
**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 20549**

FORM S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933

AASTROM BIOSCIENCES, INC.

(Exact name of registrant as specified in its charter)

Michigan
(State or other jurisdiction of
incorporation or organization)

94-3096597
(I.R.S. Employer Identification
Number)

**24 Frank Lloyd Wright Drive
P.O. Box 376
Ann Arbor, Michigan 48106
(734) 930-5555**
(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Timothy M. Mayleben
President and Chief Executive Officer
Aastrom Biosciences, Inc.
P.O. Box 376
Ann Arbor, Michigan 48106
(734) 930-5555**
(Name, address, including zip code, and telephone number, including area code, of agent for service)

With copies to:

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Approximate date of commencement of proposed sale to the public: From time to time after this Registration Statement becomes effective.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box:

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.

If this Form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box.

If this Form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box.

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer

Accelerated filer

Non-accelerated filer

Smaller reporting company

(Do not check if a smaller reporting company)

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered (1)	Proposed Maximum Offering Price Per Unit (2)	Proposed Maximum Aggregate Offering Price (3)	Amount of Registration Fee (4)
Debt Securities (5)				
Preferred Stock (6)				
Common Stock (7)				
Warrants (8)				
Units (9)				
Total	\$75,000,000	N.A.	\$75,000,000	\$5,348

- (1) The amount to be registered consists of up to \$75,000,000 of an indeterminate amount of debt securities, preferred stock, common stock, warrants and/or units. There is also being registered hereunder such currently indeterminate number of (i) shares of common stock or other securities of the registrant as may be issued upon conversion of, or in exchange for, convertible or exchangeable debt securities and/or preferred stock registered hereby, or (ii) shares of preferred stock or common stock or debt securities or units as may be issued upon exercise of warrants registered hereby, as the case may be. Any securities registered hereunder may be sold separately or as units with the other securities registered hereunder.
- (2) The proposed maximum aggregate offering price per unit will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered hereunder and is not specified as to each class of security pursuant to General Instruction II.D. of Form S-3 under the Securities Act.
- (3) Estimated solely for purposes of computing the registration fee. No separate consideration will be received for (i) common stock or other securities of the registrant that may be issued upon conversion of, or in exchange for, convertible or exchangeable debt securities and/or preferred stock registered hereby, or (ii) preferred stock, common stock, debt securities or units that may be issued upon exercise of warrants registered hereby, as the case may be.
- (4) The registration fee has been calculated in accordance with Rule 457(o) under the Securities Act.
- (5) Including such indeterminate principal amount of debt securities as may be issued from time to time at indeterminate prices or upon exercise of warrants registered hereby, as the case may be.
- (6) Including such indeterminate amount of preferred stock as may be issued from time to time at indeterminate prices or upon conversion of debt securities and/or preferred stock registered hereby, or upon exercise of warrants registered hereby, as the case may be.
- (7) Including such indeterminate amount of common stock as may be issued from time to time at indeterminate prices or upon conversion of debt securities and/or preferred stock registered hereby, or upon exercise of warrants registered hereby, as the case may be.
- (8) Including such indeterminate number of warrants or other rights, including without limitation share purchase or subscription rights, as may be issued from time to time at indeterminate prices.
- (9) Each unit will be issued under a unit agreement and will represent an interest in two or more securities, which may be or may not be separable from one another.

THE REGISTRANT HEREBY AMENDS THIS REGISTRATION STATEMENT ON SUCH DATE OR DATES AS MAY BE NECESSARY TO DELAY ITS EFFECTIVE DATE UNTIL THE REGISTRANT HAS FILED A FURTHER AMENDMENT THAT SPECIFICALLY STATES THAT THIS REGISTRATION STATEMENT SHALL THEREAFTER BECOME EFFECTIVE IN ACCORDANCE WITH SECTION 8(A) OF THE SECURITIES ACT OF 1933 OR UNTIL THE REGISTRATION STATEMENT SHALL BECOME EFFECTIVE ON SUCH DATE AS THE COMMISSION ACTING PURSUANT TO SAID SECTION 8(A), MAY DETERMINE.

The information in this prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting offers to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED NOVEMBER 12, 2010.

PROSPECTUS

\$75,000,000

AASTROM BIOSCIENCES, INC.

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

We may from time to time issue, in one or more series or classes, up to \$75,000,000 in aggregate principal amount of our common stock, preferred stock, debt securities, warrants and/or units. We may offer these securities separately or together in units. We will specify in the accompanying prospectus supplement the terms of the securities being offered. We may sell these securities to or through underwriters and also to other purchasers or through agents. We will set forth the names of any underwriters or agents, and any fees, conversions, or discount arrangements, in the accompanying prospectus supplement. We may not sell any securities under this prospectus without delivery of the applicable prospectus supplement.

You should read this document and any prospectus supplement or amendment carefully before you invest.

Our common stock is traded on the Nasdaq Capital Market under the symbol "ASTM." On November 10, 2010, the closing price for our common stock was \$3.67 per share.

Investing in our securities involves a high degree of risk. You should review carefully the risks and uncertainties described under the heading "Risk Factors" contained in this prospectus beginning on page 7 and any applicable prospectus supplement, and under similar headings in the other documents that are incorporated by reference into this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this Prospectus is _____, 2010.

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You may rely only on the information provided or incorporated by reference in this Prospectus. We have not authorized anyone to provide information different from that contained in this Prospectus. Neither the delivery of this Prospectus nor the sale of the securities means that the information contained in this Prospectus is correct after the date of this Prospectus. This Prospectus is not an offer to sell or solicitation to buy the securities in any circumstances under which the offer or solicitation is unlawful.

PROSPECTUS SUMMARY

The following summary highlights information contained elsewhere in this prospectus. It may not contain all of the information that is important to you. You should read the entire prospectus carefully, especially the discussion regarding the risks of investing in our securities under the heading “Risk Factors,” before investing in our securities. In this prospectus, “Aastrom,” “we,” “us,” and “our” refer to Aastrom Biosciences, Inc. Please refer to our Glossary at the end of this Prospectus for certain industry-specific and technical definitions.

Business

We were incorporated in 1989 and are a regenerative medicine company focused on the development of innovative cell therapies to repair or regenerate damaged or diseased tissues. We are currently focused on developing autologous cell therapies for the treatment of severe, chronic cardiovascular diseases. Using our proprietary technology, we are able to expand the number of stem and early progenitor cells from a small amount of bone marrow (approximately 50 ml) collected from the patient. Preclinical and interim clinical data suggest that our cell therapy is effective in treating patients with critical limb ischemia (CLI) and other severe, chronic cardiovascular diseases, such as dilated cardiomyopathy (DCM). Nearly 200 patients have been treated in recent clinical trials using our current cell therapy (over 400 patients safely treated since our inception) with no treatment related adverse events or safety issues.

Our technology is an autologous, expanded cellular therapy developed, using our proprietary, automated cell processing system, which utilizes “single-pass perfusion” to produce human cell products for clinical use. Single-pass perfusion is our patented manufacturing technology for growing large numbers of human cells. The production of our cell therapy products is done under current Good Manufacturing Practices (cGMP) guidelines required by the U.S. Food and Drug Administration (FDA). Our therapies begin with a small amount of the patient’s own bone marrow to produce large numbers of stem and early progenitor cells, many times more than what is found in the patient’s bone marrow. Our proprietary mixture of cell types may be capable of developing into cardiovascular and other tissues as well as stimulating a patient’s own existing repair mechanisms.

Our cellular therapies have several features that we believe are critical for success in treating patients with severe, chronic cardiovascular diseases:

Safe — our bone marrow derived, expanded, autologous cellular therapy leverages decades of scientific and medical experience, as bone marrow and bone marrow-like therapies have been used safely and efficaciously in medicine for decades.

Autologous — we start with the patient’s own cells, which are accepted by the patient’s immune system allowing the cells to differentiate and integrate into existing functional tissues, and may provide long-term engraftment and repair.

Expanded — we begin with a small amount of bone marrow from a patient (approximately 50 ml) and significantly expand the number of stem and progenitor cells to more than are present in the patient’s own bone marrow.

A mixed population of cells — we believe our proprietary mixture of cell populations contains the cell types required for tissue regeneration, which are also found in natural bone marrow, though in smaller quantities.

Minimally invasive — our procedure for taking bone marrow (an “aspirate”) can be performed in an out-patient setting and takes approximately 15 minutes. For diseases such as CLI, the administration of our therapy can be performed in an out-patient setting in a short procedure. We are pursuing a minimally invasive approach to cell delivery in diseases such as DCM.

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Our cell therapies are produced at our cell manufacturing facility in the United States, located at our headquarters in Ann Arbor, Michigan.

Our clinical development programs are focused on advancing therapies for unmet medical needs in cardiovascular diseases. Our CLI program is currently in phase 2b clinical development, and we expect it to advance to Phase 3 development in 2011. Our DCM program is in early Phase 2 clinical development and is focused on achieving proof of concept in this indication.

Results to date in our clinical trials may not be indicative of results obtained from subsequent patients enrolled in those trials or from future clinical trials. Further, our future clinical trials may not be successful or we may not be able to obtain the required Biologic License Application (BLA) registration in the United States for our products in a timely fashion, or at all.

Critical Limb Ischemia

CLI is the most serious and advanced stage of peripheral arterial disease (PAD). PAD is a chronic disease that progressively restricts blood flow in the limbs and can lead to serious medical complications. This disease is often associated with other clinical conditions including hypertension, cardiovascular disease, hyperlipidemia, diabetes, obesity and stroke. CLI is used to describe patients with the most severe forms of PAD: those with chronic ischemia-induced pain (even at rest), ulcers, tissue loss or gangrene in the limbs, often leading to amputation and death. CLI leads to more than 160,000 amputations per year. The one-year and four-year mortality rates for no-option CLI patients that progress to amputation are approximately 25% and 80%, respectively. Our technology has shown significant promise in the treatment of CLI.

In June 2010, we reported results from the planned interim analysis of our multi-center, randomized, double-blind, placebo controlled U.S. Phase 2b RESTORE-CLI clinical trial. This clinical trial is designed to evaluate the safety and efficacy of our therapy in the treatment of patients with CLI. It is the largest multi-center, randomized, double-blind, placebo-controlled cellular therapy study ever conducted in CLI patients. We completed enrollment of this trial in February 2010 with a total of 86 patients at 18 sites across the United States. These patients are being followed for a period of 12 months following treatment. In addition to assessing the safety of our product, efficacy endpoints include amputation-free survival, time to first occurrence of treatment failure (defined as major amputation, all-cause mortality, doubling in wound size and de novo gangrene), major amputation rates, level of amputation, complete wound healing, patient quality of life, and pain scores.

Results from the RESTORE-CLI interim analysis were presented at the Society of Vascular Surgery Meeting in June 2010. The results included the finding that amputation free survival — defined as time to major amputation or death — was statistically significant in favor of our therapy ($p=0.038$). Additionally, statistical analysis revealed a significant increase in time to treatment failure (e.g., major amputation, doubling in wound size de novo gangrene, and death) (log-rank test, $p=0.0053$). Other endpoints measured (e.g., major amputation rate, complete wound healing, change in Wagner wound scale) showed encouraging trends, but had not yet reached statistical significance at the interim analysis. The primary purpose of the interim analysis was to assess performance of our therapy and, if positive, to help plan the Phase 3 program. Discussions held with the FDA in June 2010 confirmed the appropriateness of using amputation free survival as the primary endpoint for the Phase 3 program. The last patient enrolled in this trial was treated in March 2010 and we expect to present six-month data on all patients in this study in a VEITHsymposium™ non-CME satellite session on November 18, 2010.

We continue to make progress towards the Phase 3 clinical development program in CLI. In October 2010, we announced that the FDA had granted fast track designation for the use of our cellular therapy for the CLI indication. The fast track program is designed to facilitate the development and expedite the review of new drugs and biologics intended to treat serious or life-threatening conditions and that demonstrate the potential to address unmet medical needs. At the June 2010 FDA meeting, Aastrom was encouraged to use the Special Protocol Assessment (SPA) process for the Phase 3 program. The SPA's supporting the Phase 3 program were submitted in October of 2010.

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Dilated Cardiomyopathy

In February 2007, the FDA granted Orphan Drug Designation to our investigational therapy involving the use of our therapy in the treatment of DCM. DCM is a severe, chronic cardiovascular disease that leads to enlargement of the heart, reducing the pumping function of the heart to the point that blood circulation is impaired. Patients with DCM typically present with symptoms of congestive heart failure, including limitations in physical activity and shortness of breath. There are two types of DCM: ischemic and non-ischemic. Ischemic DCM, the most common form, is associated with atherosclerotic cardiovascular disease. Among other causes, non-ischemic DCM can be triggered by toxin exposure, virus or genetic diseases. Patient prognosis depends on the stage of the disease but is typically characterized by a high mortality rate. Other than heart transplantation or ventricular assist devices, there are currently no effective treatment options for end-stage patients with this disease. According to the book, *Heart Failure: A Combined Medical and Surgical Approach* (2007), DCM affects 200,000-400,000 patients in the United States alone.

Our DCM development program is currently in Phase 2 and we have two ongoing U.S. Phase 2 trials investigating surgical and catheter-based delivery for our product in the treatment of DCM.

In May 2008, the FDA activated our IND application for surgical delivery of our therapy. The 40-patient U.S. IMPACT-DCM clinical trial began with the treatment of the first patient in November 2008. This multi-center, randomized, controlled, prospective, open-label, Phase 2 study was designed to include 20 patients with ischemic DCM and 20 patients with non-ischemic DCM. We completed enrollment of the 40 patients in the IMPACT-DCM clinical trial in January 2010 and the final patient was treated in March 2010. We expect to report interim results of all patients who have completed six months of follow-up during fiscal year 2011.

Participants in the IMPACT-DCM clinical trial were required to have New York Heart Association (NYHA) functional class III or IV heart failure, a left ventricular ejection fraction (LVEF) of less than or equal to 30% (60-75% is typical for a healthy person), and meet other eligibility criteria, including optimized medical therapy. Patients were randomized in an approximate 3:1 ratio of treatment to control group. Patients in the treatment group received our therapy through direct injection into the heart muscle during minimally invasive-surgery (involving a chest incision of approximately 2 inches). The primary objective of this study is to assess the safety of our therapy in patients with DCM. Efficacy measures include cardiac dimensions and tissue mass, cardiac function (e.g. cardiac output, LVEF, cardiopulmonary exercise testing parameters), cardiac perfusion and viability, as well as other efficacy endpoints. NYHA functional class and quality of life are also assessed. Patients will be followed for 12 months post-treatment.

In November 2009, the FDA activated our second IND application to allow for the evaluation of our therapy delivered by a percutaneous catheter as opposed to surgically. The Catheter-DCM clinical trial is designed to explore catheter-based delivery of our therapy to treat DCM patients. This multi-center, randomized, controlled, prospective, open-label, Phase 2 study will enroll up to 12 patients with ischemic DCM and 12 patients with non-ischemic DCM at clinical sites across the United States. Participants must meet the same criteria above for the IMPACT-DCM surgical trial. The first patient was enrolled into the trial in April 2010 and enrollment is progressing. As of October 31, 2010, 20 patients had been enrolled in the study and we expect to conclude enrollment by December 2010.

Corporate Information

Aastrom is incorporated under the laws of the State of Michigan. Our principal executive offices are located at 24 Frank Lloyd Wright Drive, P.O. Box 376, Ann Arbor, Michigan 48106. Our telephone number is (734) 930-5555. The address of our website is www.aastrom.com. Information on our website is not part of this prospectus.

About this Prospectus

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or the SEC, utilizing a shelf registration process. Under the shelf registration process, we may offer shares of our common stock and preferred stock, various series of debt securities, warrants to purchase any of such securities, and units comprised of any such securities with a total value of up to \$75,000,000 from time to time under this prospectus at prices and on terms to be determined by market conditions at the time of offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

- designation or classification;
- aggregate principal amount or aggregate offering price;
- maturity;
- original issue discount, if any;
- rates and times of payment of interest, dividends or other payments, if any;
- redemption, conversion, exchange, settlement or sinking fund terms, if any;
- conversion, exchange or settlement prices or rates, if any, and, if applicable, any provisions for changes to or adjustments in the conversion, exchange or settlement prices or rates and in the securities or other property receivable upon conversion, exchange or settlement;
- ranking;
- restrictive covenants, if any;
- voting or other rights, if any; and
- important federal income tax considerations.

A prospectus supplement may include a discussion of risks or other special considerations applicable to us or the offered securities. A prospectus supplement may also add, update or change information in this prospectus. If there is any inconsistency between the information in this prospectus and any applicable prospectus supplement, you must rely on the information in the prospectus supplement. Please carefully read both this prospectus and any applicable prospectus supplement together with the additional information described under the heading “Where You Can Find More Information.”

The registration statement containing this prospectus, including exhibits to the registration statement, provides additional information about us and the securities offered under this prospectus. The registration statement can be read at the SEC’s website (www.sec.gov) or at the SEC’s Public Reference Room mentioned under the heading “Where You Can Find More Information.”

We have not authorized any broker-dealer, salesperson or other person to give any information or to make any representation other than those contained or incorporated by reference in this prospectus and an accompanying supplement to this prospectus. You must not rely upon any information or representation not contained or incorporated by reference in this prospectus or an accompanying prospectus supplement. This prospectus and an accompanying supplement to this prospectus do not constitute an offer to sell or the solicitation of an offer to buy securities, nor do this prospectus and an accompanying supplement to this prospectus constitute an offer to sell or the solicitation of an offer to buy securities in any jurisdiction to any person to whom it is unlawful to make such offer or solicitation. The information contained in this prospectus and an accompanying prospectus supplement speaks only as of the date set forth on the applicable cover page and may not reflect subsequent changes in our business, financial condition, results of operations and prospects even though this prospectus and any accompanying prospectus supplement is delivered or securities are sold on a later date.

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We may sell the securities directly to or through underwriters, dealers or agents. We, and our underwriters or agents, reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities through underwriters, dealers or agents, we will include in any applicable prospectus supplement:

- the names of those underwriters, dealers or agents;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock

We may issue shares of our common stock from time to time. Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of shareholders and do not have cumulative voting rights. Holders of common stock have no preemptive, redemption or conversion rights and are not subject to future calls or assessments. No sinking fund provisions apply to our common stock. All outstanding shares are fully-paid and non-assessable. In the event of our liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in assets available for distribution, subject to prior distribution rights of any preferred stock then outstanding. Holders of common stock are entitled to receive proportionately any such dividends declared by our Board of Directors, or the Board, out of legally available funds for dividends, subject to any preferences that may be applicable to any shares of preferred stock that may be outstanding at that time. The rights, preferences and privileges of holders of common stock are set forth in our Restated Articles of Incorporation, or the Charter, which may be amended by the holders of a majority of the outstanding shares of common stock.

Preferred Stock

We may issue shares of our preferred stock from time to time, in one or more series. Under our Charter, our Board has the authority, without further action by shareholders, to designate up to 5,000,000 shares of preferred stock in one or more series and to fix the designations, powers, preferences and the relative, participating, optional or other special rights of the shares of each series and any qualification, limitations and restrictions thereon, any or all of which may be greater than the rights of our common stock.

If we issue preferred stock, we will fix the designations, powers, preferences and the relative, participating, optional or other special rights, and any qualification, limitations and restrictions of the shares of each series that we sell under this prospectus and applicable prospectus supplements in the certificate of designations relating to that series. If we issue preferred stock, we will incorporate by reference into the registration statement of which this prospectus is a part the form of any certificate of designations that describes the terms of such series of preferred stock before the issuance thereof. We urge you to read any prospectus supplement related to any series of preferred stock we may offer, as well as the complete certificate of designations that contains the terms of the applicable series of preferred stock.

Debt Securities

We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. Unless we give you different information in the applicable prospectus supplement, (i) the debt securities will be unsecured, (ii) the senior debt securities will be unsubordinated obligations and will rank equally with all of our other unsecured and unsubordinated indebtedness, and (iii) the subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all or some portion of our indebtedness. Any convertible debt securities that we issue will be convertible into or exchangeable for our common stock or other securities of ours. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

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If we issue debt securities, they will be issued under one or more documents called indentures, which are contracts between us and a trustee for the holders of the debt securities. We urge you to read any prospectus supplement related to the series of debt securities being offered, as well as the complete indenture that contains the terms of the debt securities. If we issue debt securities, indentures and forms of debt securities containing the terms of such debt securities will be incorporated by reference into the registration statement of which this prospectus is a part from other filings we would make with the SEC. Please see “Description of Debt Securities” hereof for an additional description of the general terms and provisions of the debt securities we may issue.

Warrants

We may issue warrants for the purchase of common stock, preferred stock, debt securities and/or units (as described below) in one or more series, from time to time. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from those securities.

If we issue warrants, they will be evidenced by warrant agreements or warrant certificates issued under one or more warrant agreements, which are contracts between us and an agent for the holders of the warrants. We urge you to read any prospectus supplement related to any series of warrants we may offer, as well as the complete warrant agreement and warrant certificate that contain the terms of the warrants. If we issue warrants, forms of warrant agreements and warrant certificates relating to such warrants will be incorporated by reference into the registration statement of which this prospectus is a part from other filings we would make with the SEC.

Units

We may issue units comprised of shares of preferred stock, shares of common stock, warrants, debt securities and other securities in any combination. We may issue units in such amounts and in as many distinct series as we wish.

If we issue units, they will be issued under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. We urge you to read any prospectus supplement related to any series of units we may offer, as well as the complete unit agreement and unit certificate that contain the terms of the units. If we issue units, forms of unit agreements and unit certificates relating to such units will be incorporated by reference into the registration statement of which this prospectus is a part from other filings we would make with the SEC.

RISK FACTORS

Investing in our securities involves a high degree of risk. You should carefully consider the risks described below, as well as other information we include or incorporate by reference into this prospectus and any applicable prospectus supplement, before making an investment decision. These risks are not the only ones facing our company. Additional risks not presently known to us or that we currently deem immaterial may also affect our business operations. Our business, financial condition or results of operations could be materially adversely affected by the materialization of any of these risks. The trading price of our securities could decline due to the materialization of any of these risks, and you may lose all or part of your investment. This prospectus and the documents incorporated herein by reference also contain forward-looking statements that involve risks and uncertainties. Actual results could differ materially from those anticipated in these forward-looking statements as a result of certain factors, including the risks described below and in the documents incorporated herein by reference, including (i) our Annual Report on Form 10-K for the year ended June 30, 2010, (ii) our Quarterly Report on Form 10-Q for the quarter ended September 30, 2010 and (iii) other documents we file with the SEC that are deemed incorporated by reference into this prospectus.

Risks Related to our Business

Our past losses and expected future losses cast doubt on our ability to operate profitably.

We were incorporated in 1989 and have experienced substantial operating losses since inception. As of September 30, 2010, we have incurred a cumulative net loss totaling approximately \$218,417,000, and we have continued to incur losses since that date. These losses have resulted principally from costs incurred in the research and development (including clinical trials) of our cell culture technologies and our cell manufacturing system, general and administrative expenses, and the prosecution of patent applications. We expect to continue to incur significant operating losses over the next several years and at least until, and probably after, product sales increase, primarily owing to our research and development programs, including preclinical studies and clinical trials, and the establishment of marketing and distribution capabilities necessary to support commercialization efforts for our products. We cannot predict with any certainty the amount of future losses. Our ability to achieve profitability will depend, among other things, on successfully completing the development of our product candidates, timely initiation and completion of clinical trials, obtaining regulatory approvals, establishing manufacturing, sales and marketing arrangements with third parties, maintaining supplies of key manufacturing components, acquisition and development of complementary activities and raising sufficient cash to fund our operating activities. Therefore, we may not be able to achieve or sustain profitability.

We may not be able to raise the required capital to conduct our operations and develop and commercialize our products.

We will require substantial additional capital resources in order to conduct our operations, complete our product development programs, complete our clinical trials needed to market our products (including a Phase 3 clinical trial for CLI), and commercialize these products and cell manufacturing facilities. In order to grow and expand our business, to introduce our new product candidates into the marketplace and to acquire or develop complementary business activities, we will need to raise a significant amount of additional funds. We will also need significant additional funds or a collaborative partner, or both, to finance the research and development activities of our cell product candidates for additional indications. Accordingly, we are continuing to pursue additional sources of financing.

Our future capital requirements will depend upon many factors, including:

- continued scientific progress in our research, clinical and development programs;
- costs and timing of conducting clinical trials and seeking regulatory approvals;
- competing technological and market developments;
- our ability to establish additional collaborative relationships;
- the effect of commercialization activities and facility expansions, if and as required; and
- complementary business acquisition or development opportunities.

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We recently terminated the common stock purchase agreement with Fusion Capital Fund II dated as of June 12, 2009. As a result, we no longer have access to the potential funding from Fusion Capital under that agreement. However, we believe that we will have adequate liquidity to finance our operations, including development of our products and product candidates, with our existing cash and cash equivalents as of September 30, 2010 through June 30, 2011. While our budgeted cash usage and operating plan through June 30, 2011 does not currently contemplate taking additional actions to reduce the use of cash over that period, we could, if necessary, delay or forego certain budgeted discretionary expenditures such as anticipated hiring plans or certain non-critical research and development expenditures, as well as slow down or delay certain clinical trial activity (without jeopardizing our pursuit of a Phase 3 clinical trial for CLI) such that we will believe that we will have sufficient cash on hand through June 30, 2011.

We will need to raise additional funds in order to complete our product development programs, complete clinical trials needed to market our products (including a Phase 3 clinical trial for CLI), and commercialize these products. Because of our long-term funding requirements, we intend to try to access the public or private equity markets if conditions are favorable to complete a financing, even if we do not have an immediate need for additional capital at that time, or whenever we require additional operating capital. In addition, we may seek collaborative relationships, incur debt and access other available funding sources. This additional funding may not be available to us on reasonable terms, or at all. Some of the factors that will impact our ability to raise additional capital and our overall success include:

- the rate and degree of progress for our product development;
- the rate of regulatory approval to proceed with clinical trial programs;
- the level of success achieved in clinical trials;
- the requirements for marketing authorization from regulatory bodies in the United States and other countries;
- the liquidity and market volatility of our equity securities; and
- regulatory and manufacturing requirements and uncertainties, technological developments by competitors.

If adequate funds are not available in the future, we may not be able to develop or enhance our products, take advantage of future opportunities, or respond to competitive pressures or unanticipated requirements and we may be required to further delay or terminate research and development programs, curtail capital expenditures, and reduce business development and other operating activities. Should the financing we require to sustain our working capital needs be unavailable or prohibitively expensive when we require it, the consequences could have a material adverse effect on our business, operating results, financial condition and prospects.

The current credit and financial market conditions may exacerbate certain risk affecting our business.

We rely upon third parties for certain aspects of our business, including collaboration partners, wholesale distributors, contract clinical trial providers, contact manufacturers and third-party suppliers. Because of the recent tightening of global credit and the volatility in the financial markets, there may be a delay or disruption in the performance or satisfaction of commitments to us by these third parties, which could adversely affect our business.

If we cannot attract and retain key personnel, our business may suffer.

Our success depends in large part upon our ability to attract and retain highly qualified scientific and management personnel. We face competition for such personnel from other companies, research and academic institutions and other entities. Further, in an effort to conserve financial resources, we have implemented reductions in our work force on three previous occasions, most recently in fiscal 2008. As a result of these and other factors, we may not be successful in hiring or retaining key personnel. Our inability to replace any key employee could harm our operations.

Our product development programs are based on novel technologies and are inherently risky.

We are subject to the risks of failure inherent in the development of products based on new technologies. The novel nature of our therapeutics creates significant challenges in regards to product development and optimization, manufacturing, government regulation, third party reimbursement and market acceptance. As a result, the development and commercialization pathway for our therapies may be subject to increased uncertainty, as compared to the pathway for new conventional drugs.

Failure to obtain and maintain required regulatory approvals would severely limit our ability to sell our products.

We must obtain the approval of the FDA before commercial sales of our cell product candidates may commence in the United States, which we believe will ultimately be the largest market for our products. We will also be required to obtain additional approvals from various foreign regulatory authorities to initiate sales activities of cell products in those jurisdictions. If we cannot demonstrate the safety and efficacy of our cell product candidates produced in our production system, we may not be able to obtain required regulatory approvals. If we cannot demonstrate the safety and efficacy of our product candidates produced in our production system, the FDA or other regulatory authorities could delay or withhold regulatory approval of our product candidates.

Finally, even if we obtain regulatory approval of a product, that approval may be subject to limitations on the indicated uses for which it may be marketed. Even after granting regulatory approval, the FDA and regulatory agencies in other countries continue to review and inspect marketed products, manufacturers and manufacturing facilities, which may create additional regulatory burdens. Later discovery of previously unknown problems with a product, manufacturer or facility, may result in restrictions on the product or manufacturer, including a withdrawal of the product from the market. Further, regulatory agencies may establish additional regulations that could prevent or delay regulatory approval of our products.

Any changes in the governmental regulatory classifications of our products could prevent, limit or delay our ability to market or develop our products.

The FDA establishes regulatory requirements based on the classification of a product. Because our product development programs are designed to satisfy the standards applicable to biological licensure for our cellular products, any change in the regulatory classification or designation would affect our ability to obtain FDA approval of our products. Each of these cell products is, under current regulations, regulated as a biologic, which requires a BLA.

Our inability to complete our product development activities successfully would severely limit our ability to operate or finance operations.

In order to commercialize our cell product candidates in the United States, we must complete substantial clinical trials, and obtain sufficient safety and efficacy results to support required registration approval and market acceptance of our cell product candidates. We may not be able to successfully complete the development of our product candidates, or successfully market our technologies or product candidates. We, and any of our potential collaborators, may encounter problems and delays relating to research and development, regulatory approval and intellectual property rights of our technologies and product candidates. Our research and development programs may not be successful, and our cell culture technologies and product candidates may not facilitate the production of cells outside the human body with the expected results. Our technologies and cell product candidates may not prove to be safe and efficacious in clinical trials, and we may not obtain the requisite regulatory approvals for our technologies or product candidates and the cells produced in such products. If any of these events occur, we may not have adequate resources to continue operations for the period required to resolve any issues delaying commercialization and we may not be able to raise capital to finance our continued operation during the period required for resolution of any such issues.

We must successfully complete our clinical trials to be able to market certain of our products.

To be able to market therapeutic cell products in the United States, we must demonstrate, through extensive preclinical studies and clinical trials, the safety and efficacy of our processes and product candidates. If our clinical trials are not successful, our products may not be marketable.

Our ability to complete our clinical trials in a timely manner depends on many factors, including the rate of patient enrollment. Patient enrollment can vary with the size of the patient population, the proximity of suitable patients to clinical sites, perceptions of the utility of cell therapy for the treatment of certain diseases, and the eligibility criteria for the study. We have experienced delays in patient accrual in our previous clinical trials. If we experience future delays in patient enrollment, we could experience increased costs and delays associated with clinical trials, which would impair our product development programs and our ability to market our products. Furthermore, the FDA monitors the progress of clinical trials and it may suspend or terminate clinical trials at any time due to patient safety or other considerations.

Our research programs are currently directed at improving product functionality for certain clinical indications, improving product shelf life, and decreasing the cost of manufacturing our products. These production process changes may alter the functionality of our cells and require various additional levels of experimental and clinical testing and evaluation. Any such testing could lengthen the time before these products would be commercially available.

Even if successful clinical results are reported for a product from a completed clinical trial, this does not mean that the results will be sustained over time, or will be sufficient for a marketable or regulatory approvable product.

We will rely on third parties to conduct some of our clinical trials, and their failure to perform their obligations in a timely or competent manner may delay development and commercialization of our product candidates.

We may use clinical research organizations to assist in conduct of our clinical trials. There are numerous alternative sources to provide these services. However, we may face delays outside of our control if these parties do not perform their obligations in a timely or competent fashion or if we are forced to change service providers. Any third-party that we hire to conduct clinical trials may also provide services to our competitors, which could compromise the performance of their obligations to us. If we experience significant delays in the progress of our clinical trials the commercial prospects for product candidates could be harmed and our ability to generate product revenue would be delayed or prevented. In addition, any provider that we retain will be subject to Good Laboratory Practices, or cGLP, and similar foreign standards and we do not have control over compliance with these regulations by these providers. Consequently, if these practices and standards are not adhered to by these providers, the development and commercialization of our product candidates could be delayed.

Failure of third parties to manufacture or supply certain components, equipment, disposable devices and other materials used our cell manufacturing process, would impair our cell product development.

We rely solely on third parties such as Sparton Corporation (formerly Astro), Ethox International, Inc., ATEK Medical, LLC, Lonza Group and GenPore to manufacture or supply certain of our devices/manufacturing equipment. In addition, we rely solely on third parties such as BioLife and Invitrogen to manufacture and/or supply certain components, equipment, disposable devices and other materials used our cell manufacturing process to develop our cell products.

It would be difficult to obtain alternate sources of supply for many of these items on a short-term basis. If any of our key manufacturers or suppliers fails to perform their respective obligations or if our supply of certain components, equipment, disposable devices and other materials is limited or interrupted, it would impair our ability to manufacture our products which would delay our ability to conduct our clinical trials or market our product candidates on a timely and cost-competitive basis, if at all. In addition, pursuant to our Contract Manufacturing and Supply Agreement with ATEK, we are responsible for transferring customer supplied inventory previously held by Moll Industries to ATEK. If we fail to transfer this inventory in an efficient or timely manner, this could impact the manufacture of the materials required for our clinical trials and adversely affect our ability to complete our clinical trials and develop and commercialize our products.

In addition, we may not be able to continue our present arrangements with our suppliers, supplement existing relationships, establish new relationships or be able to identify and obtain the ancillary materials that are necessary to develop our product candidates in the future. Our dependence upon third parties for the supply and manufacture of these items could adversely affect our ability to develop and deliver commercially feasible products on a timely and competitive basis.

Manufacturing of our cell products in centralized facilities may increase the risk that we will not have adequate quantities of our cell products for clinical programs.

We are subject to regulatory compliance and quality assurance requirements at our production site in Ann Arbor, Michigan. This site could be subject to ongoing, periodic, unannounced inspection by regulatory agencies to ensure strict compliance with GMP regulations and other governmental regulations. We do not have redundant cell manufacturing sites. In the event our cell production facility is damaged or destroyed or is subject to regulatory restrictions, our clinical trial programs and other business prospects would be adversely affected.

Even if we obtain regulatory approvals to sell our products, lack of commercial acceptance could impair our business.

We will be seeking to obtain regulatory approvals to market our cell products for tissue repair and regeneration treatments. Even if we obtain all required regulatory approvals, we cannot be certain that our products and processes will be accepted in the marketplace at a level that would allow us to operate profitably. Our products may be unable to achieve commercial acceptance for a number of reasons, such as the availability of alternatives that are less expensive, more effective, or easier to use; the perception of a low cost-benefit ratio for the product amongst physicians and hospitals; or an inadequate level of product support from ourselves or a commercial partner. Our technologies or product candidates may not be employed in all potential applications being investigated, and any reduction in applications would limit the market acceptance of our technologies and product candidates, and our potential revenues.

The market for our products will be heavily dependent on third party reimbursement policies.

Our ability to successfully commercialize our product candidates will depend on the extent to which government healthcare programs, such as Medicare and Medicaid, as well as private health insurers, health maintenance organizations and other third party payors will pay for our products and related treatments.

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Reimbursement by third party payors depends on a number of factors, including the payor's determination that use of the product is safe and effective, not experimental or investigational, medically necessary, appropriate for the specific patient and cost-effective. Reimbursement in the United States or foreign countries may not be available or maintained for any of our product candidates. If we do not obtain approvals for adequate third party reimbursements, we may not be able to establish or maintain price levels sufficient to realize an appropriate return on our investment in product development. Any limits on reimbursement from third party payors may reduce the demand for, or negatively affect the price of, our products. For example, in the past, published studies suggested that stem cell transplantation for breast cancer, which constituted a significant portion of the overall stem cell therapy market at the time, may have limited clinical benefit. The lack of reimbursement for these procedures by insurance payors has negatively affected the marketability of our products in this indication in the past.

Managing and reducing health care costs has been a general concern of federal and state governments in the United States and of foreign governments. In addition, third party payors are increasingly challenging the price and cost-effectiveness of medical products and services, and many limit reimbursement for newly approved health care products. In particular, third party payors may limit the indications for which they will reimburse patients who use any products that we may develop. Cost control initiatives could decrease the price for products that we may develop, which would result in lower product revenues to us.

Use of animal-derived materials could harm our product development and commercialization efforts.

Some of the manufacturing materials and/or components we use in, and are critical to, implementation of our technology involve the use of animal-derived products, including fetal bovine serum. Suppliers or regulatory changes may limit or restrict the availability of such materials for clinical and commercial use. We currently purchase all of our fetal bovine sera from protected herds in Australia and New Zealand. These sources are considered to be the safest and raise the least amount of concern from the global regulatory agencies. If, for example, the so-called "mad cow disease" occurs in New Zealand or in Australia, it may lead to a restricted supply of the serum currently required for our product manufacturing processes. Any restrictions on these materials would impose a potential competitive disadvantage for our products or prevent our ability to manufacture our cell products. The FDA has issued draft regulations for controls over bovine materials. These proposed regulations do not appear to affect our ability to purchase the manufacturing materials we currently use. However, the FDA may issue final regulations that could affect our operations. Our inability to develop or obtain alternative compounds would harm our product development and commercialization efforts. There are certain limitations in the supply of certain animal-derived materials, which may lead to delays in our ability to complete clinical trials or eventually to meet the anticipated market demand for our cell products.

Given our limited internal manufacturing, sales, marketing and distribution capabilities, we need to develop increased internal capability or collaborative relationships to manufacture, sell, market and distribute our products.

We have only limited internal manufacturing, sales, marketing and distribution capabilities. As market needs develop, we intend to establish and operate commercial-scale manufacturing facilities, which will need to comply with all applicable regulatory requirements. We will also need to develop new configurations of our cell manufacturing system for these facilities to enable processes and cost efficiencies associated with large-scale manufacturing. Establishing these facilities will require significant capital and expertise. We may need to make such expenditures when there are significant uncertainties as to the market opportunity. Any delay in establishing, or difficulties in operating, these facilities will limit our ability to meet the anticipated market demand for our cell products. We intend to get assistance to market some of our future cell products through collaborative relationships with companies with established sales, marketing and distribution capabilities. Our inability to develop and maintain those relationships would limit our ability to market, sell and distribute our products. Our inability to enter into successful, long-term relationships could require us to develop alternate arrangements at a time when we need sales, marketing or distribution capabilities to meet existing demand. We may market one or more of our products through our own sales force. Our inability to develop and retain a qualified sales force could limit our ability to market, sell and distribute our cell products.

If we do not keep pace with our competitors and with technological and market changes, our products will become obsolete and our business may suffer.

The markets for our products are very competitive, subject to rapid technological changes, and vary for different candidates and processes that directly compete with our products. Our competitors may have developed, or could in the future develop, new technologies that compete with our products or even render our products obsolete. As an example, in the past, published studies have suggested that hematopoietic stem cell therapy use for bone marrow transplantation, following marrow ablation due to chemotherapy, may have limited clinical benefit in the treatment of breast cancer, which was a significant portion of the overall hematopoietic stem cell transplant market. This resulted in the practical elimination of this market for our cell-based product for this application.

Our cell manufacturing system is designed to improve and automate the processes for producing cells used in therapeutic procedures. Even if we are able to demonstrate improved or equivalent results, the cost or process of treatment and other factors may cause researchers and practitioners to not use our products and we could suffer a competitive disadvantage. Finally, to the extent that others develop new technologies that address the targeted application for our products, our business will suffer.

Risks Related to Intellectual Property

If our patents and proprietary rights do not provide substantial protection, then our business and competitive position will suffer.

Our success depends in large part on our ability to develop or license and protect proprietary products and technologies. However, patents may not be granted on any of our pending or future patent applications. Also, the scope of any of our issued patents may not be sufficiently broad to offer meaningful protection. In addition, our issued patents or patents licensed to us could be successfully challenged, invalidated or circumvented so that our patent rights would not create an effective competitive barrier. Certain patent equivalents to the U.S. patents have also been issued in other jurisdictions including Australia, Japan, the Republic of Korea, Canada and under the European Convention. Furthermore, we rely on exclusive, world-wide licenses relating to the production of human cells granted to us by the University of Michigan for certain of our patent rights. If we materially breach such agreements or otherwise fail to materially comply with such agreements, or if such agreements expire or are otherwise terminated by us, we may lose our rights under the patents held by the University of Michigan. At the latest, each of these licenses will terminate when the patent underlying the license expires. The first of these underlying patents will expire on March 21, 2012. We also rely on trade secrets and unpatentable know-how that we seek to protect, in part, by confidentiality agreements with our employees, consultants, suppliers and licensees. These agreements may be breached, and we might not have adequate remedies for any breach. If this were to occur, our business and competitive position would suffer.

Intellectual property litigation could harm our business.

Our success will also depend in part on our ability to develop commercially viable products without infringing the proprietary rights of others. Although we have not been subject to any filed infringement claims, other patents could exist or could be filed which would prohibit or limit our ability to market our products or maintain our competitive position. In the event of an intellectual property dispute, we may be forced to litigate. Intellectual property litigation would divert management's attention from developing our products and would force us to incur substantial costs regardless of whether we are successful. An adverse outcome could subject us to significant liabilities to third parties, and force us to curtail or cease the development and sale of our products and processes.

The government maintains certain rights in technology that we develop using government grant money and we may lose the revenues from such technology if we do not commercialize and utilize the technology pursuant to established government guidelines.

Certain of our and our licensors' research have been or are being funded in part by government grants. As a result of such funding, the U.S. Government has established guidelines and have certain rights in the technology developed with the grant. If we fail to meet these guidelines, we would lose our exclusive rights to these products, and we would lose potential revenue derived from the sale of these products.

Potential product liability claims could affect our earnings and financial condition.

We face an inherent business risk of exposure to product liability claims in the event that the manufacture and/or use of our products during clinical trials, or after commercialization, results in adverse events. As a result, we may incur significant product liability exposure, which could exceed existing insurance coverage. We may not be able to maintain adequate levels of insurance at reasonable cost and/or reasonable terms. Excessive insurance costs or uninsured claims would increase our operating loss and affect our financial condition.

Risks Related to an Investment in our Common Stock

Our stock price has been volatile and future sales of substantial numbers of our shares could have an adverse affect on the market price of our shares.

The market price of shares of our common stock has been volatile, ranging in closing price between \$1.34 and \$4.16 during the twelve month period ended June 30, 2010. The price of our common stock may continue to fluctuate in response to a number of events and factors, such as:

- clinical trial results;
- the amount of our cash resources and our ability to obtain additional funding;
- announcements of research activities, business developments, technological innovations or new products by us or our competitors;
- entering into or terminating strategic relationships;
- changes in government regulation;
- disputes concerning patents or proprietary rights;
- changes in our revenues or expense levels;
- public concern regarding the safety, efficacy or other aspects of the products or methodologies we are developing;
- news or reports from other stem cell, cell therapy or regenerative medicine companies;
- reports by securities analysts;
- status of the investment markets;
- concerns related to management transitions; and
- delisting from the NASDAQ Capital Market.

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Any of these events may cause the price of our shares to fall, which may adversely affect our business and financing opportunities. In addition, the stock market in general and the market prices for biotechnology companies in particular have experienced significant volatility recently that often has been unrelated to the operating performance or financial conditions of such companies. These broad market and industry fluctuations may adversely affect the trading price of our stock, regardless of our operating performance or prospects.

The sale of our common stock through future equity offerings may cause dilution and could cause the price of our common stock to decline.

We have registered \$75,000,000 of securities for public sale pursuant to this prospectus. We are entitled under our amended and restated articles of incorporation to issue up to 62,500,000 shares of common stock, no par value per share, and 5,000,000 shares of preferred stock, no par value per share. As of September 30, 2010, we had issued and outstanding 28,251,787 shares of common stock, 9,985,000 shares of common stock reserved for issuance upon the exercise of current outstanding options and warrants, and 335,921 shares of common stock reserved for issuance of additional grants under our 2009 Omnibus Incentive Plan. Accordingly, we will be able to issue up to 23,927,292 additional shares of common stock and 5,000,000 shares of preferred stock. Sales of our common stock offered through future equity offerings, including sales of our securities under this prospectus, may result in substantial dilution to the interests of other holders of our common stock. The sale of a substantial number of shares of our common stock to potential investors, or anticipation of such sales, could make it more difficult for us to sell equity or equity-related securities in the future at a time and at a price that we might otherwise wish to effect sales.

Our corporate documents and Michigan law contain provisions that may make it more difficult for us to be acquired.

Our Board of Directors has the authority, without shareholder approval, to issue additional shares of preferred stock and to fix the rights, preferences, privileges and restrictions of these shares without any further vote or action by our shareholders. Michigan law contains a provision that makes it more difficult for a 10% shareholder, or its officers, to acquire a company. This authority, together with certain provisions of our charter documents, may have the effect of making it more difficult for a third party to acquire, or of discouraging a third party from attempting to acquire, control of our company. This effect could occur even if our shareholders consider the change in control to be in their best interest.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the documents that we incorporate by reference, contains forward-looking statements within the meaning of Section 27A of the Securities Act and Section 21E of the Securities Exchange Act. Any statements about our expectations, beliefs, plans, objectives, assumptions or future events or performance are not historical facts and may be forward-looking. These statements are often, but are not always, made through the use of words or phrases such as “anticipates,” “estimates,” “plans,” “projects,” “trends,” “opportunity,” “comfortable,” “current,” “intention,” “position,” “assume,” “potential,” “outlook,” “remain,” “continue,” “maintain,” “sustain,” “seek,” “achieve,” “continuing,” “ongoing,” “expects,” “believe,” “intend” and similar words or phrases, or future or conditional verbs such as “will,” “would,” “should,” “could,” “may,” or similar expressions. Accordingly, these statements involve estimates, assumptions and uncertainties which could cause actual results to differ materially from those expressed in them. Any forward-looking statements are qualified in their entirety by reference to the factors discussed throughout this report, and in particular those factors referenced in the section “Risk Factors.”

Because the factors referred to in the preceding paragraph could cause actual results or outcomes to differ materially from those expressed in any forward-looking statements we make, you should not place undue reliance on any such forward-looking statements. Further, any forward-looking statement speaks only as of the date on which it is made, and we undertake no obligation to update any forward-looking statement or statements to reflect events or circumstances after the date on which such statement is made or to reflect the occurrence of unanticipated events. New factors emerge from time to time, and it is not possible for us to predict which factors will arise. In addition, we cannot assess the impact of each factor on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements. These forward-looking statements include, but are not limited to, statements regarding:

- potential strategic collaborations with others;
- future capital needs;
- adequacy of existing capital to support operations for a specified time;
- product development and marketing plan;
- clinical trial plans and anticipated results;
- anticipation of future losses;
- commercialization plans; or
- revenue expectations and operating results.

HOW WE INTEND TO USE THE PROCEEDS

We cannot guarantee that we will receive any proceeds in connection with this offering because we may be unable or choose not to issue and sell any securities covered by this prospectus.

Unless otherwise provided in a supplement or amendment to this prospectus, we intend to use any net proceeds from this offering, together with other available funds, for operating costs, including continuing to conduct our clinical development programs, capital expenditures and working capital needs and for other general corporate purposes.

We have not specifically identified the precise amounts we will spend on each of these areas or the timing of these expenditures. The amounts actually expended for each purpose may vary significantly depending upon numerous factors, including the amount and timing of the proceeds from this offering, progress with clinical product development and other cell therapy application programs. In addition, expenditures may also depend on the establishment of new collaborative arrangements with other companies, the availability of other financing, and other factors.

We will be required to raise substantial additional capital to continue to fund the clinical development of our cell therapy applications. We may raise additional capital through additional public or private financings, as well as collaborative relationships, incurring debt and other available sources. Please see the discussion of the risks associated with our liquidity in the section “Risk Factors.”

PLAN OF DISTRIBUTION

The securities being offered may be sold in one or more transactions at fixed prices, at prevailing market prices at the time of sale, at prices related to the prevailing market prices, at varying prices determined at the time of sale, or at negotiated prices. These sales may be effected at various times in one or more of the following transactions, or in other kinds of transactions:

- through underwriters for resale to the public or investors;
- transactions on the Nasdaq Stock Market or on any national securities exchange or U.S. inter-dealer system of a registered national securities association on which our common stock may be listed or quoted at the time of sale;
- in the over-the-counter market;
- in private transactions and transactions otherwise than on these exchanges or systems or in the over-the-counter market;
- in “at the market” offerings, within the meaning of Rule 415(a)(4) of the Securities Act of 1933, as amended, or the Securities Act, to or through a market maker or into an existing trading market, on an exchange or otherwise;
- in connection with short sales of the shares;
- by pledge to secure debt and other obligations;
- through the writing of options, whether the options are listed on an options exchange or otherwise;
- in connection with the writing of non-traded and exchange-traded call options, in hedge transactions and in settlement of other transactions in standardized or over-the-counter options;
- through a combination of any of the above transactions; or
- any other method permitted by law.

We may sell our securities directly to one or more purchasers, or to or through underwriters, dealers or agents or through a combination of those methods. The related prospectus supplement will set forth the terms of each offering, including:

- the name or names of any agents, dealers, underwriters or investors who purchase the securities;
- the purchase price of the securities being offered and the proceeds we will receive from the sale;
- the amount of any compensation, discounts commissions or fees to be received by the underwriters, dealer or agents;
- any over-allotment options under which underwriters may purchase additional securities from us;
- any discounts or concessions allowed or reallocated or paid to dealers;
- any securities exchanges on which such securities may be listed;
- the terms of any indemnification provisions, including indemnification from liabilities under the federal securities laws; and
- the nature of any transaction by an underwriter, dealer or agent during the offering that is intended to stabilize or maintain the market price of the securities.

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In addition, any securities covered by this prospectus that qualify for sale pursuant to Regulation S may be sold pursuant to Regulation S rather than pursuant to this prospectus.

In connection with the sale of our securities, underwriters may receive compensation from us or from purchasers of our securities in the form of discounts, concessions or commissions. Underwriters, dealers and agents that participate in the distribution of our securities may be deemed to be underwriters. Discounts or commissions they receive and any profit on their resale of our securities may be considered underwriting discounts and commissions under the Securities Act.

We may agree to indemnify underwriters, dealers and agents who participate in the distribution of our securities against various liabilities, including liabilities under the Securities Act. We may also agree to contribute to payments that the underwriters, dealers or agents may be required to make in respect of these liabilities. We may authorize dealers or other persons who act as our agents to solicit offers by various institutions to purchase our securities from us under contracts that provide for payment and delivery on a future date. We may enter into these contracts with commercial and savings banks, insurance companies, pension funds, investment companies, educational and charitable institutions and others. If we enter into these agreements concerning any series of our securities, we will indicate that in the prospectus supplement or amendment.

In connection with an offering of our securities, underwriters may engage in transactions that stabilize, maintain or otherwise affect the price of our securities. Specifically, underwriters may over-allot in connection with the offering, creating a syndicate short position in our securities for their own account. In addition, underwriters may bid for, and purchase, our securities in the open market to cover short positions or to stabilize the price of our securities. Finally, underwriters may reclaim selling concessions allowed for distributing our securities in the offering if the underwriters repurchase previously distributed securities in transactions to cover short positions, in stabilization transactions or otherwise. Any of these activities may stabilize or maintain the market price of our securities above independent market levels. Underwriters are not required to engage in any of these activities and may end any of these activities at any time. Agents and underwriters may engage in transactions with, or perform services for, us and our affiliates in the ordinary course of business.

THE SECURITIES WE MAY OFFER

The descriptions of the securities contained in this prospectus, together with the applicable prospectus supplements, summarize all the material terms and provisions of the various types of securities that we may offer. We will describe in the applicable prospectus supplement the particular terms of the securities offered by that prospectus supplement. If we so indicate in the applicable prospectus supplement, the terms of the securities may differ from the terms we have summarized below. We will also include in the prospectus supplement information, where applicable, about material United States federal income tax considerations relating to the securities and the securities exchange, if any, on which the securities will be listed.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and certain provisions of our Charter and our amended and restated bylaws, or Bylaws, is a summary and is qualified in its entirety by the provisions of our Charter and Bylaws.

Our authorized capital stock consists of 62,500,000 shares of common stock, no par value per share, and 5,000,000 shares of preferred stock, no par value per share.

Common Stock

Holders of our common stock are entitled to one vote for each share held of record on all matters submitted to a vote of shareholders and do not have cumulative voting rights. Holders of common stock have no preemptive, redemption or conversion rights and are not subject to future calls or assessments. No sinking fund provisions apply to our common stock. All outstanding shares are fully-paid and non-assessable. In the event of our liquidation, dissolution or winding up, holders of common stock are entitled to share ratably in assets available for distribution, subject to prior distribution rights of any preferred stock then outstanding. Holders of common stock are entitled to receive proportionately any such dividends declared by the board of directors, out of legally available funds for dividends, subject to any preferences that may be applicable to any shares of preferred stock that may be outstanding at that time. The rights, preferences and privileges of holders of common stock are set forth in our Charter, which may be amended by the holders of a majority of the outstanding shares of common stock.

Preferred Stock

Our Board is authorized to issue up to 5,000,000 shares of preferred stock in one or more series without shareholder approval. Our Board may determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

The purpose of authorizing our Board to issue preferred stock in one or more series and determine the number of shares in the series and its rights and preferences is to eliminate delays associated with a shareholder vote on specific issuances. Examples of rights and preferences that the Board may fix are:

- dividend rights,
- dividend rates,
- conversion rights,
- voting rights,
- terms of redemption, and
- liquidation preferences.

The issuance of preferred stock, while providing desirable flexibility in connection with possible acquisitions and other corporate purposes, could make it more difficult for a third party to acquire, or could discourage a third party from acquiring, a majority of our outstanding voting stock. The rights of holders of our common stock described above, will be subject to, and may be adversely affected by, the rights of any preferred stock that we may designate and issue in the future.

We will incorporate by reference as an exhibit to the registration statement, which includes this prospectus, the form of any certificate of designation that describes the terms of the series of preferred stock we are offering. This description and the applicable prospectus supplement will include:

- the title and stated value;
- the number of shares authorized;
- the liquidation preference per share;
- the purchase price;
- the dividend rate, period and payment date, and method of calculation for dividends;
- whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;
- the procedures for any auction and remarketing, if any;

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- the provisions for a sinking fund, if any;
- the provisions for redemption or repurchase, if applicable, and any restrictions on our ability to exercise those redemption and repurchase rights;
- any listing of the preferred stock on any securities exchange or market;
- whether the preferred stock will be convertible into our common stock, and, if applicable, the conversion price, or how it will be calculated, and the conversion period;
- whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price, or how it will be calculated, and the exchange period;
- voting rights, if any, of the preferred stock;
- preemptive rights, if any;
- restrictions on transfer, sale or other assignment, if any;
- whether interests in the preferred stock will be represented by depositary shares;
- a discussion of any material United States federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs;
- any limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights if we liquidate, dissolve or wind up our affairs; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

When we issue shares of preferred stock under this prospectus, the shares will fully be paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

The Michigan Business Corporation Act, or the MBCA, provides that the holders of preferred stock will have the right to vote separately as a class on any proposal involving an increase or decrease in the authorized number of shares of that class, or changes in the powers, preferences or special rights of holders of that preferred stock so as to affect the class adversely. This right is in addition to any voting rights that may be provided for in the applicable certificate of designation.

Michigan Law and Certain Charter and By-Law Provisions

We are subject to certain anti-takeover provisions of the MBCA that could delay or make more difficult a merger or tender offer involving Aastrom. Chapter 7A of the MBCA prevents, in general, an “interested shareholder” (defined generally as a person owning 10% or more of a corporation’s outstanding voting shares) from engaging in a “business combination” (as defined therein) with a Michigan corporation unless: (a) the board of directors issues an advisory statement, holders of 90% of the shares of each class of stock entitled to vote approve the transaction, and holders of two-thirds of the “disinterested” shares of each class of stock approve the transaction; or (b) the interested shareholder has been an interested shareholder for at least five years and has not acquired beneficial ownership of any additional shares of the corporation subsequent to the transaction which resulted in such shareholder being classified as an interested shareholder, and meets certain requirements, including provisions relating to the fairness of the price and the form of consideration paid; or (c) the board of directors, by resolution, exempts a particular interested shareholder from these provisions prior to the interested shareholder becoming an interested shareholder. The MBCA also contains certain other provisions that could have anti-takeover effects.

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Our Charter does not provide shareholders with the right to act without a meeting and does not provide for cumulative voting in the election of directors. The amendment of any of these provisions would require approval by holders of at least a majority of the shares of our outstanding common stock.

These and other provisions of our Charter or Bylaws could have the effect of deterring certain takeovers or delaying or preventing certain changes in control or management of Aastrom, including transactions in which shareholders might otherwise receive a premium for their shares over then-current market prices.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Continental Stock Transfer & Trust Company.

DESCRIPTION OF DEBT SECURITIES

The paragraphs below describe the general terms and provisions of the debt securities we may issue. When we offer to sell a particular series of debt securities, we will describe the specific terms of the securities in a supplement to this prospectus, including any additional covenants or changes to existing covenants relating to such series. The prospectus supplement also will indicate whether the general terms and provisions described in this prospectus apply to a particular series of debt securities. You should read the actual indenture if you do not fully understand a term or the way we use it in this prospectus.

We may offer senior or subordinated debt securities. Each series of debt securities may have different terms. The senior debt securities will be issued under one or more senior indentures, dated as of a date prior to such issuance, between us and the trustee identified in the applicable prospectus supplement, as amended or supplemented from time to time. We will refer to any such indenture throughout this prospectus as the “senior indenture.” Any subordinated debt securities will be issued under one or more separate indentures, dated as of a date prior to such issuance, between us and the trustee identified in the applicable prospectus supplement, as amended or supplemented from time to time. We will refer to any such indenture throughout this prospectus as the “subordinated indenture” and to the trustee under the senior or subordinated indenture as the “trustee.” The senior indenture and the subordinated indenture are sometimes collectively referred to in this prospectus as the “indentures.” The indentures will be subject to and governed by the Trust Indenture Act of 1939, as amended. We included copies of the forms of the indentures as exhibits to our registration statement and they are incorporated into this prospectus by reference.

If we issue debt securities at a discount from their principal amount, then, for purposes of calculating the aggregate initial offering price of the offered securities issued under this prospectus, we will include only the initial offering price of the debt securities and not the principal amount of the debt securities.

We have summarized below the material provisions of the indentures and the debt securities, or indicated which material provisions will be described in the related prospectus supplement. The prospectus supplement relating to any particular securities offered will describe the specific terms of the securities, which may be in addition to or different from the general terms summarized in this prospectus. Because the summary in this prospectus and in any prospectus supplement does not contain all of the information that you may find useful, you should read the documents relating to the securities that are described in this prospectus or in any applicable prospectus supplement. Please read “Where You Can Find More Information” to find out how you can obtain a copy of those documents. Except as otherwise indicated, the terms of the indentures are identical. As used under this caption, the term “debt securities” includes the debt securities being offered by this prospectus and all other debt securities issued by us under the indentures.

General

The indentures:

- do not limit the amount of debt securities that we may issue;
- allow us to issue debt securities in one or more series;
- do not require us to issue all of the debt securities of a series at the same time;
- allow us to reopen a series to issue additional debt securities without the consent of the holders of the debt securities of such series; and
- provide that the debt securities will be unsecured, except as may be set forth in the applicable prospectus supplement.

Unless we give you different information in the applicable prospectus supplement, the senior debt securities will be unsubordinated obligations and will rank equally with all of our other unsecured and unsubordinated indebtedness. Payments on the subordinated debt securities will be subordinated to the prior payment in full of all of our senior indebtedness, as described under “Description of Debt Securities—Subordination” and in the applicable prospectus supplement.

Each indenture provides that we may, but need not, designate more than one trustee under an indenture. Any trustee under an indenture may resign or be removed and a successor trustee may be appointed to act with respect to the series of debt securities administered by the resigning or removed trustee. If two or more persons are acting as trustee with respect to different series of debt securities, each trustee shall be a trustee of a trust under the applicable indenture separate and apart from the trust administered by any other trustee. Except as otherwise indicated in this prospectus, any action described in this prospectus to be taken by each trustee may be taken by each trustee with respect to, and only with respect to, the one or more series of debt securities for which it is trustee under the applicable indenture.

The prospectus supplement for each offering will provide the following terms, where applicable:

- the title of the debt securities and whether they are senior or subordinated;
- the aggregate principal amount of the debt securities being offered, the aggregate principal amount of the debt securities outstanding as of the most recent practicable date and any limit on their aggregate principal amount, including the aggregate principal amount of debt securities authorized;
- the price at which the debt securities will be issued, expressed as a percentage of the principal and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or, if applicable, the portion of the principal amount of such debt securities that is convertible into common stock or other securities of Aastrom or the method by which any such portion shall be determined;
- if convertible, the terms on which such debt securities are convertible, including the initial conversion price or rate and the conversion period and any applicable limitations on the ownership or transferability of common stock or other securities of Aastrom received on conversion;
- the date or dates, or the method for determining the date or dates, on which the principal of the debt securities will be payable;

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- the fixed or variable interest rate or rates of the debt securities, or the method by which the interest rate or rates is determined;
- the date or dates, or the method for determining the date or dates, from which interest will accrue;
- the dates on which interest will be payable;
- the record dates for interest payment dates, or the method by which such dates will be determine;
- the persons to whom interest will be payable;
- the basis upon which interest will be calculated if other than that of a 360-day year of twelve 30-day months;
- any make-whole amount, which is the amount in addition to principal and interest that is required to be paid to the holder of a debt security as a result of any optional redemption or accelerated payment of such debt security, or the method for determining the make-whole amount;
- the place or places where the principal of, and any premium or make-whole amount, and interest on, the debt securities will be payable;
- where the debt securities may be surrendered for registration of transfer or conversion or exchange;
- where notices or demands to or upon us in respect of the debt securities and the applicable indenture may be served;
- the times, prices and other terms and conditions upon which we may redeem the debt securities;
- any obligation we have to redeem, repay or purchase the debt securities pursuant to any sinking fund or analogous provision or at the option of holders of the debt securities, and the times and prices at which we must redeem, repay or purchase the debt securities as a result of such obligation;
- the currency or currencies in which the debt securities are denominated and payable if other than United States dollars, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies and the terms and conditions relating thereto, and the manner of determining the equivalent of such foreign currency in United States dollars;
- whether the principal of, and any premium or make-whole amount, or interest on, the debt securities of the series are to be payable, at our election or at the election of a holder, in a currency or currencies other than that in which the debt securities are denominated or stated to be payable, and other related terms and conditions;
- whether the amount of payments of principal of, and any premium or make-whole amount, or interest on, the debt securities may be determined according to an index, formula or other method and how such amounts will be determined;

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- whether the debt securities will be in registered form, bearer form or both and (i) if in registered form, the person to whom any interest shall be payable, if other than the person in whose name the security is registered at the close of business on the regular record date for such interest, or (ii) if in bearer form, the manner in which, or the person to whom, any interest on the security shall be payable if otherwise than upon presentation and surrender upon maturity;
- any restrictions applicable to the offer, sale or delivery of securities in bearer form and the terms upon which securities in bearer form of the series may be exchanged for securities in registered form of the series and vice versa, if permitted by applicable laws and regulations;
- whether any debt securities of the series are to be issuable initially in temporary global form and whether any debt securities of the series are to be issuable in permanent global form with or without coupons and, if so, whether beneficial owners of interests in any such permanent global security may, or shall be required to, exchange their interests for other debt securities of the series, and the manner in which interest shall be paid;
- the identity of the depositary for securities in registered form, if such series are to be issuable as a global security;
- the date as of which any debt securities in bearer form or in temporary global form shall be dated if other than the original issuance date of the first security of the series to be issued;
- the applicability, if any, of the defeasance and covenant defeasance provisions described in this prospectus or in the applicable indenture;
- whether and under what circumstances we will pay any additional amounts on the debt securities in respect of any tax, assessment or governmental charge and, if so, whether we will have the option to redeem the debt securities in lieu of making such a payment;
- whether and under what circumstances the debt securities being offered are convertible into common stock or other securities of Aastrom, as the case may be, including the conversion price or rate and the manner or calculation thereof;
- the circumstances, if any, specified in the applicable prospectus supplement, under which beneficial owners of interests in the global security may obtain definitive debt securities and the manner in which payments on a permanent global debt security will be made if any debt securities are issuable in temporary or permanent global form;
- any provisions granting special rights to holders of securities upon the occurrence of such events as specified in the applicable prospectus supplement;
- if the debt securities of such series are to be issuable in definitive form only upon receipt of certain certificates or other documents or satisfaction of other conditions, then the form and/or terms of such certificates, documents or conditions;
- the name of the applicable trustee and the nature of any material relationship with us or any of our affiliates, and the percentage of debt securities of the class necessary to require the trustee to take action;
- any deletions from, modifications of or additions to our events of default or covenants with regard to such debt securities and any change in the right of any trustee or any of the holders to declare the principal amount of any of such debt securities due and payable;
- applicable CUSIP numbers; and
- any other terms of such debt securities not inconsistent with the provisions of the applicable indenture.

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We may issue debt securities that provide for less than the entire principal amount thereof to be payable upon declaration of acceleration of the maturity of the debt securities. We refer to any such debt securities throughout this prospectus as “original issue discount securities.” The applicable prospectus supplement will describe the United States federal income tax consequences and other relevant considerations applicable to original issue discount securities.

We also may issue indexed debt securities. Payments of principal of, and premium and interest on, indexed debt securities are determined with reference to the rate of exchange between the currency or currency unit in which the debt security is denominated and any other currency or currency unit specified by us, to the relationship between two or more currencies or currency units or by other similar methods or formulas specified in the prospectus supplement.

Except as described under “—Merger, Consolidation or Sale of Assets” or as may be set forth in any prospectus supplement, the debt securities will not contain any provisions that (i) would limit our ability to incur indebtedness or (ii) would afford holders of debt securities protection in the event of (a) a highly leveraged or similar transaction involving us, or (b) a change of control or reorganization, restructuring, merger or similar transaction involving us that may adversely affect the holders of the debt securities. In the future, we may enter into transactions, such as the sale of all or substantially all of our assets or a merger or consolidation, that may have an adverse effect on our ability to service our indebtedness, including the debt securities, by, among other things, substantially reducing or eliminating our assets.

Neither the MBCA nor our governing instruments define the term “substantially all” as it relates to the sale of assets. Additionally, Michigan cases interpreting the term “substantially all” rely upon the facts and circumstances of each particular case. Consequently, to determine whether a sale of “substantially all” of our assets has occurred, a holder of debt securities must review the financial and other information that we have disclosed to the public.

We will provide you with more information in the applicable prospectus supplement regarding any deletions, modifications, or additions to the events of default or covenants that are described below, including any addition of a covenant or other provision providing event risk or similar protection.

Payment

Unless we give you different information in the applicable prospectus supplement, the principal of, and any premium or make-whole amount, and interest on, any series of the debt securities will be payable at the corporate trust office of the trustee. We will provide you with the address of the trustee in the applicable prospectus supplement. We may also pay interest by mailing a check to the address of the person entitled to it as it appears in the applicable register for the debt securities or by wire transfer of funds to that person at an account maintained within the United States.

All monies that we pay to a paying agent or a trustee for the payment of the principal of, and any premium or make-whole amount, or interest on, any debt security will be repaid to us if unclaimed at the end of two years after the obligation underlying payment becomes due and payable. After funds have been returned to us, the holder of the debt security may look only to us for payment, without payment of interest for the period which we hold the funds.

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Denomination, Interest, Registration and Transfer

Unless otherwise described in the applicable prospectus supplement, the debt securities of any series will be issuable in denominations of \$1,000 and integral multiples of \$1,000.

Subject to the limitations imposed upon debt securities that are evidenced by a computerized entry in the records of a depository company rather than by physical delivery of a note, a holder of debt securities of any series may:

- exchange them for any authorized denomination of other debt securities of the same series and of a like aggregate principal amount and kind upon surrender of such debt securities at the corporate trust office of the applicable trustee or at the office of any transfer agent that we designate for such purpose; and
- surrender them for registration of transfer or exchange at the corporate trust office of the applicable trustee or at the office of any transfer agent that we designate for such purpose.

Every debt security surrendered for registration of transfer or exchange must be duly endorsed or accompanied by a written instrument of transfer satisfactory to the applicable trustee or transfer agent. Payment of a service charge will not be required for any registration of transfer or exchange of any debt securities, but we or the trustee may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith. If in addition to the applicable trustee, the applicable prospectus supplement refers to any transfer agent initially designated by us for any series of debt securities, we may at any time rescind the designation of any such transfer agent or approve a change in the location through which any such transfer agent acts, except that we will be required to maintain a transfer agent in each place of payment for such series. We may at any time designate additional transfer agents for any series of debt securities.

Neither we, nor any trustee, will be required to:

- issue, register the transfer of or exchange debt securities of any series during a period beginning at the opening of business 15 days before the day that the notice of redemption of any debt securities selected for redemption is mailed and ending at the close of business on the day of such mailing;
- register the transfer of or exchange any debt security, or portion thereof, so selected for redemption, in whole or in part, except the unredeemed portion of any debt security being redeemed in part; and
- issue, register the transfer of or exchange any debt security that has been surrendered for repayment at the option of the holder, except the portion, if any, of such debt security not to be so repaid.

Merger, Consolidation or Sale of Assets

The indentures provide that we may, without the consent of the holders of any outstanding debt securities, (i) consolidate with, (ii) sell, lease or convey all or substantially all of our assets to, or (iii) merge with or into, any other entity provided that:

- either we are the continuing entity, or the successor entity, if other than us, assumes the obligations (a) to pay the principal of, and any premium or make-whole amount, and interest on, all of the debt securities and (b) to duly perform and observe all of the covenants and conditions contained in each indenture;
- after giving effect to the transaction, there is no event of default under the indentures and no event which, after notice or the lapse of time, or both, would become such an event of default, occurs and continues; and
- an officers' certificate and legal opinion covering such conditions are delivered to each applicable trustee.

Covenants

Existence. Except as described under “—Merger, Consolidation or Sale of Assets,” the indentures require us to do or cause to be done all things necessary to preserve and keep in full force and effect our existence, rights and franchises. However, the indentures do not require us to preserve any right or franchise if we determine that any right or franchise is no longer desirable in the conduct of our business.

Payment of taxes and other claims. The indentures require us to pay, discharge or cause to be paid or discharged, before they become delinquent (i) all taxes, assessments and governmental charges levied or imposed on us, our subsidiaries or our or our subsidiaries’ income, profits or property, and (ii) all lawful claims for labor, materials and supplies which, if unpaid, might by law become a lien upon our property or the property of our subsidiaries. However, we will not be required to pay, discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings.

Provision of financial information. The indentures require us to (i) within 15 days of each of the respective dates by which we are required to file our annual reports, quarterly reports and other documents with the SEC, file with the trustee copies of the annual report, quarterly report and other documents that we file with the SEC under Section 13 or 15(d) of the Exchange Act, (ii) file with the trustee and the SEC any additional information, documents and reports regarding compliance by us with the conditions and covenants of the indentures, as required, (iii) within 30 days after the filing with the trustee, mail to all holders of debt securities, as their names and addresses appear in the applicable register for such debt securities, without cost to such holders, summaries of any documents and reports required to be filed by us pursuant to (i) and (ii) above, and (iv) supply, promptly upon written request and payment of the reasonable cost of duplication and delivery, copies of such documents to any prospective holder.

Additional covenants. The applicable prospectus supplement will set forth any additional covenants of Aastrom relating to any series of debt securities.

Events of Default, Notice and Waiver

Unless the applicable prospectus supplement states otherwise, when we refer to “events of default” as defined in the indentures with respect to any series of debt securities, we mean:

- default in the payment of any installment of interest on any debt security of such series continuing for 30 days;
- default in the payment of principal of, or any premium or make-whole amount on, any debt security of such series for five business days at its stated maturity;
- default in making any sinking fund payment as required for any debt security of such series for five business days;
- default in the performance or breach of any covenant or warranty in the debt securities or in the indenture by Aastrom continuing for 60 days after written notice as provided in the applicable indenture, but not of a covenant added to the indenture solely for the benefit of a series of debt securities issued thereunder other than such series;

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- a default under any bond, debenture, note, mortgage, indenture or instrument:
 - (i) having an aggregate principal amount of at least \$75,000,000; or
 - (ii) under which there may be issued, secured or evidenced any existing or later created indebtedness for money borrowed by us or our subsidiaries, if we are directly responsible or liable as obligor or guarantor,

if the default results in the indebtedness becoming or being declared due and payable prior to the date it otherwise would have, without such indebtedness having been discharged, or such acceleration having been rescinded or annulled, within 30 days after notice to the issuing company specifying such default. Such notice shall be given to us by the trustee, or to us and the trustee by the holders of at least 10% in principal amount of the outstanding debt securities of that series. The written notice shall specify such default and require us to cause such indebtedness to be discharged or cause such acceleration to be rescinded or annulled and shall state that such notice is a “Notice of Default” under such indenture;
- bankruptcy, insolvency or reorganization, or court appointment of a receiver, liquidator or trustee of Aastrom or any significant subsidiary of Aastrom; and
- any other event of default provided with respect to a particular series of debt securities.

When we use the term “significant subsidiary,” we refer to the meaning ascribed to such term in Rule 1-02 of Regulation S-X promulgated under the Securities Act.

If an event of default occurs and is continuing with respect to debt securities of any series outstanding, then the applicable trustee or the holders of 25% or more in principal amount of the debt securities of that series will have the right to declare the principal amount of all the debt securities of that series to be due and payable. If the debt securities of that series are original issue discount securities or indexed securities, then the applicable trustee or the holders of 25% or more in principal amount of the debt securities of that series will have the right to declare the portion of the principal amount as may be specified in the terms thereof to be due and payable. However, at any time after such a declaration of acceleration has been made, but before a judgment or decree for payment of the money due has been obtained by the applicable trustee, the holders of at least a majority in principal amount of outstanding debt securities of such series or of all debt securities then outstanding under the applicable indenture may rescind and annul such declaration and its consequences if:

- we have deposited with the applicable trustee all required payments of the principal, any premium or make-whole amount, interest and, to the extent permitted by law, interest on overdue installment of interest, plus applicable fees, expenses, disbursements and advances of the applicable trustee; and
- all events of default, other than the non-payment of accelerated principal, or a specified portion thereof, and any premium or make-whole amount, have been cured or waived.

The indentures also provide that the holders of at least a majority in principal amount of the outstanding debt securities of any series or of all debt securities then outstanding under the applicable indenture may, on behalf of all holders, waive any past default with respect to such series and its consequences, except a default:

- in the payment of the principal, any premium or make-whole amount, or interest;
- in respect of a covenant or provision contained in the applicable indenture that cannot be modified or amended without the consent of the holders of the outstanding debt security that is affected by the default; or
- in respect of a covenant or provision for the benefit or protection of the trustee, without its express written consent.

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The indentures require each trustee to give notice to the holders of debt securities within 90 days of a default unless such default has been cured or waived. However, the trustee may withhold notice if specified persons of such trustee consider such withholding to be in the interest of the holders of debt securities. The trustee may not withhold notice of a default in the payment of principal, any premium or interest on any debt security of such series or in the payment of any sinking fund installment in respect of any debt security of such series.

The indentures provide that holders of debt securities of any series may not institute any proceedings, judicial or otherwise, with respect to such indenture or for any remedy under the indenture, unless the trustee fails to act for a period of 60 days after the trustee has received a written request to institute proceedings in respect of an event of default from the holders of 25% or more in principal amount of the outstanding debt securities of such series, as well as an offer of indemnity reasonably satisfactory to the trustee. However, this provision will not prevent any holder of debt securities from instituting suit for the enforcement of payment of the principal of, and any premium or make-whole amount, and interest on, such debt securities at the respective due dates thereof.

The indentures provide that, subject to provisions in each indenture relating to its duties in the case of a default, a trustee has no obligation to exercise any of its rights or powers at the request or direction of any holders of any series of debt securities then outstanding under the indenture, unless the holders have offered to the trustee reasonable security or indemnity. The holders of at least a majority in principal amount of the outstanding debt securities of any series or of all debt securities then outstanding under an indenture shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the applicable trustee, or of exercising any trust or power conferred upon such trustee. However, a trustee may refuse to follow any direction which:

- is in conflict with any law or the applicable indenture;
- may involve the trustee in personal liability; or
- may be unduly prejudicial to the holders of debt securities of the series not joining the proceeding.

Within 120 days after the close of each fiscal year, we will be required to deliver to each trustee a certificate, signed by one of our several specified officers, stating whether or not that officer has knowledge of any default under the applicable indenture. If the officer has knowledge of any default, the notice must specify the nature and status of the default.

Modification of the Indentures

The indentures provide that modifications and amendments may be made only with the consent of the affected holders of at least a majority in principal amount of all outstanding debt securities issued under that indenture. However, no such modification or amendment may, without the consent of the holders of the debt securities affected by the modification or amendment:

- change the stated maturity of the principal of, or any premium or make-whole amount on, or any installment of principal of or interest on, any such debt security;
- reduce the principal amount of, the rate or amount of interest on, or any premium or make-whole amount payable on redemption of, any such debt security;
- reduce the amount of principal of an original issue discount security that would be due and payable upon declaration of acceleration of the maturity thereof or would be provable in bankruptcy, or adversely affect any right of repayment of the holder of any such debt security;

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- change the place of payment or the coin or currency for payment of principal of, or any premium or make-whole amount, or interest on, any such debt security;
- impair the right to institute suit for the enforcement of any payment on or with respect to any such debt security;
- reduce the percentage in principal amount of any outstanding debt securities necessary to modify or amend the applicable indenture with respect to such debt securities, to waive compliance with particular provisions thereof or defaults and consequences thereunder or to reduce the quorum or voting requirements set forth in the applicable indenture; and
- modify any of the foregoing provisions or any of the provisions relating to the waiver of particular past defaults or covenants, except to increase the required percentage to effect such action or to provide that some of the other provisions may not be modified or waived without the consent of the holder of such debt security.

The holders of a majority in aggregate principal amount of the outstanding debt securities of each series may, on behalf of all holders of debt securities of that series, waive, insofar as that series is concerned, our compliance with material restrictive covenants of the applicable indenture.

We and our respective trustee may make modifications and amendments of an indenture without the consent of any holder of debt securities for any of the following purposes:

- to evidence the succession of another person to us as obligor under such indenture;
- to add to our covenants for the benefit of the holders of all or any series of debt securities or to surrender any right or power conferred upon us in such indenture;
- to add events of default for the benefit of the holders of all or any series of debt securities;
- to add or change any provisions of an indenture (i) to change or eliminate restrictions on the payment of principal of, or premium or make-whole amount, or interest on, debt securities in bearer form, or (ii) to permit or facilitate the issuance of debt securities in uncertificated form, provided that such action shall not adversely affect the interests of the holders of the debt securities of any series in any material respect;
- to change or eliminate any provisions of an indenture, provided that any such change or elimination shall become effective only when there are no debt securities outstanding of any series created prior thereto which are entitled to the benefit of such provision;
- to secure the debt securities;
- to establish the form or terms of debt securities of any series;
- to provide for the acceptance of appointment by a successor trustee or facilitate the administration of the trusts under an indenture by more than one trustee;
- to cure any ambiguity, defect or inconsistency in an indenture, provided that such action shall not adversely affect the interests of holders of debt securities of any series issued under such indenture; and
- to supplement any of the provisions of an indenture to the extent necessary to permit or facilitate defeasance and discharge of any series of such debt securities, provided that such action shall not adversely affect the interests of the holders of the outstanding debt securities of any series.

Voting

The indentures provide that in determining whether the holders of the requisite principal amount of outstanding debt securities of a series have given any request, demand, authorization, direction, notice, consent or waiver under the indentures or whether a quorum is present at a meeting of holders of debt securities:

- the principal amount of an original issue discount security that shall be deemed to be outstanding shall be the amount of the principal thereof that would be due and payable as of the date of such determination upon declaration of acceleration of the maturity thereof;
- the principal amount of any debt security denominated in a foreign currency that shall be deemed outstanding shall be the United States dollar equivalent, determined on the issue date for such debt security, of the principal amount or, in the case of an original issue discount security, the United States dollar equivalent on the issue date of such debt security of the amount determined as provided in the preceding bullet point;
- the principal amount of an indexed security that shall be deemed outstanding shall be the principal face amount of such indexed security at original issuance, unless otherwise provided for such indexed security under such indenture; and
- debt securities owned by us or any other obligor upon the debt securities or by any affiliate of ours or of such other obligor shall be disregarded.

The indentures contain provisions for convening meetings of the holders of debt securities of a series. A meeting will be permitted to be called at any time by the applicable trustee, and also, upon request, by us or the holders of at least 25% in principal amount of the outstanding debt securities of such series, in any such case upon notice given as provided in such indenture. Except for any consent that must be given by the holder of each debt security affected by the modifications and amendments of an indenture described above, any resolution presented at a meeting or adjourned meeting duly reconvened at which a quorum is present may be adopted by the affirmative vote of the holders of a majority of the aggregate principal amount of the outstanding debt securities of that series represented at such meeting.

Notwithstanding the preceding paragraph, except as referred to above, any resolution relating to a request, demand, authorization, direction, notice, consent, waiver or other action that may be made, given or taken by the holders of a specified percentage, which is less than a majority of the aggregate principal amount of the outstanding debt securities of a series, may be adopted at a meeting or adjourned meeting duly reconvened at which a quorum is present by the affirmative vote of such specified percentage.

Any resolution passed or decision taken at any properly held meeting of holders of debt securities of any series will be binding on all holders of such series. The quorum at any meeting called to adopt a resolution, and at any reconvened meeting, will be persons holding or representing a majority in principal amount of the outstanding debt securities of a series. However, if any action is to be taken relating to a consent or waiver which may be given by the holders of at least a specified percentage in principal amount of the outstanding debt securities of a series, the persons holding such percentage will constitute a quorum.

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Notwithstanding the foregoing provisions, the indentures provide that if any action is to be taken at a meeting with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that such indenture expressly provides may be made, given or taken by the holders of a specified percentage in principal amount of all outstanding debt securities affected by such action, or of the holders of such series and one or more additional series:

- there shall be no minimum quorum requirement for such meeting; and
- the principal amount of the outstanding debt securities of such series that vote in favor of such request, demand, authorization, direction, notice, consent, waiver or other action shall be taken account in determining whether such request, demand, authorization, direction, notice, consent, waiver or other action has been made, given or taken under such indenture.

Subordination

Unless otherwise provided in the applicable prospectus supplement, subordinated debt securities will be subject to the following subordination provisions.

Upon any distribution to our creditors in a liquidation, dissolution or reorganization, the payment of the principal of and interest on any subordinated debt securities will be subordinated to the extent provided in the applicable indenture in right of payment to the prior payment in full of all senior debt. However, our obligation to make payments of the principal of and interest on such subordinated debt securities otherwise will not be affected. No payment of principal or interest will be permitted to be made on subordinated debt securities at any time if a default on senior debt exists that permits the holders of such senior debt to accelerate its maturity and the default is the subject of judicial proceedings or we receive notice of the default. After all senior debt is paid in full and until the subordinated debt securities are paid in full, holders of subordinated debt securities will be subrogated to the rights of holders of senior debt to the extent that distributions otherwise payable to holders of subordinated debt securities have been applied to the payment of senior debt. The subordinated indenture will not restrict the amount of senior debt or other indebtedness of Aastrom and its subsidiaries. As a result of these subordination provisions, in the event of a distribution of assets upon insolvency, holders of subordinated debt securities may recover less, ratably, than our general creditors.

The term "senior debt" will be defined in the applicable indenture as the principal of and interest on, or substantially similar payments to be made by us in respect of, other outstanding indebtedness, whether outstanding at the date of execution of the applicable indenture or subsequently incurred, created or assumed. The prospectus supplement may include a description of additional terms implementing the subordination feature.

No restrictions will be included in any indenture relating to subordinated debt securities upon the creation of additional senior debt.

If this prospectus is being delivered in connection with the offering of a series of subordinated debt securities, the accompanying prospectus supplement or the information incorporated in this prospectus by reference will set forth the approximate amount of senior debt outstanding as of the end of our most recent fiscal quarter.

Discharge, Defeasance and Covenant Defeasance

Unless otherwise indicated in the applicable prospectus supplement, the indentures allow us to discharge our obligations to holders of any series of debt securities issued under any indenture when:

- either (i) all securities of such series have already been delivered to the applicable trustee for cancellation; or (ii) all securities of such series have not already been delivered to the applicable trustee for cancellation but (a) have become due and payable, (b) will become due and payable within one year, or (c) if redeemable at our option, are to be redeemed within one year, and we have irrevocably deposited with the applicable trustee, in trust, funds in such currency or currencies, currency unit or units or composite currency or currencies in which such debt securities are payable, an amount sufficient to pay the entire indebtedness on such debt securities in respect of principal and any premium or make-whole amount, and interest to the date of such deposit if such debt securities have become due and payable or, if they have not, to the stated maturity or redemption date;

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- we have paid or caused to be paid all other sums payable; and
- an officers' certificate and an opinion of counsel stating the conditions to discharging the debt securities have been satisfied has been delivered to the trustee.

Unless otherwise indicated in the applicable prospectus supplement, the indentures provide that, upon our irrevocable deposit with the applicable trustee, in trust, of an amount, in such currency or currencies, currency unit or units or composite currency or currencies in which such debt securities are payable at stated maturity, or government obligations, or both, applicable to such debt securities, which through the scheduled payment of principal and interest in accordance with their terms will provide money in an amount sufficient to pay the principal of, and any premium or make-whole amount, and interest on, such debt securities, and any mandatory sinking fund or analogous payments thereon, on the scheduled due dates therefor, the issuing company may elect either:

- to defease and be discharged from any and all obligations with respect to such debt securities; or
- to be released from its obligations with respect to such debt securities under the applicable indenture or, if provided in the applicable prospectus supplement, its obligations with respect to any other covenant, and any omission to comply with such obligations shall not constitute an event of default with respect to such debt securities.

Notwithstanding the above, we may not elect to defease and be discharged from the obligation to pay any additional amounts upon the occurrence of particular events of tax, assessment or governmental charge with respect to payments on such debt securities and the obligations to register the transfer or exchange of such debt securities, to replace temporary or mutilated, destroyed, lost or stolen debt securities, to maintain an office or agency in respect of such debt securities, or to hold monies for payment in trust.

The indentures only permit us to establish the trust described in the paragraph above if, among other things, we have delivered to the applicable trustee an opinion of counsel to the effect that the holders of such debt securities will not recognize income, gain or loss for United States federal income tax purposes as a result of such defeasance or covenant defeasance and will be subject to United States federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such defeasance or covenant defeasance had not occurred. Such opinion of counsel, in the case of defeasance, will be required to refer to and be based upon a ruling received from or published by the Internal Revenue Service or a change in applicable United States federal income tax law occurring after the date of the indenture. In the event of such defeasance, the holders of such debt securities would be able to look only to such trust fund for payment of principal, any premium or make-whole amount, and interest.

When we use the term "government obligations," we mean securities that are:

- direct obligations of the United States or the government that issued the foreign currency in which the debt securities of a particular series are payable, for the payment of which its full faith and credit is pledged; or
- obligations of a person controlled or supervised by and acting as an agency or instrumentality of the United States or other government that issued the foreign currency in which the debt securities of such series are payable, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States or such other government, which are not callable or redeemable at the option of the issuer thereof and shall also include a depository receipt issued by a bank or trust company as custodian with respect to any such government obligation or a specific payment of interest on or principal of any such government obligation held by such custodian for the account of the holder of a depository receipt. However, except as required by law, such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the government obligation or the specific payment of interest on or principal of the government obligation evidenced by such depository receipt.

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Unless otherwise provided in the applicable prospectus supplement, if after we have deposited funds and/or government obligations to effect defeasance or covenant defeasance with respect to debt securities of any series, (i) the holder of a debt security of such series is entitled to, and does, elect under the terms of the applicable indenture or the terms of such debt security to receive payment in a currency, currency unit or composite currency other than that in which such deposit has been made in respect of such debt security, or (ii) a conversion event occurs in respect of the currency, currency unit or composite currency in which such deposit has been made, the indebtedness represented by such debt security will be deemed to have been, and will be, fully discharged and satisfied through the payment of the principal of, and premium or make-whole amount, and interest on, such debt security as they become due out of the proceeds yielded by converting the amount so deposited in respect of such debt security into the currency, currency unit or composite currency in which such debt security becomes payable as a result of such election or such cessation of usage based on the applicable market exchange rate.

When we use the term “conversion event,” we mean the cessation of use of:

- a currency, currency unit or composite currency both by the government of the country that issued such currency and for the settlement of transactions by a central bank or other public institutions of or within the international banking community;
- the European Currency Unit both within the European Monetary System and for the settlement of transactions by public institutions of or within the European Communities; or
- any currency unit or composite currency other than the European Currency Unit for the purposes for which it was established.

Unless otherwise provided in the applicable prospectus supplement, all payments of principal of, and any premium or make-whole amount, and interest on, any debt security that is payable in a foreign currency that ceases to be used by its government of issuance shall be made in United States dollars.

In the event that (i) we effect covenant defeasance with respect to any debt securities and (ii) those debt securities are declared due and payable because of the occurrence of any event of default, the amount in the currency, currency unit or composite currency in which such debt securities are payable, and government obligations on deposit with the applicable trustee, will be sufficient to pay amounts due on such debt securities at the time of their stated maturity but may not be sufficient to pay amounts due on such debt securities at the time of the acceleration resulting from such event of default. However, the issuing company would remain liable to make payments of any amounts due at the time of acceleration.

The applicable prospectus supplement may further describe the provisions, if any, permitting such defeasance or covenant defeasance, including any modifications to the provisions described above, with respect to the debt securities of or within a particular series.

Conversion Rights

The terms and conditions, if any, upon which the debt securities are convertible into common stock or other securities of Aastrom will be set forth in the applicable prospectus supplement. The terms will include whether the debt securities are convertible into shares of common stock or other securities of Aastrom, the conversion price, or manner of calculation thereof, the conversion period, provisions as to whether conversion will be at the issuing company's option or the option of the holders, the events requiring an adjustment of the conversion price and provisions affecting conversion in the event of the redemption of the debt securities and any restrictions on conversion.

Global Securities

The debt securities of a series may be issued in whole or in part in the form of one or more global securities that will be deposited with, or on behalf of, a depository identified in the applicable prospectus supplement relating to such series. Global securities, if any, issued in the United States are expected to be deposited with The Depository Trust Company, or DTC, as depository. We may issue global securities in either registered or bearer form and in either temporary or permanent form. We will describe the specific terms of the depository arrangement with respect to a series of debt securities in the applicable prospectus supplement relating to such series. We expect that unless the applicable prospectus supplement provides otherwise, the following provisions will apply to depository arrangements.

Once a global security is issued, the depository for such global security or its nominee will credit on its book-entry registration and transfer system the respective principal amounts of the individual debt securities represented by such global security to the accounts of participants that have accounts with such depository. Such accounts shall be designated by the underwriters, dealers or agents with respect to such debt securities or by us if we offer such debt securities directly. Ownership of beneficial interests in such global security will be limited to participants with the depository or persons that may hold interests through those participants.

We expect that, under procedures established by DTC, ownership of beneficial interests in any global security for which DTC is the depository will be shown on, and the transfer of that ownership will be effected only through, records maintained by DTC or its nominee, with respect to beneficial interests of participants with the depository, and records of participants, with respect to beneficial interests of persons who hold through participants with the depository. Neither we nor the trustee will have any responsibility or liability for any aspect of the records of DTC or for maintaining, supervising or reviewing any records of DTC or any of its participants relating to beneficial ownership interests in the debt securities. The laws of some states require that certain purchasers of securities take physical delivery of such securities in definitive form. Such limits and laws may impair the ability to own, pledge or transfer beneficial interest in a global security.

So long as the depository for a global security or its nominee is the registered owner of such global security, such depository or such nominee, as the case may be, will be considered the sole owner or holder of the debt securities represented by the global security for all purposes under the applicable indenture. Except as described below or in the applicable prospectus supplement, owners of beneficial interest in a global security will not be entitled to have any of the individual debt securities represented by such global security registered in their names, will not receive or be entitled to receive physical delivery of any such debt securities in definitive form and will not be considered the owners or holders thereof under the applicable indenture. Beneficial owners of debt securities evidenced by a global security will not be considered the owners or holders thereof under the applicable indenture for any purpose, including with respect to the giving of any direction, instructions or approvals to the trustee under the indenture. Accordingly, each person owning a beneficial interest in a global security with respect to which DTC is the depository must rely on the procedures of DTC and, if such person is not a participant with the depository, on the procedures of the participant through which such person owns its interests, to exercise any rights of a holder under the applicable indenture. We understand that, under existing industry practice, if DTC requests any action of holders or if an owner of a beneficial interest in a global security desires to give or take any action which a holder is entitled to give or take under the applicable indenture, DTC would authorize the participants holding the relevant beneficial interest to give or take such action, and such participants would authorize beneficial owners through such participants to give or take such actions or would otherwise act upon the instructions of beneficial owners holding through them.

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Payments of principal of, and any premium or make-whole amount, and interest on, individual debt securities represented by a global security registered in the name of a depository or its nominee will be made to or at the direction of the depository or its nominee, as the case may be, as the registered owner of the global security under the applicable indenture. Under the terms of the applicable indenture, we and the trustee may treat the persons in whose name debt securities, including a global security, are registered as the owners thereof for the purpose of receiving such payments. Consequently, neither we nor the trustee have or will have any responsibility or liability for the payment of such amounts to beneficial owners of debt securities including principal, any premium or make-whole amount, or interest. We believe, however, that it is currently the policy of DTC to immediately credit the accounts of relevant participants with such payments, in amounts proportionate to their respective holdings of beneficial interests in the relevant global security as shown on the records of DTC or its nominee. We also expect that payments by participants to owners of beneficial interests in such global security held through such participants will be governed by standing instructions and customary practices, as is the case with securities held for the account of customers in bearer form or registered in street name, and will be the responsibility of such participants. Redemption notices with respect to any debt securities represented by a global security will be sent to the depository or its nominee. If less than all of the debt securities of any series are to be redeemed, we expect the depository to determine the amount of the interest of each participant in such debt securities to be redeemed to be determined by lot. Neither we, the trustee, any paying agent nor the security registrar for such debt securities will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in the global security for such debt securities or for maintaining any records with respect thereto.

Neither we nor the trustee will be liable for any delay by the holders of a global security or the depository in identifying the beneficial owners of debt securities, and we and the trustee may conclusively rely on, and will be protected in relying on, instructions from the holder of a global security or the depository for all purposes. The rules applicable to DTC and its participants are on file with the SEC.

If a depository for any debt securities is at any time unwilling, unable or ineligible to continue as depository and we do not appoint a successor depository within 90 days, we will issue individual debt securities in exchange for the global security representing such debt securities. In addition, we may at any time and our sole discretion, subject to any limitations described in the applicable prospectus supplement relating to such debt securities, determine not to have any of such debt securities represented by one or more global securities and in such event will issue individual debt securities in exchange for the global security or securities representing such debt securities. Individual debt securities so issued will be issued in denominations of \$1,000 and integral multiples of \$1,000.

The debt securities of a series may also be issued in whole or in part in the form of one or more bearer global securities that will be deposited with a depository, or with a nominee for such depository, identified in the applicable prospectus supplement. Any such bearer global securities may be issued in temporary or permanent form. The specific terms and procedures, including the specific terms of the depository arrangement, with respect to any portion of a series of debt securities to be represented by one or more bearer global securities will be described in the applicable prospectus supplement.

No Recourse

There is no recourse under any obligation, covenant or agreement in the applicable indenture or with respect to any security against any of our or our successor's past, present or future shareholders, employees, officers or directors.

DESCRIPTION OF WARRANTS

The following description, together with the additional information we may include in any applicable prospectus supplements, summarizes the material terms and provisions of the warrants that we may offer under this prospectus and the related warrant agreements and warrant certificates. While the terms summarized below will apply generally to any warrants that we may offer, we will describe the particular terms of any series of warrants in more detail in the applicable prospectus supplement. If we indicate in the prospectus supplement, the terms of any warrants offered under that prospectus supplement may differ from the terms described below. Specific warrant agreements will contain additional important terms and provisions and will be incorporated by reference as an exhibit to the registration statement, which includes this prospectus.

General

We may issue warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. We may issue warrants independently or together with common stock, preferred stock and/or debt securities, and the warrants may be attached to or separate from these securities.

We will evidence each series of warrants by warrant certificates that we will issue under a separate warrant agreement. We will enter into the warrant agreement with a warrant agent. Each warrant agent will be a bank that we select that has its principal office in the United States and a combined capital and surplus of at least \$75,000,000. We will indicate the name and address of the warrant agent in the applicable prospectus supplement relating to a particular series of warrants.

We will describe in the applicable prospectus supplement the terms of the series of warrants, including:

- the offering price and aggregate number of warrants offered;
- the currency for which the warrants may be purchased;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each such security or each principal amount of such security;
- if applicable, the date on and after which the warrants and the related securities will be separately transferable;
- in the case of warrants to purchase debt securities, the principal amount of debt securities purchasable upon exercise of one warrant and the price at, and currency in which, this principal amount of debt securities may be purchased upon such exercise;
- in the case of warrants to purchase common stock or preferred stock, the number of shares of common stock or preferred stock, as the case may be, purchasable upon the exercise of one warrant and the price at which these shares may be purchased upon such exercise;
- the effect of any merger, consolidation, sale or other disposition of our business on the warrant agreement and the warrants;
- the terms of any rights to redeem or call the warrants;
- any provisions for changes to or adjustments in the exercise price or number of securities issuable upon exercise of the warrants;
- the dates on which the right to exercise the warrants will commence and expire;
- the manner in which the warrant agreement and warrants may be modified;
- federal income tax consequences of holding or exercising the warrants;
- the terms of the securities issuable upon exercise of the warrants; and
- any other specific terms, preferences, rights or limitations of or restrictions on the warrants.

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Before exercising their warrants, holders of warrants will not have any of the rights of holders of the securities purchasable upon such exercise, including:

- in the case of warrants to purchase debt securities, the right to receive payments of principal of, or any premium or interest on, the debt securities purchasable upon exercise or to enforce covenants in the applicable indenture; or
- in the case of warrants to purchase common stock or preferred stock, the right to receive any dividends or payments upon our liquidation, dissolution or winding up or to exercise any voting rights.

Exercise of Warrants

Each warrant will entitle the holder to purchase the securities that we specify in the applicable prospectus supplement at the exercise price that we describe in the applicable prospectus supplement. Unless we otherwise specify in the applicable prospectus supplement, holders of the warrants may exercise the warrants at any time up to 5:00 P.M. New York time on the expiration date that we set forth in the applicable prospectus supplement. After the close of business on the expiration date, unexercised warrants will become void.

Holders of the warrants may exercise the warrants by delivering the warrant certificate representing the warrants to be exercised together with specified information, and paying the required amount to the warrant agent in immediately available funds, as provided in the applicable prospectus supplement. We will set forth on the reverse side of the warrant certificate and in the applicable prospectus supplement the information that the holder of the warrant will be required to deliver to the warrant agent upon exercise.

Upon receipt of the required payment and the warrant certificate properly completed and duly executed at the corporate trust office of the warrant agent or any other office indicated in the applicable prospectus supplement, we will issue and deliver the securities purchasable upon such exercise. If fewer than all of the warrants represented by the warrant certificate are exercised, then we will issue a new warrant certificate for the remaining amount of warrants. If we so indicate in the applicable prospectus supplement, holders of the warrants may surrender securities as all or part of the exercise price for warrants.

Enforceability of Rights By Holders of Warrants

Each warrant agent will act solely as our agent under the applicable warrant agreement and will not assume any obligation or relationship of agency or trust with any holder of any warrant. A single bank or trust company may act as warrant agent for more than one issue or series of warrants. A warrant agent will have no duty or responsibility in case of any default by us under the applicable warrant agreement or warrant, including any duty or responsibility to initiate any proceedings at law or otherwise, or to make any demand upon us. Any holder of a warrant may, without the consent of the related warrant agent or the holder of any other warrant, enforce by appropriate legal action its right to exercise, and receive the securities purchasable upon exercise of, its warrants.

DESCRIPTION OF UNITS

This section outlines some of the provisions of the units and the unit agreements. This information may not be complete in all respects and is qualified entirely by reference to the unit agreement with respect to the units of any particular series. The specific terms of any series of units will be described in the applicable prospectus supplement. If so described in a particular supplement, the specific terms of any series of units may differ from the general description of terms presented below.

We may issue units comprised of shares of preferred stock, shares of common stock, warrants and other securities in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The unit agreement under which a unit is issued may provide that the securities included in the unit may not be held or transferred separately, at any time or at any time before a specified date.

The applicable prospectus supplement may describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances those securities may be held or transferred separately;
- any provisions of the governing unit agreement;
- the price or prices at which such units will be issued;
- the applicable United States federal income tax considerations relating to the units;
- any provisions for the issuance, payment, settlement, transfer or exchange of the units or of the securities comprising the units; and
- any other terms of the units and of the securities comprising the units.

The provisions described in this section, as well as those described under “Description of Capital Stock” and “Description of Warrants” will apply to the securities included in each unit, to the extent relevant.

Issuance in Series

We may issue units in such amounts and in as many distinct series as we wish. This section summarizes terms of the units that apply generally to all series. Most of the financial and other specific terms of your series will be described in the applicable prospectus supplement.

Unit Agreements

We will issue the units under one or more unit agreements to be entered into between us and a bank or other financial institution, as unit agent. We may add, replace or terminate unit agents from time to time. We will identify the unit agreement under which each series of units will be issued and the unit agent under that agreement in the applicable prospectus supplement.

The following provisions will generally apply to all unit agreements unless otherwise stated in the applicable prospectus supplement.

Modification Without Consent

We and the applicable unit agent may amend any unit or unit agreement without the consent of any holder:

- to cure any ambiguity; any provisions of the governing unit agreement that differ from those described below;
- to correct or supplement any defective or inconsistent provision; or
- to make any other change that we believe is necessary or desirable and will not adversely affect the interests of the affected holders in any material respect.

We do not need any approval to make changes that affect only units to be issued after the changes take effect. We may also make changes that do not adversely affect a particular unit in any material respect, even if they adversely affect other units in a material respect. In those cases, we do not need to obtain the approval of the holder of the unaffected unit; we need only obtain any required approvals from the holders of the affected units.

Modification With Consent

We may not amend any particular unit or a unit agreement with respect to any particular unit unless we obtain the consent of the holder of that unit, if the amendment would:

- impair any right of the holder to exercise or enforce any right under a security included in the unit if the terms of that security require the consent of the holder to any changes that would impair the exercise or enforcement of that right; or
- reduce the percentage of outstanding units or any series or class the consent of whose holders is required to amend that series or class, or the applicable unit agreement with respect to that series or class, as described below.

Any other change to a particular unit agreement and the units issued under that agreement would require the following approval:

- If the change affects only the units of a particular series issued under that agreement, the change must be approved by the holders of a majority of the outstanding units of that series; or
- If the change affects the units of more than one series issued under that agreement, it must be approved by the holders of a majority of all outstanding units of all series affected by the change, with the units of all the affected series voting together as one class for this purpose.

These provisions regarding changes with majority approval also apply to changes affecting any securities issued under a unit agreement, as the governing document.

In each case, the required approval must be given by written consent.

Unit Agreements Will Not Be Qualified Under Trust Indenture Act

No unit agreement will be qualified as an indenture, and no unit agent will be required to qualify as a trustee, under the Trust Indenture Act. Therefore, holders of units issued under unit agreements will not have the protections of the Trust Indenture Act with respect to their units.

Mergers and Similar Transactions Permitted; No Restrictive Covenants or Events of Default

The unit agreements will not restrict our ability to merge or consolidate with, or sell our assets to, another corporation or other entity or to engage in any other transactions. If at any time we merge or consolidate with, or sell our assets substantially as an entirety to, another corporation or other entity, the successor entity will succeed to and assume our obligations under the unit agreements. We will then be relieved of any further obligation under these agreements.

The unit agreements will not include any restrictions on our ability to put liens on our assets, including our interests in our subsidiaries, nor will they restrict our ability to sell our assets. The unit agreements also will not provide for any events of default or remedies upon the occurrence of any events of default.

Governing Law

The unit agreements and the units will be governed by Michigan law.

Form, Exchange and Transfer

We will issue each unit in global—i.e., book-entry—form only. Units in book-entry form will be represented by a global security registered in the name of a depository, which will be the holder of all the units represented by the global security. Those who own beneficial interests in a unit will do so through participants in the depository's system, and the rights of these indirect owners will be governed solely by the applicable procedures of the depository and its participants. We will describe book-entry securities, and other terms regarding the issuance and registration of the units in the applicable prospectus supplement.

Each unit and all securities comprising the unit will be issued in the same form.

If we issue any units in registered, non-global form, the following will apply to them.

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The units will be issued in the denominations stated in the applicable prospectus supplement. Holders may exchange their units for units of smaller denominations or combined into fewer units of larger denominations, as long as the total amount is not changed.

- Holders may exchange or transfer their units at the office of the unit agent. Holders may also replace lost, stolen, destroyed or mutilated units at that office. We may appoint another entity to perform these functions or perform them ourselves.
- Holders will not be required to pay a service charge to transfer or exchange their units, but they may be required to pay for any tax or other governmental charge associated with the transfer or exchange. The transfer or exchange, and any replacement, will be made only if our transfer agent is satisfied with the holder's proof of legal ownership. The transfer agent may also require an indemnity before replacing any units.
- If we have the right to redeem, accelerate or settle any units before their maturity, and we exercise our right as to less than all those units or other securities, we may block the exchange or transfer of those units during the period beginning 15 days before the day we mail the notice of exercise and ending on the day of that mailing, in order to freeze the list of holders to prepare the mailing. We may also refuse to register transfers of or exchange any unit selected for early settlement, except that we will continue to permit transfers and exchanges of the unsettled portion of any unit being partially settled. We may also block the transfer or exchange of any unit in this manner if the unit includes securities that are or may be selected for early settlement.

Only the depository will be entitled to transfer or exchange a unit in global form, since it will be the sole holder of the unit.

Payments and Notices

In making payments and giving notices with respect to our units, we will follow the procedures as described in the applicable prospectus supplement.

LEGAL MATTERS

The validity of the common stock offered by this prospectus will be passed upon for us by Dykema Gossett PLLC, Ann Arbor, Michigan, acting as special counsel to the Company.

EXPERTS

The financial statements and management's assessment of the effectiveness of internal control over financial reporting (which is included in Management's Report on Internal Control over Financial Reporting) incorporated in this prospectus by reference to the Annual Report on Form 10-K for the year ended June 30, 2010 have been so incorporated in reliance on the report of PricewaterhouseCoopers LLP, an independent registered public accounting firm, given on the authority of said firm as experts in auditing and accounting.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the information requirements of the Exchange Act and, in accordance therewith, file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's Public Reference Room at 100 F Street, N.E., Washington, D.C. 20549. You may call the SEC at 1-800-SEC-0330 for further information on the operation of the Public Reference Room. These documents also may be accessed through the SEC's electronic data gathering, analysis and retrieval system, or EDGAR, via electronic means, including the SEC's home page on the Internet (www.sec.gov).

We have the authority to designate and issue more than one class or series of stock having various preferences, conversion and other rights, voting powers, restrictions, limitations as to dividends, qualifications, and terms and conditions of redemption. See "Description of Capital Stock." We will furnish a full statement of the relative rights and preferences of each class or series of our stock which has been so designated and any restrictions on the ownership or transfer of our stock to any shareholder upon request and without charge. Written requests for such copies should be directed to Aastrom Biosciences, Inc., 24 Frank Lloyd Wright Drive, P.O. Box 376, Ann Arbor, Michigan 48106, attention: Investor Relations or by telephone request to (734) 930-5555. Our website is located at <http://www.aastrom.com>. Information contained on our website is not incorporated by reference into this prospectus and, therefore, is not part of this prospectus or any accompanying prospectus supplement.

INCORPORATION BY REFERENCE

This prospectus incorporates by reference important business and financial information that we file with the SEC and that we are not including in or delivering with this prospectus. As the SEC allows, incorporated documents are considered part of this prospectus, and we can disclose important information to you by referring you to those documents.

- our annual report on Form 10-K for the fiscal year ended June 30, 2010, filed with the SEC on September 7, 2010;
- portions of our definitive Proxy Statement for the Annual Meeting of Shareholders held on October 21, 2010 that have been incorporated by reference into the Form 10-K;
- our quarterly report on Form 10-Q, filed with the SEC on November 8, 2010;
- our current reports on Form 8-K filed with the SEC on July 6, 2010, July 14, 2010, August 2, 2010, August 31, 2010, October 25, 2010 and November 12, 2010; and
- the description of our common stock contained in our registration statement on Form S-1, which was filed with the SEC on November 1, 1996, including any amendment or report filed for the purpose of updating such description.

All documents we file with the SEC pursuant to Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act, except as to any portion of any report or document that is not deemed filed under such provisions, (i) on or after the date of filing of the registration statement containing this prospectus and prior to the effectiveness of the registration statement and (ii) on or after the date of this prospectus until the earlier of the date on which all of the securities registered hereunder have been sold or the registration statement of which this prospectus is a part has been withdrawn, shall be deemed incorporated by reference in this prospectus and to be a part of this prospectus from the date of filing of those documents.

You may request a copy of any or all of these filings, at no cost, by writing to us at: Aastrom Biosciences, Inc., 24 Frank Lloyd Wright Drive, P.O. Box 276, Ann Arbor, Michigan 48106, attention: Investor Relations or by telephoning us at (734) 930-5555. These filings may also be obtained through the our website located at <http://www.aastrom.com>.

You should rely only on the information incorporated by reference or provided in this prospectus or any supplement. We have not authorized anyone else to provide you with different information. You should not assume that information in this prospectus or any supplement is accurate as of any date other than the date on the front of these documents.

In accordance with these rules, we have incorporated by reference the description of our business, our securities, our properties, any legal proceedings, market price of and dividends with respect to our common stock, our financial statements and our management's discussion and analysis of our financial condition and results of operations. We have also incorporated by reference disclosure with respect to our officers and directors, their compensation structure, any related transactions with our officers and directors and our shareholders.

We advise that there have been no material changes in our affairs that have occurred since the end of the latest fiscal year for which audited financial statements were included in the latest Form 10-K and that have not been described in a Form 10-Q or Form 8-K filed under the Exchange Act.

**DISCLOSURE OF COMMISSION POSITION ON INDEMNIFICATION
FOR SECURITIES ACT LIABILITIES**

As permitted by the MBCA, our Bylaws contain provisions that permit us to indemnify our directors and officers to the full extent permitted by Michigan law and our Charter contains provisions that eliminate the personal liability of our directors in each case for monetary damages to us or our shareholders for breach of their fiduciary duties, except to the extent that Michigan law prohibits indemnification or elimination of liability. These provisions do not limit or eliminate our rights or the rights of any shareholder to seek an injunction or any other non-monetary relief in the event of a breach of a director's or officer's fiduciary duty. In addition, these provisions apply only to claims against a director or officer arising out of his or her role as a director or officer and do not relieve a director or officer from liability if he or she engaged in willful misconduct or a knowing violation of the criminal law or any federal or state securities law.

The rights of indemnification provided in our Bylaws are not exclusive of any other rights that may be available under any insurance or other agreement, by vote of shareholders or disinterested directors or otherwise.

Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers or persons controlling us pursuant to the foregoing provisions, we have been informed that in the opinion of the SEC this type of indemnification is against public policy as expressed in the Securities Act and is therefore unenforceable.

GLOSSARY

TERM	DEFINITION
Adverse Event	Any adverse change in health or “side-effect” that occurs in a person participating in a clinical trial, from the time they consent to joining the trial until a pre-specified period of time after their treatment has been completed.
Autologous	Originating from the patient receiving treatment. (Aastrom uses only autologous cells)
BLA — Biologics License Application	An application containing product safety, efficacy and manufacturing information required by the FDA to market biologics products in the U.S.
Catheter-DCM	Aastrom’s U.S. Phase 2 clinical trial investigating catheter-based delivery of our product in the treatment of dilated cardiomyopathy.
CLI — Critical Limb Ischemia	A vascular disease characterized by insufficient blood flow in the lower extremities that causes severe pain, tissue loss or both.
Controlled Clinical Trial	A clinical study that compares patients receiving a specific treatment to patients receiving an alternate treatment for the condition of interest. The alternate treatment may be another active treatment, standard of care for the condition and/or a placebo (inactive) treatment.
DCM — Dilated Cardiomyopathy	A chronic cardiac disease where expansion of the patient’s heart reduces the pumping function to a point that the normal circulation of blood cannot be maintained.
Double-Blind Clinical Trial	Clinical trials in which neither the patient nor the physician know if the patient received the experimental treatment or a control/placebo.
FDA — Food & Drug Administration	The U.S. FDA ensures that medicines, medical devices, and radiation-emitting consumer products are safe and effective. Authorized by Congress to enforce the Federal Food, Drug, and Cosmetic Act and several other public health laws, the agency monitors the manufacture, import, transport, storage, and sale of \$1 trillion worth of goods annually.
GMP — Good Manufacturing Practice	GMP regulations require that manufacturers, processors, and packagers of drugs, medical devices, some food, and blood take proactive steps to ensure that their products are safe, pure, and effective. GMP regulations require a quality approach to manufacturing, enabling companies to minimize or eliminate instances of contamination, mix-ups, and errors.
IMPACT-DCM	Aastrom’s U.S. Phase 2 clinical trial investigating surgical delivery of our product in the treatment of dilated cardiomyopathy.
IND — Investigational New Drug	An application submitted to the FDA for a new drug or biologic that, if allowed, will be used in a clinical trial.

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TERM	DEFINITION
Ischemia	A shortage or inadequate flow of blood to a body part (commonly an organ or tissue) caused by a constriction or obstruction of the blood vessels supplying it.
LVEF — Left Ventricular Ejection Fraction	The fraction of blood pumped out of the left ventricle with each heart beat.
Open-label Clinical Trial	A trial in which both the treating physician and the patient know whether they are receiving the experimental treatment or control/placebo treatment.
Orphan Drug Designation	“Orphan drug” refers to a drug or biologic that is intended for use in the treatment of a rare disease or condition. Orphan drug designation from the U.S. Food and Drug Association (FDA) qualifies the sponsor to receive certain benefits from the Government in exchange for developing the drug for a rare disease or condition. The drug must then go through the FDA marketing approval process like any other drug or biologic which evaluates for safety and efficacy. Usually a sponsor receives a quicker review time and lower application fees for an orphan product.
Phase 1 Clinical Trial	A Phase 1 trial represents an initial study in a small group of patients to test for safety and other relevant factors.
Phase 2 Clinical Trial	A Phase 2 trial represents a study in a moderate number of patients to assess the safety and efficacy of a product.
Phase 2b Clinical Trial	A Phase 2b trial is a moderately-sized Phase 2 trial that is more specifically designed assess the efficacy of a product than a Phase 2a trial.
Phase 3 Clinical Trial	Phase 3 studies are initiated to establish safety and efficacy in an expanded patient population at multiple clinical trial sites and are generally larger than trials in earlier phases of development.
Progenitor Cells	A “parent” cell that gives rise to a distinct cell lineage by a series of cell divisions.
Prospective Clinical Trial	A clinical trial in which participants are identified and then followed throughout the study going forward in time.
Randomized Clinical Trial	A clinical trial in which the participants are assigned randomly to different treatment groups.
SPP — Single-Pass Perfusion	SPP is Aastrom’s proprietary technology that controls gas and cell culture media exchange to enable the replication of early-stage stem and progenitor cells while preventing their differentiation into mature cells.
Stem Cell	<p>Unspecialized (undifferentiated) cells that retain the ability to divide throughout a lifetime and give rise to more specialized (differentiated) cells which take the place of cells that die or are lost.</p> <p>In culture, these undifferentiated cells possess the ability to divide for indefinite periods in culture and may give rise to highly specialized cells.</p>

\$75,000,000



AASTROM BIOSCIENCES, INC.

**Common Stock
Preferred Stock
Debt Securities
Warrants
Units**

PROSPECTUS

, 2010

We have not authorized any dealer, salesperson or other person to give any information or represent anything not contained in this prospectus. You must not rely on any unauthorized information. If anyone provides you with different or inconsistent information, you should not rely on it. This prospectus does not offer to sell any shares in any jurisdiction where it is unlawful. Neither the delivery of this prospectus, nor any sale made hereunder, shall create any implication that the information in this prospectus is correct after the date hereof.

Part II—INFORMATION NOT REQUIRED IN PROSPECTUS**Item 14. Other Expenses of Issuance and Distribution**

The expenses payable by Aastrom Biosciences, Inc. (the “Registrant” or the “Company”) in connection with the issuance and distribution of the securities being registered (other than underwriting discounts and commissions, if any) are set forth below. Each item listed is estimated, except for the Securities and Exchange Commission (the “SEC”) registration fee.

Securities and Exchange Commission registration fee	\$ 5,348
Legal fees and expenses	*
Accounting fees and expenses	*
Printing fees and expenses	*
Transfer agent and trustee fees	*
Miscellaneous	*
Total	\$ 5,348

* Estimated expenses not presently known

Item 15. Indemnification of Directors and Officers

Sections 1561 through 1571 of the Michigan Business Corporation Act (the “MBCA”) authorize a corporation to grant or a court to award, indemnity to directors, officers, employees and agents in terms sufficiently broad to permit such indemnification under certain circumstances for liabilities (including reimbursement for expenses incurred) arising under the Securities Act of 1933, as amended (the “Securities Act of 1933”).

The Company’s Amended and Restated Bylaws (the “Bylaws”) provide that the Company shall, to the fullest extent authorized or permitted by the MBCA, or other applicable law, indemnify a director or officer who was or is a party or is threatened to be made a party to any proceeding by or in the right of the Company to procure a judgment in its favor by reason of the fact that such person is or was a director, officer, employee or agent of the Company, against expenses, including actual and reasonable attorneys’ fees, and amounts paid in settlement incurred in connection with the action or suit, if the indemnitee acted in good faith and in a manner the person reasonably believed to be in, or not opposed to, the best interests of the Company or its shareholders. This section also authorizes the Company to advance expenses incurred by any agent of the Company in defending any proceeding prior to the final disposition of such proceeding upon receipt of an undertaking by or on behalf of the agent to repay such amount unless it shall be determined ultimately that the agent is entitled to be indemnified.

The Bylaws also authorize the Company to purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the Company against any liability asserted against or incurred by such person in such capacity or arising out of such person’s status as such, regardless of whether the Company would have the power to indemnify such person against such liability under the provisions of the MBCA.

The Company has entered into indemnification agreements with certain individuals which contain provisions that may in some respects be broader than the specific indemnification provisions contained under applicable law. The indemnification agreement may require the Company, among other things, to indemnify such directors, officers and key personnel against certain liabilities that may arise by reason of their status or service as directors, officers or employees of the Company, to advance the expenses incurred by such parties as a result of any threatened claims or proceedings brought against them as to which they could be indemnified, and to the maximum extent that insurance coverage of such directors, officers and key employees under the Company’s directors’ and officers’ liability insurance policies is maintained.

Section 1209 of the MBCA permits a Michigan corporation to include in its articles of incorporation a provision eliminating or limiting a director’s liability to a corporation or its shareholders for monetary damages for breaches of fiduciary duty. The enabling statute provides, however, that liability for breaches of the duty of loyalty, acts or omissions not in good faith or involving intentional misconduct or knowing violations of the law, or the receipt of improper personal benefits cannot be eliminated or limited in this manner. The Company’s Restated Articles of Incorporation (the “Charter”) include a provision which eliminates, to the fullest extent permitted by the MBCA, director liability for monetary damages for breaches of fiduciary duty.

Item 16. Exhibits

A list of exhibits filed with this registration statement on Form S-3 is set forth on the Exhibit Index and is incorporated herein by reference.

Item 17. Undertakings

The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Securities and Exchange Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20 percent change in the maximum aggregate offering price set forth in the "Calculation of Registration Fee" table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i), (a)(1)(ii) and (a)(1)(iii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Securities and Exchange Commission by the registrant pursuant to Section 13 or Section 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement, or is contained in a form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement;

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering;

(4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:

(i) Each prospectus filed by the registrant pursuant to Rule 424(b)(3) shall be deemed to be part of the registration statement as of the date the filed prospectus was deemed part of and included in the registration statement; and

(ii) Each prospectus required to be filed pursuant to Rule 424(b)(2), (b)(5), or (b)(7) as part of a registration statement in reliance on Rule 430B relating to an offering made pursuant to Rule 415(a)(1)(i), (vii), or (x) for the purpose of providing the information required by Section 10(a) of the Securities Act of 1933 shall be deemed to be part of and included in the registration statement as of the earlier of the date such form of prospectus is first used after effectiveness or the date of the first contract of sale of securities in the offering described in the prospectus. As provided in Rule 430B, for liability purposes of the issuer and any person that is at that date an underwriter, such date shall be deemed to be a new effective date of the registration statement relating to the securities in the registration statement to which that prospectus relates, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; provided, however, that no statement made in a registration statement or prospectus that is part of the registration statement or made in a document incorporated or deemed incorporated by reference into the registration statement or prospectus that is part of the registration statement will, as to a purchaser with a time of contract of sale prior to such effective date, supersede or modify any statement that was made in the registration statement or prospectus that was part of the registration statement or made in any such document immediately prior to such effective date;

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(5) That, for the purpose of determining liability of the registrant under the Securities Act of 1933 to any purchaser in the initial distribution of the securities, the undersigned registrant undertakes that in a primary offering of securities of the undersigned registrant pursuant to this registration statement, regardless of the underwriting method used to sell the securities to the purchaser, if the securities are offered or sold to such purchaser by means of any of the following communications, the undersigned registrant will be a seller to the purchaser and will be considered to offer or sell such securities to such purchaser:

- (i) Any preliminary prospectus or prospectus of the undersigned registrant relating to the offering required to be filed pursuant to Rule 424;
- (ii) Any free writing prospectus relating to the offering prepared by or on behalf of the undersigned registrant or used or referred to by the undersigned registrant;
- (iii) The portion of any other free writing prospectus relating to the offering containing material information about the undersigned registrant or its securities provided by or on behalf of the undersigned registrant; and
- (iv) Any other communication that is an offer in the offering made by the undersigned registrant to the purchaser;

(6) That, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934 (and, where applicable, each filing of an employee benefit plan's annual report pursuant to Section 15(d) of the Securities Exchange Act of 1934) that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof;

(7) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue;

(8) That, for purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act of 1933 shall be deemed to be part of this registration statement as of the time it was declared effective;

(9) That, for the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof; and

(10) To file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act of 1939 in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under Section 305(b)(2) of the Trust Indenture Act of 1939.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in Ann Arbor, Michigan on November 12, 2010.

AASTROM BIOSCIENCES, INC.

By: /s/ Timothy M. Mayleben

Timothy M. Mayleben
President and Chief Executive Officer

Each person whose signature appears below hereby constitutes and appoints Timothy M. Mayleben and Scott C. Durbin, and each of them singly, his true and lawful attorneys-in-fact and agents, with full power of substitution and resubstitution, for him and in his name, place and stead, in any and all capacities, to sign any or all amendments (including, without limitation, post-effective amendments) to this Registration Statement and any subsequent registration statement filed by the Registrant pursuant to Rule 462(b) of the Securities Act of 1933, which relates to this Registration Statement, and to file the same, with all exhibits thereto, and all documents in connection herewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorney-in-fact and agent, or his substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, this Registration Statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Timothy M. Mayleben</u> Timothy M. Mayleben	President, Chairman of the Board and Chief Executive Officer (Principal Executive Officer)	November 12, 2010
<u>/s/ Scott C. Durbin</u> Scott C. Durbin	Chief Financial Officer (Principal Financial and Accounting Officer)	November 12, 2010
<u>/s/ Nelson M. Sims</u> Nelson M. Sims	Director	November 12, 2010
<u>/s/ Ronald Cresswell, Ph.D.</u> Ronald Cresswell, Ph.D.	Director	November 12, 2010
<u>/s/ Alan L. Rubino</u> Alan L. Rubino	Director	November 12, 2010
<u>/s/ Harold C. Urschel, Jr., M.D.</u> Harold C. Urschel, Jr., M.D.	Director	November 12, 2010
<u>/s/ Robert L. Zerbe, M.D.</u> Robert L. Zerbe, M.D.	Director	November 12, 2010

EXHIBIT INDEX

Exhibit No.	Description
3.1	Restated Articles of Incorporation of Aastrom, filed as Exhibit 4.1 to Aastrom's Current Report on Form 8-K filed on December 17, 2009 and incorporated herein by reference.
3.2	Certificate of Amendment to Restated Articles of Incorporation of Aastrom dated February 9, 2010, filed as Exhibit 3.2 to Aastrom's Post Effective Amendment No. 1 to Form S-1 filed on March 31, 2010 and incorporated herein by reference.
3.3	Amended and Restated Bylaws, filed as Exhibit 3.1 to Aastrom's Current Report on Form 8-K filed on November 12, 2010 and incorporated herein by reference.
4.1	Form of Senior Indenture for Senior Debt Securities.
4.2	Form of Senior Debt Security (included in Exhibit 4.1 hereto).
4.3	Form of Indenture for Subordinated Debt Securities.
4.4	Form of Subordinated Debt Security (included in Exhibit 4.3 hereto)
4.5	Specimen Common Stock Certificate, filed as Exhibit 4.1 to Amendment No. 2 to Aastrom's Registration Statement on Form S-1/A filed on December 20, 1996 and incorporated herein by reference.
4.6*	Form of Certificate of Designations
4.7*	Form of Preferred Stock Certificate
4.8*	Form of Warrant Agreement
4.9*	Form of Warrant Certificate
4.10*	Form of Unit Agreement
4.11*	Form of Unit Certificate
5.1	Opinion of Dykema Gossett PLLC.
12.1*	Computation of Ratio of Earnings to Fixed Charges
23.1	Consent of PricewaterhouseCoopers LLP
23.2	Consent of Dykema Gossett PLLC (included in Exhibit 5.1 hereto)
24.1	Power of Attorney (included in Part II of this registration statement)
25.1**	Form T-1 Statement of Eligibility of Trustee for Senior Indenture under the Trust Indenture Act of 1939
25.2**	Form T-1 Statement of Eligibility of Trustee for Subordinated Indenture under the Trust Indenture Act of 1939

* To be filed, if necessary, by amendment or as an exhibit to a document to be incorporated or deemed to be incorporated by reference in this registration statement, including a Current Report on Form 8-K.

** To be filed, if necessary, separately under the electronic form type 305B2.

AASTROM BIOSCIENCES, INC.

TO

Trustee

Indenture

Dated as of _____, 20____

Senior Debt Securities

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AASTROM BIOSCIENCES, INC.

Reconciliation and tie between the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act" or "TIA") and the Indenture, dated as of _____, 20_.

Trust Indenture Act Section	Indenture Section
§ 310(a)(1)	607
(a)(2)	607
(b)	607, 608
§ 312(c)	701
§ 313(a)	702
(c)	702
§ 314(a)	703
(a)(4)	1008
(c)(1)	102
(c)(2)	102
(e)	102
§ 315(b)	601
§ 316(a) (last sentence)	101("Outstanding")
(a)(1)(A)	502, 512
(a)(1)(B)	513
(b)	508
§ 317(a)(1)	503
(a)(2)	504
§ 318(a)	111
(c)	111

NOTE: This reconciliation and tie shall not, for any purpose, be deemed to be a part of the Indenture.

Attention should also be directed to Section 318(c) of the Trust Indenture Act, which provides that the provisions of Sections 310 to and including 317 of the Trust Indenture Act are a part of and govern every qualified indenture, whether or not physically contained therein.

INDENTURE, dated as of _____, 20__, AASTROM BIOSCIENCES, INC., a corporation organized under the laws of the State of Michigan (hereinafter called the "Company"), having its principal office at 24 Frank Lloyd Wright Drive, Ann Arbor, Michigan 48106 and _____, as Trustee hereunder (hereinafter called the "Trustee"), having a Corporate Trust Office at _____.

RECITALS OF THE COMPANY

The Company deems it necessary to issue from time to time for its lawful purposes senior debt securities (hereinafter called the "Securities") evidencing its unsecured and senior indebtedness, and has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of the Securities, to be issued in one or more Series as provided in this Indenture.

This Indenture is subject to the provisions of the Trust Indenture Act of 1939, as amended (the "Trust Indenture Act" or "TIA"), that are deemed to be incorporated into this Indenture and shall, to the extent applicable, be governed by such provisions.

All things necessary to make this Indenture a valid and legally binding agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of a Series thereof, as follows:

ARTICLE ONE — DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

SECTION 101. Definitions. For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (1) the terms defined in this Article have the meanings assigned to them in this Article, and include the plural as well as the singular;
 - (2) all other terms used herein which are defined in the TIA, either directly or by reference therein, have the meanings assigned to them therein, and the terms "cash transactions" and "self-liquidating paper," as used in TIA Section 311, shall have the meanings assigned to them in the rules of the Commission adopted under the TIA;
 - (3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with GAAP;
 - (4) any reference to an "Article" or a "Section" refers to an Article or Section, as the case may be, of this Indenture; and
-

(5) the words “herein,” “hereof” “and” “hereunder” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

“Act,” when used with respect to any Holder, has the meaning specified in Section 104.

“Affiliate” of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, “control” when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“Authenticating Agent” means any Person authorized by the Trustee pursuant to Section 611 hereof to act on behalf of the Trustee to authenticate Securities of one or more Series.

“Authorized Newspaper” means a newspaper, printed in the English language or in an official language of the country of publication, customarily published on each Business Day, whether or not published on Saturdays, Sundays or holidays, and of general circulation in each place in connection with which the term is used or in the financial community of each such place. Whenever successive publications are required to be made in Authorized Newspapers, the successive publications may be made in the same or in different Authorized Newspapers in the same city meeting the foregoing requirements and in each case on any Business Day.

“Bankruptcy Law” has the meaning specified in Section 501.

“Bearer Security” means any Security established pursuant to Section 201 which is payable to the bearer.

“Board of Directors” when used with reference to the Company, means the board of directors of the Company, or any committee of that board duly authorized to act hereunder, or any director or directors and/or officer or officers of the Company, to whom the board or committee shall have duly delegated its authority.

“Board Resolution” means a copy of (1) a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors or a duly authorized committee of the Board of Directors and to be in full force and effect on the date of such certification, or (2) a certificate signed by the director or directors and/or officer or officers to whom the Board of Directors shall have duly delegated its authority, together with a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification authorizing such delegation, and, in each case, delivered to the Trustee.

“Business Day,” when used with respect to any Place of Payment or any other particular location referred to in this Indenture or in the Securities, means, unless otherwise specified with respect to any Securities issued pursuant to Section 301, any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in that Place of

Payment or particular location are authorized or required by law, regulation or executive order to close.

“Capital Stock” means, with respect to any Person, any capital stock (including preferred stock), shares, interests, participations or other ownership interests (however designated) of such Person and any rights (other than debt securities convertible into or exchangeable for corporate stock), warrants or options to purchase any thereof.

“Clearstream” means Clearstream Banking Luxembourg, société anonyme, or its successor.

“Closing Price” means the closing price of a share of Common Stock of the Company as reported on the NASDAQ Capital Market.

“Code” means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

“Commission” means the Securities and Exchange Commission, as from time to time constituted, created under the Exchange Act, or, if at any time after execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties on such date.

“Common Depository” has the meaning specified in Section 304.

“Common Stock” means, with respect to any Person, all shares of capital stock issued by such Person other than Preferred Stock.

“Company” means the Person named as the “Company” in the first paragraph of this Indenture until a successor corporation shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Company” shall mean such successor corporation.

“Company Request” and “Company Order” mean, respectively, a written request or order signed in the name of the Company by its Chairman of the Board, the Chief Executive Officer, the President, or a Vice President, and by its Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee.

“Constituent Person” has the meaning specified in Section 1611.

“Conversion Event” means the cessation of use of (i) a Foreign Currency both by the government of the country which issued such currency and for the settlement of transactions by a central bank or other public institutions of or within the international banking community, (ii) the ECU both within the European Monetary System and for the settlement of transactions by public institutions of or within the European Communities or (iii) any currency unit (or composite currency) other than the ECU for the purposes for which it was established.

“Conversion Price” has the meaning specified in Section 1601.

“Corporate Trust Office” means the office of the Trustee at which, at any particular time, its corporate trust business shall be principally administered, which office at the date hereof is located at [_____].

“corporation” includes corporations, associations, companies and business trusts.

“coupon” means any interest coupon appertaining to a Bearer Security.

“Covenant Defeasance” has the meaning specified in Section 1403.

“Custodian” has the meaning specified in Section 501.

“Defaulted Interest” has the meaning specified in Section 307.

“Defeasance” has the meaning specified in Section 1402.

“Distribution Record Date” has the meaning specified in Section 1611.

“Dividend Record Date” has the meaning specified in Section 1604.

“Dollar” or the sign “\$” means a dollar or other equivalent unit in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

“DTC” means The Depository Trust Company and any successor to DTC in its capacity as depository for any Securities.

“ECU” means the European Currency Unit as defined and revised from time to time by the Council of the European Communities.

“Euroclear” means the operator of the Euroclear System.

“European Communities” means the European Economic Community, the European Coal and Steel Community and the European Atomic Energy Community.

“European Monetary System” means the European Monetary System established by the Resolution of December 5, 1978 of the Council of the European Communities.

“Event of Default” has the meaning specified in Article Five.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, as in force at the date as of which this Indenture was executed; provided, however, that in the event the Exchange Act is amended after such date, “Exchange Act” means to the extent required by any such amendment, the Exchange Act as so amended.

“Exchange Date” has the meaning specified in Section 304.

“FINRA” means the Financial Industry Regulatory Authority, Inc.

“Foreign Currency” means any currency, currency unit or composite currency, including, without limitation, the ECU issued by the government of one or more countries other than the United States of America or by any recognized confederation or association of such governments.

“GAAP” means, except as otherwise provided herein, generally accepted accounting principles, as in effect from time to time, as used in the United States applied on a consistent basis.

“Global Security” means a Security evidencing all or a part of a series of Securities issued to and registered in the name of the depository for such series, or its nominee, in accordance with Section 305, and bearing the legend prescribed in Section 203.

“Government Obligations” means (i) securities which are (A) direct obligations of the United States of America or the government which issued the Foreign Currency in which the Securities of a particular series are payable, for the payment of which its full faith and credit is pledged or (B) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America or such government which issued the Foreign Currency in which the Securities of such series are payable, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America or such other government, which, in either case, are not callable or redeemable at the option of the issuer thereof, and (iii) a depository receipt issued by a bank or trust company as custodian with respect to any such Government Obligation or a specific payment of interest on or principal of any such Government Obligation held by such custodian for the account of the holder of a depository receipt, provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the Government Obligation or the specific payment of interest on or principal of the Government Obligation evidenced by such depository receipt.

“Holder” means, in the case of a Registered Security, the Person in whose name a Security is registered in the Security Register and, in the case of a Bearer Security, the bearer thereof and, when used with respect to any coupon, shall mean the bearer thereof.

“Indenture” means this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, and shall include the terms of particular series of Securities established as contemplated by Section 301; provided, however, that, if at any time more than one Person is acting as Trustee under this instrument, “Indenture” shall mean, with respect to any one or more series of Securities for which such Person is Trustee, this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of the or those particular series of Securities for which such Person is Trustee established as contemplated by Section 301, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is Trustee, regardless of when such terms or provisions were adopted, and exclusive of any provisions or terms adopted

by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee but to which such Person, as such Trustee, was not a party.

“Indexed Security” means a Security the terms of which provide that the principal amount thereof payable at Stated Maturity may be more or less than the principal face amount thereof at original issuance.

“Interest,” when used with respect to an Original Issue Discount Security which by its terms bears interest only after Maturity, shall mean interest payable after Maturity.

“Interest Payment Date,” when used with respect to any Security, means the Stated Maturity of an installment of interest on such Security.

“Make-Whole Amount,” when used with respect to any Security, means the amount, if any, in addition to principal (and accrued interest thereon, if any) which is required by a Security, under the terms and conditions specified therein or as otherwise specified as contemplated by Section 301, to be paid by the Company to the Holder thereof in connection with any optional redemption or accelerated payment of such Security.

“mandatory sinking fund payment” has the meaning specified in Section 1201.

“Market Value of the Distribution” has the meaning specified in Section 1604.

“Maturity,” when used with respect to any Security, means the date on which the principal (or, if the context so requires, in the case of an Original Issue Discount Security, or lesser amount or, in the case of an Indexed Security, an amount determined in accordance with the specified terms of that Security) of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, notice of redemption, notice of option to elect repayment or otherwise.

“Officers’ Certificate” means a certificate signed by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or a Vice President (whether or not designated by a number or word or words added before or after the title “Vice President”), and by the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary of the Company, and delivered to the Trustee.

“Opinion of Counsel” means a written opinion of counsel, who may be counsel for the Company or who may be an employee of or other counsel for the Company.

“optional sinking fund payment” has the meaning specified in Section 1201.

“Original Issue Discount Security” means any Security which provides for an amount (excluding any amounts attributable to accrued but unpaid interest thereon) less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 502.

“Outstanding,” when used with respect to Securities, means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, except:

(i) Securities theretofore canceled by the Trustee or delivered to the Trustee for cancellation;

(ii) Securities, or portions thereof, for whose payment or redemption (including repayment at the option of the Holder) money in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent (other than the Company) in trust or set aside and segregated in trust by the Company (if the Company shall act as its own Paying Agent) for the Holders of such Securities and any coupons appertaining thereto; provided, however, that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;

(iii) Securities, except to the extent provided in Sections 1402 and 1403, with respect to which the Company has effected Defeasance and/or Covenant Defeasance as provided in Article Fourteen; and

(iv) Securities which have been paid pursuant to Section 306 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company.

provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder or are present at a meeting of Holders for quorum purposes, and for the purpose of making the calculations required by TIA Section 313, (i) the principal amount of an Original Issue Discount Security that may be counted in making such determination or calculation and that shall be deemed to be Outstanding for such purpose shall be equal to the amount of principal thereof that would be (or shall have been declared to be) due and payable, at the time of such determination, upon a declaration of acceleration of the maturity thereof pursuant to Section 502, (ii) the principal amount of any Security denominated in a Foreign Currency that may be counted in making such determination or calculation and that shall be deemed Outstanding for such purpose shall be equal to the Dollar equivalent, determined pursuant to Section 301 as of the date such Security is originally issued by the Company, of the principal amount (or, in the case of an Original Issue Discount Security, the Dollar equivalent as of such date of original issuance of the amount determined as provided in clause (i) above) of such Security, (iii) the principal amount of any Indexed Security that may be counted in making such determination or calculation and that shall be deemed outstanding for such purpose shall be equal to the principal face amount of such Indexed Security at original issuance, unless otherwise provided with respect to such Security pursuant to Section 301, and (iv) Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in making such calculation or in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities which a Responsible Officer of the Trustee actually knows to be so owned shall be so disregarded. Securities owned as provided in clause (iv) above which have been pledged in good faith may be

regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor. In case of a dispute as to such right, the advice of counsel shall be full protection in respect of any decision made by the Trustee in accordance with such advice.

"Paying Agent" means any Person authorized by the Company to pay the principal of (and premium or Make-Whole Amount, if any) or interest on any Securities or coupons on behalf of the Company.

"Person" means any individual, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof, or any other entity or organization.

"Place of Payment," when used with respect to the Securities of or within any series, means the place or places where the principal of (and premium or Make-Whole Amount, if any) and interest on such Securities are payable as specified as contemplated by Sections 301 and 1002.

"Predecessor Security" of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 306 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security or a Security to which a mutilated, destroyed, lost or stolen coupon appertains shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security or the Security to which the mutilated, destroyed, lost or stolen coupon appertains.

"Preferred Stock" means, with respect to any Person, all capital stock issued by such Person that is entitled to a preference or priority over any other capital stock issued by such Person with respect to any distribution of such Person's assets, whether by dividend or upon any voluntary or involuntary liquidation, dissolution or winding up.

"Redemption Date," when used with respect to any Security to be redeemed, in whole or in part, means the date fixed for such redemption by or pursuant to this Indenture.

"Redemption Price," when used with respect to any Security to be redeemed, means the price specified in the related Officers' Certificate or supplemental indenture contemplated by and pursuant to Section 301, at which it is to be redeemed pursuant to this Indenture.

"Reference Date" has the meaning specified in Section 1604.

"Registered Security" shall mean any Security which is registered in the Security Register.

"Regular Record Date" for the interest payable on any Interest Payment Date on the Registered Securities of or within any series means the date specified for that purpose as contemplated by Section 301, whether or not a Business Day.

“Repayment Date” means, when used with respect to any Security to be repaid at the option of the Holder, the date fixed for such repayment by or pursuant to this Indenture.

“Repayment Price” means, when used with respect to any Security to be repaid at the option of the Holder, the price at which it is to be repaid by or pursuant to this Indenture.

“Responsible Officer,” when used with respect to the Trustee, means any Vice President (whether or not designated by a number or a word or words added before or after the title “Vice President”), Assistant Vice President, Trust Officer or Assistant Trust Officer working in its Corporate Trust Department, or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and working in its Corporate Trust Department, and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of such officer’s knowledge and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

“Rights” has the meaning specified in Section 1604.

“Rights Record Date” has the meaning specified in Section 1604.

“Security” and “Securities” has the meaning stated in the first recital of this Indenture and, more particularly, means any Security or Securities authenticated and delivered under this Indenture; provided, however, that, if at any time there is more than one Person acting as Trustee under this Indenture, “Securities” with respect to the Indenture as to which such Person is Trustee shall have the meaning stated in the first recital of this Indenture and shall more particularly mean Securities authenticated and delivered under this Indenture, exclusive, however, of Securities of any series as to which such Person is not Trustee.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 305.

A “Series” of Securities means all securities denoted as part of the same series authorized by or pursuant to a particular Board Resolution.

“Short Term Rights” has the meaning specified in Section 1604.

“Significant Subsidiary” means any Subsidiary which is a “significant subsidiary” (as defined in Article I, Rule 1-02 of Regulation S-X, promulgated under the Securities Act of 1933, as amended) of the Company.

“Special Record Date” for the payment of any Defaulted Interest on the Registered Securities of or within any series means a date fixed by the Company pursuant to Section 307.

“Stated Maturity,” when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security or a coupon representing such installment of interest as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“Subsidiary” means, with respect to any Person, any corporation, limited liability company, partnership or other entity of which a majority of (i) the voting power of the voting equity securities or (ii) the outstanding equity interests are owned, directly or indirectly, by such Person. For the purposes of this definition, “voting equity securities” means equity securities having voting power for the election of directors, whether at all times or only so long as no senior class of security has such voting power by reason of any contingency.

“Trading Day” means any day on which the NASDAQ Capital Market is open for business.

“Trigger Events” has the meaning specified in Section 1604.

“Trust Indenture Act” or “TIA” means the Trust Indenture Act of 1939, as amended and as in force at the date as of which this Indenture was executed, except as provided in Section 905.

“Trustee” means the Person named as the “Trustee” in the first paragraph of this Indenture until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder; provided, however, that if at any time there is more than one such Person, “Trustee” as used with respect to the Securities of any series shall mean only the Trustee with respect to Securities of that series.

“Unadjusted Distribution” has the meaning specified in Section 1604.

“United States” means, unless otherwise specified with respect to any Securities pursuant to Section 301, the United States of America (including the states and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction.

“United States Person” means, unless otherwise specified with respect to any Securities pursuant to Section 301, an individual who is a citizen or resident of the United States, a corporation, partnership or other entity created or organized in or under the laws of the United States or an estate or trust the income of which is subject to United States Federal income taxation regardless of its source.

“Yield to Maturity” means the yield to maturity, computed at the time of issuance of a Security (or, if applicable, at the most recent redetermination of interest on such Security) and as set forth in such Security in accordance with generally accepted United States bond yield computation principles.

SECTION 102. Compliance Certificates and Opinions. Upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee an Officers’ Certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by

any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (including certificates delivered pursuant to Section 1008) shall include:

- (1) a statement that each individual signing such certificate or opinion has read such condition or covenant and the definitions herein relating thereto;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;
- (3) a statement that, in the opinion of each such individual, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such condition or covenant has been complied with; and
- (4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

SECTION 103. Form of Documents Delivered to Trustee. In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

Any certificate or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon an Opinion of Counsel, or a certificate or representations by counsel, unless such officer knows, or in the exercise of reasonable care should know, that the opinion, certificate or representations with respect to the matters upon which his certificate or opinion is based are erroneous. Any such Opinion of Counsel or certificate or representations may be based, insofar as it relates to factual matters, upon a certificate or opinion of, or representations by, an officer or officers of the Company stating that the information as to such factual matters is in the possession of the Company, unless such counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous.

Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

SECTION 104. Acts of Holders.

(a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of the Outstanding Securities of all series or one or more series, as the case may be, may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by agents duly appointed in writing. If Securities of a series are issuable as Bearer Securities, any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of Securities of such series may, alternatively, be embodied in and evidenced by the record of Holders of Securities of such series voting in favor thereof, either in person or by proxies duly appointed in writing, at any meeting of Holders of Securities of such series duly called and held in accordance with the provisions of Article Fifteen, or a combination of such instruments and any such record. Except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments or record or both are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments and any such record (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments or so voting at any such meeting. Proof of execution of any such instrument or of a writing appointing any such agent, or of the holding by any Person of a Security, shall be sufficient for any purpose of this Indenture and conclusive in favor of the Trustee and the Company and any agent of the Trustee or the Company, if made in the manner provided in this Section. The record of any meeting of Holders of Securities shall be proved in the manner provided in Section 1506.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of his authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other reasonable manner which the Trustee deems sufficient.

(c) The ownership of Registered Securities shall be proved by the Security Register. As to any matter relating to beneficial ownership interests in any Global Security, the appropriate depository's records shall be dispositive for purposes of this Indenture.

(d) The ownership of Bearer Securities may be proved by the production of such Bearer Securities or by a certificate executed, as depository, by any trust company, bank, banker or other depository, wherever situated, if such certificate shall be deemed by the Trustee to be satisfactory, showing that at the date therein mentioned such Person had on deposit with such depository, or exhibited to it, the Bearer Securities therein described; or such facts may be proved by the certificate or affidavit of the Person holding such Bearer Securities, if such certificate or affidavit is deemed by the Trustee to be satisfactory. The Trustee and the Company may assume that such ownership of any Bearer Security continues until (1) another certificate or affidavit bearing a later date issued in respect of the same Bearer Security is produced, or (2) such Bearer Security is produced to the Trustee by some other Person, or (3) such Bearer Security is surrendered in exchange for a Registered Security, or (4) such Bearer Security is no

longer Outstanding. The ownership of Bearer Securities may also be proved in any other manner which the Trustee deems sufficient.

(e) If the Company shall solicit from the Holders of Registered Securities any request, demand, authorization, direction, notice, consent, waiver or other Act, the Company may, at its option, in or pursuant to a Board Resolution, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other Act, but the Company shall have no obligation to do so. Notwithstanding TIA Section 316(c), such record date shall be the record date specified in or pursuant to such Board Resolution, which shall be a date not earlier than the date 30 days prior to the first solicitation of Holders generally in connection therewith and not later than the date such solicitation is completed. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other Act may be given before or after such record date, but only the Holders of record at the close of business on such record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of Outstanding Securities have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other Act, and for that purpose the Outstanding Securities shall be computed as of such record date; provided that no such authorization, agreement or consent by the Holders on such record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than eleven months after the record date.

(f) Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or upon the conversion thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee, any Security Registrar, any Paying Agent, any Authenticating Agent or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

SECTION 105. Notices, etc., to Trustee and Company. Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing to or with the Trustee at [_____] or at any other address previously furnished in writing to the Company by the Trustee, Attention: [_____]; or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to the Company addressed to it at the address of its principal office specified in the first paragraph of this Indenture or at any other address previously furnished in writing to the Trustee by the Company, Attention: [_____]; or

(3) either the Trustee or the Company, by the other party or by any Holder, shall be sufficient for every purpose hereunder if given by facsimile transmission, receipt confirmed by telephone followed by an original copy delivered by guaranteed overnight courier; if to the Trustee at facsimile number [_____]; and if to the Company at facsimile number [_____].

SECTION 106. Notice to Holders; Waiver. Where this Indenture provides for notice of any event to Holders of Registered Securities by the Company or the Trustee, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each such Holder affected by such event, at his address as it appears in the Security Register, not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. In any case where notice to Holders of Registered Securities is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders of Registered Securities or the sufficiency of any notice to Holders of Bearer Securities given as provided herein. Any notice mailed to a Holder in the manner herein prescribed shall be conclusively deemed to have been received by such Holder, whether or not such Holder actually receives such notice.

If by reason of the suspension of or irregularities in regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification to Holders of Registered Securities as shall be made with the approval of the Trustee shall constitute a sufficient notification to such Holders for every purpose hereunder.

Except as otherwise expressly provided herein or otherwise specified with respect to any Securities pursuant to Section 301, where this Indenture provides for notice to Holders of Bearer Securities of any event, such notice shall be sufficiently given if published in an Authorized Newspaper in The City of New York and in such other city or cities as may be specified in such Securities on a Business Day, such publication to be not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once, on the date of the first such publication.

If by reason of the suspension of publication of any Authorized Newspaper or Authorized Newspapers or by reason of any other cause it shall be impracticable to publish any notice to Holders of Bearer Securities as provided above, then such notification to Holders of Bearer Securities as shall be given with the approval of the Trustee shall constitute sufficient notice to such Holders for every purpose hereunder. Neither the failure to give notice by publication to any particular Holder of Bearer Securities as provided above, nor any defect in any notice so published, shall affect the sufficiency of such notice with respect to other Holders of Bearer Securities or the sufficiency of any notice to Holders of Registered Securities given as provided herein.

Any request, demand, authorization, direction, notice, consent or waiver required or permitted under this Indenture shall be in the English language, except that any published notice may be in an official language of the country of publication.

Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

SECTION 107. Counterparts; Effect of Headings and Table of Contents. This Indenture may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same Indenture. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

SECTION 108. Successors and Assigns. All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

SECTION 109. Severability Clause. In case any provision in this Indenture or in any Security or coupon shall be held invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 110. Benefits of Indenture. Nothing in this Indenture or in the Securities or coupons, if any, express or implied, shall give to any Person, other than the parties hereto, any Security Registrar, any Paying Agent, any Authenticating Agent and their successors hereunder and the Holders any benefit or any legal or equitable right, remedy or claim under this Indenture.

SECTION 111. Governing Law. This Indenture and the Securities and coupons shall be governed by and construed in accordance with the laws of the State of New York. This Indenture is subject to the provisions of the TIA that are required to be part of this Indenture and shall, to the extent applicable, be governed by such provisions.

SECTION 112. Legal Holidays. In any case where any Interest Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity of any Security or the last date on which a Holder has the right to convert or exchange a Security shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or any Security or coupon other than a provision in the Securities of any series which specifically states that such provision shall apply in lieu hereof), payment of interest or principal (and premium or Make-Whole Amount, if any) or conversion or exchange of such Security need not be made at such Place of Payment on such date, but (except as otherwise provided in the supplemental indenture with respect to such Security) may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date, Redemption Date, Repayment Date or sinking fund payment date, or at the Stated Maturity or Maturity, or on such last day for conversion or exchange, provided that no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity, as the case may be.

SECTION 113. Limited Liability; Immunity of Stockholders, Directors, Officers and Agents of the Company. Notwithstanding any other provision of this Indenture or of the Securities of any series to the contrary, no recourse under or upon any obligation, covenant or agreement contained in this Indenture or in any Security, or for the payment of any sums due on account of any indebtedness evidenced thereby, including without limitation principal, premium or interest, if any, or for any claim based on this Indenture or any Security or otherwise in respect of this Indenture or any Security, shall be had, whether by levy or execution or otherwise, against (i) the Company, the Company's assets or against any past, present or future stockholder, employee, officer, director or agent, as such, of the Company or any successor, either directly or through the Company or any successor, under any rule of law, statute, constitutional provision or by the enforcement of any assessment or penalty, or by any legal or equitable proceeding or otherwise, nor shall any such parties be personally liable for any such amounts, obligations or claims, or liable for any deficiency judgment based thereon or with respect thereto, it being expressly understood that the sole remedies hereunder or under any other document with respect to the Securities against such parties with respect to such amounts, obligations or claims shall be against the Company and that all such liability of and recourse against such parties is expressly waived and released by the acceptance of the Securities by the Holders and as part of the consideration for the issue of the Securities.

SECTION 114. Conflict with Trust Indenture Act. If any provision hereof limits, qualifies or conflicts with another provision hereof which is required or deemed to be included in this Indenture by any of the provisions of the Trust Indenture Act, such required provision shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act that may be so modified or excluded, the latter provision shall be deemed to apply to this Indenture as so modified or to be excluded, as the case may be.

ARTICLE TWO — SECURITIES FORMS

SECTION 201. Forms of Securities. The Registered Securities, if any, of each series and the Bearer Securities, if any, of each series and related coupons shall be substantially in the form of Exhibit A hereto or in such other form as shall be established in one or more indentures supplemental hereto or approved from time to time by or pursuant to a Board Resolution in accordance with Section 301, shall have such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture or any indenture supplemental hereto, and may have such letters, numbers or other marks of identification or designation and such legends or endorsements placed thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Indenture, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any over-the-counter market or securities exchange, on which the Securities may be quoted or listed, or to conform to usage.

Unless otherwise specified as contemplated by Section 301, Bearer Securities shall have interest coupons attached.

The definitive Securities and coupons shall be printed, lithographed or engraved or produced by any combination of these methods on a steel engraved border or steel engraved borders or mechanically reproduced on safety paper or may be produced in any other manner, all as determined by the officers executing such Securities or coupons, as evidenced by their execution of such Securities or coupons.

SECTION 202. Form of Trustee's Certificate of Authentication. Subject to Section 611, the Trustee's certificate of authentication shall be in substantially the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

_____,
as Trustee

Dated: _____

By: _____
Authorized Signatory

SECTION 203. Securities Issuable in Global Form. If Securities of or within a series are issuable in the form of one or more Global Securities, then, notwithstanding clause (8) of Section 301 and the provisions of Section 302, any such Global Security or Securities may provide that it or they shall represent the aggregate amount of all Outstanding Securities of such series (or such lesser amount as is permitted by the terms thereof) from time to time endorsed thereon and may also provide that the aggregate amount of Outstanding Securities of such series represented thereby may from time to time be increased or decreased to reflect exchanges. Any endorsement of any Global Security to reflect the amount, or any increase or decrease in the amount, or changes in the rights of Holders thereof, of Outstanding Securities represented thereby shall be made (or caused to be made) by the Trustee in such manner or by such Person or Persons as shall be specified therein or in the Company Order to be delivered to the Trustee pursuant to Section 303 or 304. Subject to the provisions of Section 303 and, if applicable, Section 304, the Trustee shall deliver and redeliver any Global Security in permanent global form in the manner and upon instructions given by the Person or Persons specified therein or in the applicable Company Order. If a Company Order pursuant to Section 303 or 304 has been, or simultaneously is, delivered, any instructions by the Company with respect to endorsement or delivery or redelivery of a Global Security shall be in writing but need not comply with Section 102 and need not be accompanied by an Opinion of Counsel.

The provisions of the last sentence of Section 303 shall apply to any Security represented by a Global Security if such Security was never issued and sold by the Company and the Company delivers to the Trustee the Global Security together with written instructions (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) with regard to the reduction in the principal amount of Securities represented thereby, together with the written statement contemplated by the last sentence of Section 303.

Notwithstanding the provisions of Section 307, unless otherwise specified as contemplated by Section 301, payment of principal of and any premium or Make-Whole

Amount, if any, and interest on any Global Security in permanent global form shall be made to the registered Holder thereof.

Notwithstanding the provisions of Section 308 and except as provided in the preceding paragraph, the Company, the Trustee and any agent of the Company and the Trustee shall treat as the Holder of such principal amount of Outstanding Securities represented by a permanent Global Security (i) in the case of a permanent Global Security in registered form, the Holder of such permanent Global Security in registered form, or (ii) in the case of a permanent Global Security in bearer form, Euroclear or Clearstream.

Any Global Security authenticated and delivered hereunder shall bear a legend in substantially the following form:

“This Security is a Global Security within the meaning set forth in the Indenture hereinafter referred to and is registered in the name of a Depository or a nominee of a Depository. This Security is exchangeable for Securities registered in the name of a person other than the Depository or its nominee only in the limited circumstances described in the Indenture, and may not be transferred except as a whole by the Depository to a nominee of the Depository or by a nominee of the Depository to the Depository or another nominee of the Depository or by the Depository or its nominee to a successor Depository or its nominee.”

ARTICLE THREE — THE SECURITIES

SECTION 301. Amount Unlimited; Issuable in Series. The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series, each of which shall be authorized pursuant to Board Resolutions of the Company. There shall be established in one or more Board Resolutions or pursuant to authority granted by one or more Board Resolutions and, subject to Section 303, set forth in an Officers' Certificate, or established in one or more indentures supplemental hereto, prior to the issuance of Securities of any series:

- (1) The title of the Securities of the series, including “CUSIP” numbers (which shall distinguish the Securities of such series from all other series of Securities);
- (2) Any limit upon the aggregate principal amount of the Securities of the series that may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or upon conversion of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 304, 305, 306, 906, 1107 or 1305) and the minimum authorized denominations with respect to the Securities of such series;
- (3) The price (expressed as a percentage of the principal amount thereof) at which such Securities will be issued and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or (if applicable) the portion of the principal amount of such Securities

that is convertible into Common Stock or Preferred Stock or the method by which any such portion shall be determined;

(4) If convertible, the terms on which such Securities are convertible, including the initial conversion price or rate and the conversion period and any applicable limitations on the ownership or transferability of Common Stock or Preferred Stock receivable on conversion;

(5) The date or dates, or the method for determining such date or dates, on which the principal of such Securities will be payable;

(6) The rate or rates (which may be fixed or variable), or the method by which such rate or rates shall be determined, at which such Securities will bear interest, if any;

(7) The date or dates, or the method for determining such date or dates, from which any such interest will accrue, the Interest Payment Dates on which any such interest will be payable, the Regular Record Dates for such Interest Payment Dates, or the method by which such dates shall be determined, the Persons to whom such interest shall be payable, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months;

(8) The Make-Whole Amount, if any, or method for determining the Make-Whole Amount, if any, payable with respect to such Securities, and the terms upon which such amount, if any, will be payable;

(9) The place or places where the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities will be payable, where such Securities may be surrendered for registration of transfer or conversion or exchange and where notices or demands to or upon the Company in respect of such Securities and this Indenture may be served;

(10) The period or periods, if any, within which, the price or prices at which and the other terms and conditions upon which such Securities may, pursuant to any optional or mandatory redemption provisions, be redeemed, as a whole or in part, at the option of the Company;

(11) The obligation, if any, of the Company to redeem, repay or purchase such Securities pursuant to any sinking fund or analogous provision or at the option of a Holder thereof, and the period or periods within which, the price or prices at which and the other terms and conditions upon which such Securities will be redeemed, repaid or purchased, as a whole or in part, pursuant to such obligation;

(12) If other than Dollars, the currency or currencies in which such Securities are denominated and payable, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies, the manner of determining the equivalent thereof in Dollars for purposes of the definition of "Outstanding" in Section 101, and the terms and conditions relating thereto;

(13) Whether the amount of payments of principal of (and premium or Make-Whole Amount, if any, including any amount due upon redemption, if any) or interest on such Securities may be determined with reference to an index, formula or other method (which index, formula or method may, but need not be, based on the yield on or trading price of other securities, including United States Treasury securities or on a currency, currencies, currency unit or units, or composite currency or currencies) and the manner in which such amounts shall be determined;

(14) Whether the principal of (and premium or Make-Whole Amount, if any) or interest on the Securities of the series are to be payable, at the election of the Company or a Holder thereof, in a currency or currencies, currency unit or units or composite currency or currencies other than that in which such Securities are denominated or stated to be payable, the period or periods within which, and the terms and conditions upon which, such election may be made, and the time and manner of, and identity of the exchange rate agent with responsibility for, determining the exchange rate between the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are denominated or stated to be payable and the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are to be so payable;

(15) Provisions, if any, granting special rights to the Holders of Securities of the series upon the occurrence of such events as may be specified;

(16) Any deletions from, modifications of or additions to the Events of Default or covenants of the Company with respect to Securities of the series, whether or not such Events of Default or covenants are consistent with the Events of Default or covenants set forth herein;

(17) Whether and under what circumstances the Company will pay any additional amounts on such Securities in respect of any tax, assessment or governmental charge and, if so, whether the Company will have the option to redeem such Securities in lieu of making such payment;

(18) Whether Securities of the series are to be issuable as Registered Securities, Bearer Securities (with or without coupons) or both, any restrictions applicable to the offer, sale or delivery of Bearer Securities and the terms upon which Bearer Securities of the series may be exchanged for Registered Securities of the series and vice versa (if permitted by applicable laws and regulations), whether any Securities of the series are to be issuable initially in temporary global form and whether any Securities of the series are to be issuable in permanent global form with or without coupons and, if so, whether beneficial owners of interests in any such permanent global Security may, or shall be required to, exchange such interests for Securities of such series and of like tenor of any authorized form and denomination and the circumstances under which any such exchanges may, or shall be required to, occur, if other than in the manner provided in the Indenture, and, if Registered Securities of the series are to be issuable as a Global Security, the identity of the depository for such series;

(19) The date as of which any Bearer Securities of the series and any temporary Global Security representing outstanding Securities of the series shall be dated if other than the date of original issuance of the first Security of the series to be issued;

(20) The Person to whom any interest on any Registered Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest the manner in which, or the Person to whom, any interest on any Bearer Security of the series shall be payable, if otherwise than upon presentation and surrender of the coupons appertaining thereto as they severally mature, and the extent to which, or the manner in which, any interest payable on a temporary Global Security on an Interest Payment Date will be paid if other than in the manner provided herein; provided, however, in each case, that the manner of determining such Person or making such payment shall be acceptable to the Trustee (as not imposing on it any undue administrative burden or risk of liability);

(21) The applicability, if any, of the Defeasance and Covenant Defeasance provisions of Article Fourteen hereof to the Securities of the series;

(22) The obligation, if any, of the Company to permit the conversion of the Securities of such series into Common Stock or Preferred Stock, as the case may be, and the terms and conditions upon which such conversion shall be effected (including, without limitation, the initial conversion price or rate, the conversion period, any adjustment of the applicable conversion price and any requirements relative to the reservation of such shares for purposes of conversion);

(23) If the Securities of such series are to be issuable in definitive form (whether upon original issue or upon exchange of a temporary Security of such series) only upon receipt of certain certificates or other documents or satisfaction of other conditions, then the form and/or terms of such certificates, documents or conditions;

(24) Designation of the Trustee, if different from the Trustee under the Indenture, with respect to such series and the terms applicable to such Trustee (which shall be accepted by such Trustee by its execution and delivery of a supplemental indenture as provided therein); and

(25) Any other terms of the series (which terms shall not be inconsistent with the provisions of this Indenture).

All Securities of any one series and the coupons appertaining to any Bearer Securities of such series shall be substantially identical except, in the case of Registered Securities, as to denomination and except as may otherwise be provided in or pursuant to such Board Resolution (subject to Section 303) and set forth in such Officers' Certificate or in any such indenture supplemental hereto. All Securities of any one series need not be issued at the same time and, unless otherwise provided, a series may be reopened, without the consent of the Holders, for issuances of additional Securities of such series.

If any of the terms of the Securities of any series are established by action taken pursuant to one or more Board Resolutions, a copy of an appropriate record of such action(s) shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officers' Certificate setting forth the terms of the Securities of such series.

SECTION 302. Denominations. The Securities of each series shall be issuable in such denominations as shall be specified as contemplated by Section 301. With respect to Securities of any series denominated in Dollars, in the absence of any such provisions with respect to the Securities of any series, the Securities of such series, other than Global Securities (which may be of any denomination), shall be issuable in denominations of \$1,000 and any integral multiple thereof or the equivalent amounts thereof in the case of Securities denominated in the Foreign Currency or currency unit.

SECTION 303. Execution, Authentication, Delivery and Dating. The Securities and any coupons appertaining thereto shall be executed on behalf of the Company by its Chairman of the Board, its Chief Executive Officer, its President, or one of its Vice Presidents, under its corporate seal reproduced thereon, and attested by its Secretary or one of its Assistant Secretaries. The signature of any of these officers on the Securities and coupons may be manual or facsimile signatures of the present or any future such authorized officer and may be imprinted or otherwise reproduced on the Securities.

Securities and coupons bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities or coupons.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series, together with any coupon appertaining thereto, executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities (accompanied by a copy of the Board Resolution and the Officers' Certificate or supplemental indenture contemplated by Section 301), and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities; provided, however, that, in connection with its original issuance, no Bearer Security shall be mailed or otherwise delivered to any location in the United States; and provided further that, unless otherwise specified with respect to any series of Securities pursuant to Section 301, a Bearer Security may be delivered in connection with its original issuance only if the Person entitled to receive such Bearer Security shall have furnished a certificate to Euroclear or Clearstream, as the case may be, in the form set forth in Exhibit B-1 to this Indenture or such other certificate as may be specified by the Company with respect to any series of Securities pursuant to Section 301, dated no earlier than 15 days prior to the earlier of the date on which such Bearer Security is delivered and the date on which any temporary Security first becomes exchangeable for such Bearer Security in accordance with the terms of such temporary Security and this Indenture. If any Security shall be represented by a permanent Global Security, then, for purposes of this Section and Section 304, the notation of a beneficial owner's interest therein

upon original issuance of such Security or upon exchange of a portion of a temporary Global Security shall be deemed to be delivery in connection with its original issuance of such beneficial owner's interest in such permanent Global Security. Except as permitted by Section 306, the Trustee shall not authenticate and deliver any Bearer Security unless all appurtenant coupons for interest then matured have been detached and canceled.

If all the Securities of any series are not to be issued at one time and if the Board Resolution or supplemental indenture establishing such series shall so permit, such Company Order may set forth procedures acceptable to the Trustee for the issuance of such Securities and determining the terms of particular Securities of such series, such as interest rate or formula, maturity date, date of issuance and date from which interest shall accrue. In authenticating such Securities, and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall be entitled to receive, and (subject to TIA Section 315(a) through 315(d)) shall be fully protected in relying upon,

(i) an Opinion of Counsel stating that

(a) the form or forms of such Securities and any coupons have been established in conformity with the provisions of this Indenture;

(b) the terms of such Securities and any coupons have been established in conformity with the provisions of this Indenture; and

(c) such Securities, together with any coupons appertaining thereto, when completed by appropriate insertions and executed and delivered by the Company to the Trustee for authentication in accordance with this Indenture, authenticated and delivered by the Trustee in accordance with this Indenture and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute legal, valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization and other similar laws of general applicability relating to or affecting the enforcement of creditors' rights generally and to general equitable principles; and

(ii) an Officers' Certificate stating that all conditions precedent provided for in this Indenture relating to the issuance of the Securities have been complied with and that, to the best of the knowledge of the signers of such certificate, that no Event of Default with respect to any of the Securities shall have occurred and be continuing.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities (or to enter into the related supplemental indenture, if applicable) if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties, obligations or immunities under the Securities and this Indenture or otherwise in a manner which is not reasonably acceptable to the Trustee.

Notwithstanding the provisions of Section 301 and of the preceding paragraph, if all the Securities of any series are not to be issued at one time, it shall not be necessary to deliver an Officers' Certificate otherwise required pursuant to Section 301 or a Company Order, or an Opinion of Counsel or an Officers' Certificate otherwise required pursuant to the preceding paragraph at the time of issuance of each Security of such series, but such order, opinion and certificates, with appropriate modifications to cover such future issuances, shall be delivered at or before the time of issuance of the first Security of such series.

Each Registered Security shall be dated the date of its authentication and each Bearer Security shall be dated as of the date specified as contemplated by Section 301.

No Security or coupon shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security or Security to which such coupon appertains a certificate of authentication substantially in the form provided for herein duly executed by the Trustee (subject to Section 611) by manual signature of an authorized signatory, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder and is entitled to the benefits of this Indenture. Notwithstanding the foregoing, if any Security (including a Global Security) shall have been authenticated and delivered hereunder but never issued and sold by the Company, and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 309 together with a written statement (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) stating that such Security has never been issued and sold by the Company, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

SECTION 304. Temporary Securities.

(a) Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued, in registered form, or, if authorized, in bearer form with one or more coupons or without coupons, and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as conclusively evidenced by their execution of such Securities. In the case of Securities of any series, such temporary Securities may be in global form.

Except in the case of temporary Global Securities (which shall be exchanged as otherwise provided herein or as otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301), if temporary Securities of any series are issued, the Company will cause definitive Securities of that series to be prepared without unreasonable delay. After the preparation of definitive Securities of such series, the temporary Securities of such series shall be exchangeable for definitive Securities of such series upon surrender of the temporary Securities of such series at the office or agency of the Company in a Place of Payment for that series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series (accompanied by any non-matured coupons appertaining

thereto), the Company shall execute (in accordance with a Company Order delivered at or prior to the authentication of the first definitive security to such series) and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations; provided, however, that no definitive Bearer Security shall be delivered in exchange for a temporary Registered Security; and provided further that a definitive Bearer Security shall be delivered in exchange for a temporary Bearer Security only in compliance with the conditions set forth in Section 303. Until so exchanged, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series.

(b) Unless otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301, the following provisions of this Section 304(b) shall govern the exchange of temporary Securities other than through the facilities of the DTC. If any such temporary Security is issued in global form, then such temporary Global Security shall, unless otherwise provided therein, be delivered to the London office of a depository or common depository upon and pursuant to written direction of the Company (the “Common Depository”), for the benefit of Euroclear and Clearstream, for credit to the respective accounts of the beneficial owners of such Securities (or to such other accounts as they may direct).

Without unnecessary delay but in any event not later than the date specified in, or determined pursuant to the terms of, any such temporary Global Security (the “Exchange Date”), the Company shall deliver to the Trustee definitive Securities, in aggregate principal amount equal to the principal amount of such temporary Global Security, executed by the Company. On or after the Exchange Date, such temporary Global Security shall be surrendered by the Common Depository to the Trustee, as the Company’s agent for such purpose, to be exchanged, in whole or from time to time in part, for definitive Securities without charge, and the Trustee shall authenticate and deliver, in exchange for each portion of such temporary Global Security, an equal aggregate principal amount of definitive Securities of the same series of authorized denominations and of like tenor as the portion of such temporary Global Security to be exchanged. The definitive Securities to be delivered in exchange for any such temporary Global Security shall be in bearer form, registered form, permanent global bearer form or permanent global registered form, or any combination thereof, as specified as contemplated by Section 301, and, if any combination thereof is so specified, as requested by the beneficial owner thereof (as directed by or pursuant to information provided by the Common Depository); provided, however, that, unless otherwise specified in such temporary Global Security, upon such presentation by the Common Depository, such temporary Global Security shall be accompanied by a certificate dated the Exchange Date or a subsequent date and signed by Euroclear as to the portion of such temporary Global Security held for its account then to be exchanged and a certificate dated the Exchange Date or a subsequent date and signed by Clearstream as to the portion of such temporary Global Security held for its account then to be exchanged, each in the form set forth in Exhibit B-2 to this Indenture or in such other form as may be established pursuant to Section 301; and provided further that definitive Bearer Securities shall be delivered in exchange for a portion of a temporary Global Security only in compliance with the requirements of Section 303.

Unless otherwise specified in such temporary Global Security, the interest of a beneficial owner of Securities of a series in a temporary Global Security shall be exchanged for definitive

Securities of the same series and of like tenor following the Exchange Date when the account holder instructs Euroclear or Clearstream, as the case may be, to request such exchange on his behalf and delivers to Euroclear or Clearstream, as the case may be, a certificate in the form set forth in Exhibit B-1 to this Indenture (or in such other form as may be established pursuant to Section 301), dated no earlier than 15 days prior to the Exchange Date, copies of which certificate shall be available from the offices of Euroclear and Clearstream, the Trustee, any Authenticating Agent appointed for such series of Securities and each Paying Agent. Unless otherwise specified in such temporary Global Security, any such exchange shall be made free of charge to the beneficial owners of such temporary Global Security, except that a Person receiving definitive Securities must bear the cost of insurance, postage, transportation and the like unless such Person takes delivery of such definitive Securities in person at the offices of Euroclear or Clearstream. Definitive Securities in bearer form to be delivered in exchange for any portion of a temporary Global Security shall be delivered only to an address located outside the United States.

Until exchanged in full as hereinabove provided, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of the same series and of like tenor authenticated and delivered hereunder, except that, unless otherwise specified as contemplated by Section 301, interest payable on a temporary Global Security on an Interest Payment Date for Securities of such series occurring prior to the applicable Exchange Date shall be payable to Euroclear and Clearstream on such Interest Payment Date upon delivery by Euroclear and Clearstream to the Trustee of a certificate or certificates in the form set forth in Exhibit B-2 to this Indenture (or in such other forms as may be established pursuant to Section 301), for credit without further interest on or after such Interest Payment Date to the respective accounts of Persons who are the beneficial owners of such temporary Global Security on such Interest Payment Date and who have each delivered to Euroclear or Clearstream, as the case may be, a certificate dated no earlier than 15 days prior to the Interest Payment Date occurring prior to such Exchange Date in the form set forth as Exhibit B-1 to this Indenture (or in such other forms as may be established pursuant to Section 301). Notwithstanding anything to the contrary herein contained, the certifications made pursuant to this paragraph shall satisfy the certification requirements of the preceding two paragraphs of this Section 304(b) and of the third paragraph of Section 303 of this Indenture and the interests of the Persons who are the beneficial owners of the temporary Global Security with respect to which such certification was made will be exchanged for definitive Securities of the same series and of like tenor on the Exchange Date or the date of certification if such date occurs after the Exchange Date, without further act or deed by such beneficial owners. Except as otherwise provided in this paragraph, no payments of principal or interest owing with respect to a beneficial interest in a temporary Global Security will be made unless and until such interest in such temporary Global Security shall have been exchanged for an interest in a definitive Security. Any interest so received by Euroclear and Clearstream and not paid as herein provided shall be returned to the Trustee prior to the expiration of two years after such Interest Payment Date in order to be repaid to the Company.

With respect to Exhibit B-1 or B-2 to this Indenture, the Company may, in its discretion and if required or desirable under applicable law, substitute one or more other forms of such exhibits for such exhibits, eliminate the requirement that any or all certificate be provided, or change the time that any certificate may be required, provided that such substitute form or forms

or notice of elimination or change of such certification requirement have theretofore been delivered to the Trustee with a Company Request and such form or forms, elimination or change is reasonably acceptable to the Trustee.

SECTION 305. Registration, Registration of Transfer, Conversion and Exchange. The Company shall cause to be kept at the Corporate Trust Office of the Trustee or in any office or agency of the Company in a Place of Payment a register for each series of Securities (the registers maintained in such office or in any such office or agency of the Company in a Place of Payment being herein sometimes referred to collectively as the "Security Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Registered Securities and of transfers of Registered Securities. The Security Register shall be in written form or any other form capable of being converted into written form within a reasonable time. The Trustee, at its Corporate Trust Office, is hereby initially appointed "Security Registrar" for the purpose of registering Registered Securities and transfers of Registered Securities on such Security Register as herein provided. In the event that the Trustee shall cease to be Security Registrar, it shall have the right to examine, and be provided a copy of, the Security Register at all reasonable times.

Subject to the provisions of this Section 305, upon surrender for registration of transfer of any Registered Security of any series at any office or agency of the Company in a Place of Payment for that series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Registered Securities of the same series, of any authorized denominations and of a like aggregate principal amount, bearing a number not contemporaneously outstanding, and containing identical terms and provisions.

Subject to the provisions of this Section 305, at the option of the Holder, Registered Securities of any series may be exchanged for other Registered Securities of the same series, of any authorized denomination or denominations and of a like aggregate principal amount, containing identical terms and provisions, upon surrender of the Registered Securities to be exchanged at any such office or agency. Whenever any such Registered Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Registered Securities which the Holder making the exchange is entitled to receive. Unless otherwise specified with respect to any series of Securities as contemplated by Section 301, Bearer Securities may not be issued in exchange for Registered Securities.

If (but only if) permitted by the applicable Board Resolution and (subject to Section 303) set forth in the applicable Officers' Certificate, or in any indenture supplemental hereto, delivered as contemplated by Section 301, at the option of the Holder, Bearer Securities of any series may be exchanged for Registered Securities of the same series of any authorized denominations and of a like aggregate principal amount and tenor, upon surrender of the Bearer Securities to be exchanged at any such office or agency, with all unmatured coupons and all matured coupons in default thereto appertaining. If the Holder of a Bearer Security is unable to produce any such unmatured coupon or coupons or matured coupon or coupons in default, any such permitted exchange may be effected if the Bearer Securities are accompanied by payment in funds acceptable to the Company (or to the Trustee for the Security in case of matured coupons

in default) in an amount equal to the face amount of such missing coupon or coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there is furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to any Paying Agent any such missing coupon in respect of which such a payment shall have been made, such Holder shall be entitled to receive the amount of such payment; provided, however, that, except as otherwise provided in Section 1002, interest represented by coupons shall be payable only upon presentation and surrender of those coupons at an office or agency located outside the United States. Notwithstanding the foregoing, in case a Bearer Security of any series is surrendered at any such office or agency in a permitted exchange for a Registered Security of the same series and like tenor after the close of business at such office or agency on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date or proposed date for payment, as the case may be, and interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

Notwithstanding the foregoing, except as otherwise specified as contemplated by Section 301, any permanent Global Security shall be exchangeable only as provided in this paragraph. If the depository for any permanent Global Security is DTC, then, unless the terms of such Global Security expressly permit such Global Security to be exchanged in whole or in part for definitive Securities, a Global Security may be transferred, in whole but not in part, only to a nominee of DTC, or by a nominee of DTC to DTC, or to a successor to DTC for such Global Security selected or approved by the Company or to a nominee of such successor to DTC. If at any time DTC notifies the Company that it is unwilling or unable to continue as depository for the applicable Global Security or Securities or if at any time DTC ceases to be a clearing agency registered under the Exchange Act if so required by applicable law or regulation, the Company shall appoint a successor depository with respect to such Global Security or Securities. If (w) a successor depository for such Global Security or Securities is not appointed by the Company within 90 days after the Company receives such notice or becomes aware of such unwillingness, inability or ineligibility, (x) the Company delivers to the Trustee for Securities of such series in registered form a Company Order stating that the Securities of such series shall be exchangeable, (y) an Event of Default has occurred and is continuing and the beneficial owners representing a majority in principal amount of the applicable series of Securities represented by such Global Security or Securities advise DTC to cease acting as depository for such Global Security or Securities or (z) the Company, in its sole discretion, determines at any time that all Outstanding Securities (but not less than all) of any series issued or issuable in the form of one or more Global Securities shall no longer be represented by such Global Security or Securities, then the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities of like series, rank, tenor and terms in definitive form in an aggregate principal amount equal to the principal amount of such Global Security or Securities. If any beneficial owner of an interest in

a permanent global Security is otherwise entitled to exchange such interest for Securities of such series and of like tenor and principal amount of another authorized form and denomination, as specified as contemplated by Section 301 and provided that any applicable notice provided in the permanent Global Security shall have been given, then without unnecessary delay but in any event not later than the earliest date on which such interest may be so exchanged, the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities in aggregate principal amount equal to the principal amount of such beneficial owner's interest in such permanent Global Security. On or after the earliest date on which such interests may be so exchanged, such permanent Global Security shall be surrendered for exchange by DTC or such other depository as shall be specified in the Company Order with respect thereto to the Trustee, as the Company's agent for such purpose; provided, however, that no such exchanges may occur during a period beginning at the opening of business 15 days before any selection of Securities to be redeemed and ending on the relevant Redemption Date if the Security for which exchange is requested may be among those selected for redemption; and provided further that no Bearer Security delivered in exchange for a portion of a permanent Global Security shall be mailed or otherwise delivered to any location in the United States. If a Registered Security is issued in exchange for any portion of a permanent Global Security after the close of business at the office or agency where such exchange occurs on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of such Registered Security, but will be payable on such Interest Payment Date or proposed date for payment, as the case may be, only to the Person to whom interest in respect of such portion of such permanent Global Security is payable in accordance with the provisions of this Indenture.

All Securities issued upon any registration of transfer or conversion or exchange of Securities shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such registration of transfer or conversion or exchange.

Every Registered Security presented or surrendered for registration of transfer or for conversion, exchange or redemption shall (if so required by the Company or the Security Registrar) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar, duly executed by the Holder thereof or his attorney duly authorized in writing.

No service charge shall be made to the Holder for any registration of transfer or conversion or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or conversion or exchange of Securities, other than exchanges pursuant to Section 304, 906, 1107 or 1305 not involving any transfer.

The Company or the Trustee, as applicable, shall not be required (i) to issue, register the transfer of or exchange any Security if such Security may be among those selected for redemption during a period beginning at the opening of business 15 days before selection of the

Securities to be redeemed under Section 1103 and ending at the close of business on (A) if such Securities are issuable only as Registered Securities, the day of the mailing of the relevant notice of redemption and (B) if such Securities are issuable as Bearer Securities, the day of the first publication of the relevant notice of redemption or, if such Securities are also issuable as Registered Securities and there is no publication, the mailing of the relevant notice of redemption, or (ii) to register the transfer of or exchange any Registered Security so selected for redemption in whole or in part, except, in the case of any Registered Security to be redeemed in part, the portion thereof not to be redeemed, or (iii) to exchange any Bearer Security so selected for redemption except that such a Bearer Security may be exchanged for a Registered Security of that series and like tenor, provided that such Registered Security shall be simultaneously surrendered for redemption, or (iv) to issue, register the transfer of or exchange any Security which has been surrendered for repayment at the option of the Holder, except the portion, if any, of such Security not to be so repaid.

Furthermore, notwithstanding any other provision of this Section 305, the Company will not be required to exchange any Securities if, as a result of the exchange, the Company would suffer adverse consequences under any United States law or regulation.

SECTION 306. Mutilated, Destroyed, Lost and Stolen Securities. If any mutilated Security or a Security with a mutilated coupon appertaining to it is surrendered to the Trustee or the Company, together with, in proper cases, such security or indemnity as may be required by the Company or the Trustee to save each of them or any agent of either of them harmless, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to the surrendered Security.

If there shall be delivered to the Company and to the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security or coupon, and (ii) such security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of notice to the Company or the Trustee that such Security or coupon has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security or in exchange for the Security to which a destroyed, lost or stolen coupon appertains (with all appurtenant coupons not destroyed, lost or stolen), a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains.

Notwithstanding the provisions of the previous two paragraphs, in case any such mutilated, destroyed, lost or stolen Security or coupon has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains, pay such Security or coupon if the applicant for such payment shall furnish to the Company and the Trustee for such

Security such security or indemnity as may be required by them to save each of them harmless, and in the case of destruction, loss or theft, evidence satisfactory to the Company and Trustee and any agent of any of them of the destruction, loss or theft of such Security and the ownership thereof; provided, however, that payment of principal of (and premium or Make-Whole Amount, if any), and interest, if any, on, Bearer Securities shall, except as otherwise provided in Section 1002, be payable only at an office or agency located outside the United States and, unless otherwise specified as contemplated by Section 301, any interest on Bearer Securities shall be payable only upon presentation and surrender of the coupons appertaining thereto.

Upon the issuance of any new Security under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

Every new Security of any series with its coupons, if any, issued pursuant to this Section in lieu of any destroyed, lost or stolen Security, or in exchange for a Security to which a destroyed, lost or stolen coupon appertains, shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security and its coupons, if any, or the destroyed, lost or stolen coupon shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of that series and their coupons, if any, duly issued hereunder.

The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities or coupons.

SECTION 307. Payment of Interest; Interest Rights Preserved. Except as otherwise specified with respect to a series of Securities in accordance with the provisions of Section 301, interest on any Registered Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest payment at the office or agency of the Company maintained for such purpose pursuant to Section 1002; provided, however, that each installment of interest on any Registered Security may at the Company's option be paid by (i) mailing a check for such interest, payable to or upon the written order of the Person entitled thereto pursuant to Section 308, to the address of such Person as it appears on the Security Register or (ii) transfer to an account maintained by the payee located inside the United States.

Unless otherwise provided as contemplated by Section 301 with respect to the Securities of any series, payment of interest may be made, in the case of a Bearer Security, by transfer to an account maintained by the payee with a bank located outside the United States.

Unless otherwise provided as contemplated by Section 301, every permanent Global Security will provide that interest, if any, payable on any Interest Payment Date will be paid to DTC, Euroclear and/or Clearstream, as the case may be, with respect to that portion of such permanent Global Security held for its account by Cede & Co. or the Common Depository, as the

case may be, for the purpose of permitting such party to credit the interest received by it in respect of such permanent Global Security to the accounts of the beneficial owners thereof.

In case a Bearer Security of any series is surrendered in exchange for a Registered Security of such series after the close of business (at an office or agency in a Place of Payment for such series) on any Regular Record Date and before the opening of business (at such office or agency) on the next succeeding Interest Payment Date, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date and interest will not be payable on such Interest Payment Date in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

Except as otherwise specified with respect to a series of Securities in accordance with the provisions of Section 301, any interest on any Registered Security of any series that is payable, but is not punctually paid or duly provided for, on any Interest Payment Date (herein called "Defaulted Interest") shall forthwith cease to be payable to the registered Holder thereof on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Registered Security of such series and the date of the proposed payment (which shall not be less than 20 days after such notice is received by the Trustee), and at the same time the Company shall deposit with the Trustee an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit on or prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first-class postage prepaid, to each Holder of Registered Securities of such series at his address as it appears in the Security Register not less than 10 days prior to such Special Record Date. The Trustee may, in its discretion, in the name and at the expense of the Company, cause a similar notice to be published at least once in an Authorized Newspaper in each Place of Payment, but such publications shall not be a condition precedent to the establishment of such Special Record Date. Notice of the

proposed payment of such Defaulted Interest and the Special Record Date therefor having been mailed as aforesaid, such Defaulted Interest shall be paid to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (2). In case a Bearer Security of any series is surrendered at the office or agency in a Place of Payment for such series in exchange for a Registered Security of such series after the close of business at such office or agency on any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such proposed date of payment and Defaulted Interest will not be payable on such proposed date of payment in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

(2) The Company may make payment of any Defaulted Interest on the Registered Securities of any series in any other lawful manner not inconsistent with the requirements of any over-the-counter market or securities exchange on which such Securities may be quoted or listed, and upon such notice as may be required by such market or exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section and Section 305, each Security delivered under this Indenture upon registration of transfer of or upon conversion of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

SECTION 308. Persons Deemed Owners. Prior to due presentment of a Registered Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name such Registered Security is registered as the owner of such Security for the purpose of receiving payment of principal of (and premium or Make-Whole Amount, if any), and (subject to Sections 305 and 307) interest on, such Registered Security and for all other purposes whatsoever, whether or not such Registered Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary. All such payments so made to any such Person, or upon such Person's order, shall be valid, and, to the extent of the sum or sums so paid, effectual to satisfy and discharge the liability for money payable upon any such Security.

Title to any Bearer Security and any coupons appertaining thereto shall pass by delivery. The Company, the Trustee and any agent of the Company or the Trustee may treat the Holder of any Bearer Security and the Holder of any coupon as the absolute owner of such Security or coupon for the purpose of receiving payment thereof or on account thereof and for all other purposes whatsoever, whether or not such Security or coupon be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

No holder of any beneficial interest in any Global Security held on its behalf by a depository shall have any rights under this Indenture with respect to such Global Security and such depository (which is the Holder of such security) shall be treated by the Company, the Trustee, and any agent of the Company or the Trustee as the owner of such Global Security for all purposes whatsoever. None of the Company, the Trustee, any Paying Agent or the Security Registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests of a Global Security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Notwithstanding the foregoing, with respect to any Global Security, nothing herein shall prevent the Company, the Trustee, or any agent of the Company or the Trustee, from giving effect to any written certification, proxy or other authorization furnished by any depository, as a Holder, with respect to such Global Security or impair, as between such depository and owners of beneficial interests in such Global Security, the operation of customary practices governing the exercise of the rights of such depository (or its nominee) as Holder of such Global Security.

SECTION 309. Cancellation. All Securities and coupons surrendered for payment, redemption, repayment at the option of the Holder, registration of transfer or conversion or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee, and any such Securities and coupons and Securities and coupons surrendered directly to the Trustee for any such purpose, upon direction by the Company, shall be promptly cancelled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly cancelled by the Trustee. If the Company shall so acquire any of the Securities, however, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are surrendered to the Trustee for cancellation. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section, except as expressly permitted by this Indenture. Cancelled Securities and coupons held by the Trustee shall be disposed of by the Trustee in accordance with its customary practices (subject to the record retention requirements of the Exchange Act).

SECTION 310. Computation of Interest. Except as otherwise specified as contemplated by Section 301 with respect to Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

SECTION 311. CUSIP Numbers. The Company in issuing the Securities may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption as a convenience to Holders; provided, however, that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Securities, and any such redemption shall

not be affected by any defect in or omission of such numbers. The Company will promptly notify the Trustee of any change in the “CUSIP” numbers.

ARTICLE FOUR — SATISFACTION AND DISCHARGE

SECTION 401. Satisfaction and Discharge of Indenture. This Indenture shall upon Company Request cease to be of further effect with respect to any series of Securities specified in such Company Request (except as to any surviving rights of registration of transfer or conversion or exchange of Securities of such series herein expressly provided for), and the Trustee, upon receipt of a Company Order, and at the expense of the Company, shall execute instruments in form and substance satisfactory to the Trustee and the Company acknowledging satisfaction and discharge of this Indenture as to such series when

(1) either

(A) all Securities of such series theretofore authenticated and delivered and all coupons, if any, appertaining thereto (other than (i) coupons appertaining to Bearer Securities surrendered for exchange for Registered Securities and maturing after such exchange, whose surrender is not required or has been waived as provided in Section 305, (ii) Securities and coupons of such series which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 306, (iii) coupons appertaining to Securities called for redemption and maturing after the relevant Redemption Date, whose surrender has been waived as provided in Section 1106, and (iv) Securities and coupons of such series for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 1003) have been delivered to the Trustee for cancellation; or

(B) all Securities of such series and, in the case of (i) or (ii) below, any coupons appertaining thereto not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

(ii) will become due and payable at their Stated Maturity within one year, or

(iii) if redeemable at the option of the Company, are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company,

and the Company, in the case of (i), (ii) or (iii) above, has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose an amount in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of

such series are payable, sufficient to pay and discharge the entire indebtedness on such Securities and such coupons not theretofore delivered to the Trustee for cancellation, for principal (and premium or Make-Whole Amount, if any) and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

(2) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(3) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture as to such series have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee and any predecessor Trustee under Section 606, the obligations of the Company to any Authenticating Agent under Section 611 and, if money shall have been deposited with and held by the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 402 and the last paragraph of Section 1003 shall survive such satisfaction and discharge.

SECTION 402. Application of Trust Funds. Subject to the provisions of the last paragraph of Section 1003, all money deposited with the Trustee pursuant to Section 401 shall be held in trust and applied by it, in accordance with the provisions of the Securities, the coupons and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the principal (and premium or Make-Whole Amount, if any), and any interest for whose payment such money has been deposited with or received by the Trustee, but such money need not be segregated from other funds except to the extent required by law.

ARTICLE FIVE — REMEDIES

SECTION 501. Events of Default. "Event of Default," wherever used herein with respect to any particular series of Securities, means any one of the following events (whatever the reason for such Event of Default and whether or not it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

(1) default in the payment of any interest on any Security of that series or of any coupon appertaining thereto, when such interest or coupon becomes due and payable, and continuance of such default for a period of 30 days; or

(2) default in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of that series when it becomes due and payable at its Maturity; or

(3) default in the deposit of any sinking fund payment, to the extent applicable to such series of Securities, when and as due by the terms of any Security of that series; or

(4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture with respect to any Security of that series (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of a series of Securities other than that series), and continuance of such default or breach for a period of 60 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities of that series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or

(5) default under any bond, debenture, note, mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any indebtedness for money borrowed by the Company (or by any Subsidiary, the repayment of which the Company has guaranteed or for which the Company is directly responsible or liable as obligor or guarantor), having an aggregate principal amount outstanding of at least \$75,000,000, whether such indebtedness now exists or shall hereafter be created, which default shall have resulted in such indebtedness becoming or being declared due and payable prior to the date on which it would otherwise have become due and payable, without such indebtedness having been discharged, or such acceleration having been rescinded or annulled, within a period of 30 days after there shall have been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 10% in principal amount of the Outstanding Securities of that series a written notice specifying such default and requiring the Company to cause such indebtedness to be discharged or cause such acceleration to be rescinded or annulled and stating that such notice is a "Notice of Default" hereunder; provided, however, that, subject to the provisions of Sections 601 and 602, the Trustee shall not be deemed to have knowledge of such default unless either (A) a Responsible Officer of the Trustee shall have knowledge of such default or (B) the Trustee shall have received written notice thereof from the Company, from any Holder, from the holder of any such indebtedness or from the trustee under any such mortgage, indenture or other instrument; or

(6) the Company or any Significant Subsidiary pursuant to or within the meaning of any Bankruptcy Law:

(A) commences a voluntary case,

(B) consents to the entry of an order for relief against it in an involuntary case,

(C) consents to the appointment of a Custodian of it or for all or substantially all of its property, or

- (D) makes a general assignment for the benefit of its creditors; or
- (7) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:
 - (A) is for relief against the Company or any Significant Subsidiary in an involuntary case,
 - (B) appoints a Custodian of the Company or any Significant Subsidiary or for all or substantially all of either of its property, or
 - (C) orders the liquidation of the Company or any Significant Subsidiary, and the order or decree remains unstayed and in effect for 90 days; or
- (8) any other Event of Default provided with respect to Securities of that series.

As used in this Section 501, the term “Bankruptcy Law” means title 11, U.S. Code or any similar Federal or state law for the relief of debtors and the term “Custodian” means any receiver, trustee, assignee, liquidator or other similar official under any Bankruptcy Law.

SECTION 502. Acceleration of Maturity; Rescission and Annulment. If an Event of Default with respect to Securities of any series at the time Outstanding occurs and is continuing, then and in every such case the Trustee or the Holders of not less than 25% in principal amount of the Outstanding Securities of that series may declare the principal amount (or, if Securities of that Series are Original Issue Discount Securities or Indexed Securities, such portion of the principal as may be specified in the terms thereof) of all the Securities of that series to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by the Holders), and upon any such declaration such principal or specified portion thereof shall become immediately due and payable.

At any time after such a declaration of acceleration with respect to Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article provided, the Holders of a majority in principal amount of the Outstanding Securities of that series, by written notice to the Company and the Trustee, may rescind and annul such declaration of acceleration and its consequences if:

- (1) the Company has paid or deposited with the Trustee a sum sufficient to pay in the currency, currency unit or composite currency in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series):
 - (A) all overdue installments of interest on all Outstanding Securities of that series and any related coupons,
 - (B) the principal of (and premium or Make-Whole Amount, if any, on) any Outstanding Securities of that series which have become due otherwise than

by such declaration of acceleration and interest thereon at the rate or rates borne by or provided for in such Securities,

(C) to the extent that payment of such interest is lawful, interest upon overdue installments of interest at the rate or rates borne by or provided for in such Securities, and

(D) all sums paid or advanced by the Trustee hereunder and the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel; and

(2) all Events of Default with respect to Securities of that series, other than the nonpayment of the principal of (or premium or Make-Whole Amount, if any) or interest on Securities of that series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 513.

No such rescission shall affect any subsequent default or impair any right consequent thereon.

SECTION 503. Collection of Indebtedness and Suits for Enforcement by Trustee. The Company covenants that if:

(1) default is made in the payment of any installment of interest on any Security of any series and any related coupon when such interest becomes due and payable and such default continues for a period of 30 days, or

(2) default is made in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of any series at its Maturity,

then the Company will, upon demand of the Trustee, pay to the Trustee, for the benefit of the Holders of such Securities of such series and coupons, the whole amount then due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, with interest upon any overdue principal (and premium or Make-Whole Amount, if any) and, to the extent that payment of such interest shall be legally enforceable, upon any overdue installments of interest at the rate or rates borne by or provided for in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, and may prosecute such proceeding to judgment or final decree, and may enforce the same against the Company or any other obligor upon such Securities of such series and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities of such series, wherever situated.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series and any related coupons by such appropriate judicial proceedings as the Trustee shall deem necessary to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

SECTION 504. Trustee May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities of any series shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal, premium or Make-Whole Amount, if any, or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(i) to file and prove a claim for the whole amount, or such lesser amount as may be provided for in the Securities of such series, of principal (and premium or Make-Whole Amount, if any) and interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceeding, and

(ii) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator (or other similar official) in any such judicial proceeding is hereby authorized by each Holder of Securities of such series and coupons to make such payments to the Trustee, and in the event that the Trustee shall consent to the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee and any predecessor Trustee, their agents and counsel, and any other amounts due the Trustee or any predecessor Trustee under Section 606.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder of a Security or coupon any plan of reorganization, arrangement, adjustment or composition affecting the Securities or coupons or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder of a Security or coupon in any such proceeding.

In any proceedings brought by the Trustee (and also any proceedings involving the interpretation of any provision of this Indenture to which the Trustee shall be a party) the Trustee shall be held to represent all the Holders of the Securities, and it shall not be necessary to make any Holders of the Securities parties to any such proceedings.

SECTION 505. Trustee May Enforce Claims Without Possession of Securities or Coupons. All rights of action and claims under this Indenture or any of the Securities or coupons may be prosecuted and enforced by the Trustee without the possession of any of the Securities or coupons or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Securities and coupons in respect of which such judgment has been recovered.

SECTION 506. Application of Money Collected. Any money collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal (or premium or Make-Whole Amount, if any) or interest, upon presentation of the Securities or coupons, or both, as the case may be, and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee and any predecessor Trustee under Section 606;

SECOND: To the payment of the amounts then due and unpaid upon the Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the aggregate amounts due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, respectively; and

THIRD: To the payment of the remainder, if any, to the Company.

SECTION 507. Limitation on Suits. No Holder of any Security of any series or any related coupon shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless:

(1) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that series;

(2) the Holders of not less than 25% in principal amount of the Outstanding Securities of that series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;

(3) such Holder or Holders have offered to the Trustee indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities to be incurred in compliance with such request;

(4) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and

(5) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the Outstanding Securities of that series;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders, or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders.

SECTION 508. Unconditional Right of Holders to Receive Principal, Premium or Make-Whole Amount, if any, and Interest. Notwithstanding any other provision in this Indenture, the Holder of any Security or coupon shall have the right which is absolute and unconditional to receive payment of the principal of (and premium or Make-Whole Amount, if any) and (subject to Sections 305 and 307) interest on such Security or payment of such coupon on the respective due dates expressed in such Security or coupon (or, in the case of redemption, on the Redemption Date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

SECTION 509. Restoration of Rights and Remedies. If the Trustee or any Holder of a Security or coupon has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, the Company, the Trustee and the Holders of Securities and coupons shall, subject to any determination in such proceeding, be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

SECTION 510. Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities or coupons in the last paragraph of Section 306, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders of Securities or coupons is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

SECTION 511. Delay or Omission Not Waiver. No delay or omission of the Trustee or of any Holder of any Security or coupon to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as

may be deemed expedient, by the Trustee or by the Holders of Securities or coupons, as the case may be.

SECTION 512. Control by Holders of Securities. The Holders of not less than a majority in principal amount of the Outstanding Securities of any series shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Securities of such series, provided that:

- (1) such direction shall not be in conflict with any rule of law or with this Indenture,
- (2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction, and
- (3) the Trustee need not take any action which might involve it in personal liability or be unduly prejudicial to the Holders of Securities of such series not joining therein.

Nothing in this Indenture shall impair the right of the Trustee in its discretion to take any action deemed proper by the Trustee and which is not inconsistent with such direction by Holders.

SECTION 513. Waiver of Past Defaults. The Holders of not less than a majority in principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series and any related coupons waive any past default hereunder with respect to such series and its consequences, except a default

- (1) in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series or any related coupons, or
- (2) in respect of a covenant or provision hereof which under Article Nine cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected; or
- (3) in respect of a covenant or provision hereof for the benefit or protection of the Trustee, without its express written consent.

Upon any such waiver, such default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other default or Event of Default or impair any right consequent thereon.

SECTION 514. Waiver of Usury, Stay or Extension Laws. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the

covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

SECTION 515. Undertaking for Costs. All parties to this Indenture agree, and each Holder of any Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in such suit having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the Outstanding Securities of any series, or to any suit instituted by any Holder for the enforcement of the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security on or after the respective Stated Maturities expressed in such Security (or, in the case of redemption, on or after the Redemption Date).

ARTICLE SIX — THE TRUSTEE

SECTION 601. Notice of Defaults. Within 90 days after the occurrence of any default hereunder with respect to the Securities of any series, the Trustee shall transmit in the manner and to the extent provided in TIA Section 313(c), notice of such default hereunder known to the Trustee, unless such default shall have been cured or waived; provided, however, that, except in the case of a default in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series, or in the payment of any sinking or purchase fund installment with respect to the Securities of such series, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee, or a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interests of the Holders of the Securities and coupons of such series; and provided further that in the case of any default or breach of the character specified in Section 501(4) with respect to the Securities and coupons of such series, no such notice to Holders shall be given until at least 60 days after the occurrence thereof. For the purpose of this Section, the term "default" means any event which is, or after notice or lapse of time or both would become, an Event of Default with respect to the Securities of such series.

SECTION 602. Certain Rights of Trustee. Subject to the provisions of TIA Section 315(a) through 315(d):

- (1) the Trustee may conclusively rely and shall be fully protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, coupon or other paper or document (whether in its original or facsimile form) reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties;
- (2) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order (other than delivery of any Security, together with any coupons appertaining thereto, to the Trustee for authentication and delivery pursuant to Section 303 which shall be sufficiently evidenced as provided therein) and any resolution of the Board of Directors may be sufficiently evidenced by a Board Resolution;
- (3) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officers' Certificate;
- (4) the Trustee may consult with counsel of its own selection and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;
- (5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders of Securities of any series or any related coupons pursuant to this Indenture, unless such Holders shall have offered to the Trustee security or indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;
- (6) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, coupon or other paper or document, unless requested in writing so to do by the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series; provided that, if the payment within a reasonable time to the Trustee of the costs, expenses or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require reasonable indemnity against such expenses or liabilities as a condition to proceeding; the reasonable expenses of every such examination shall be paid by the Holders or, if paid by the Trustee, shall be repaid by the Holders upon demand. The Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, relevant to the facts or matters that are the subject of its inquiry, personally or by agent or attorney at the expense of the Company

and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation;

(7) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(8) the Trustee shall not be liable for any action taken, suffered or omitted by it in good faith and reasonably believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(9) any permissive right or power available to the Trustee under this Indenture or any supplement hereto shall not be construed to be a mandatory duty or obligation;

(10) the Trustee shall not be charged with knowledge of any matter (including any default, other than as described in Section 501(1), (2) or (3)) unless and except to the extent actually known to a Responsible Officer of the Trustee or to the extent written notice thereof is received by the Trustee at the Corporate Trust Office;

(11) the Trustee shall have no liability for any inaccuracy in the books and records of, or for any actions or omissions of, DTC, Euroclear or Clearstream or any depository acting on behalf of any of them;

(12) the rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and each agent, custodian and other Person employed by the Trustee to act hereunder; and

(13) the Trustee may request that the Company deliver an Officers' Certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officers' Certificate may be signed by any person authorized to sign an Officers' Certificate, including any person specified as so authorized in any such certificate previously delivered and not superseded.

The Trustee shall not be required to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

Except during the continuance of an Event of Default, the Trustee undertakes to perform only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee.

SECTION 603. Not Responsible for Recitals or Issuance of Securities. The recitals contained herein and in the Securities, except the Trustee's certificate of authentication, and in any coupons shall be taken as the statements of the Company, and neither the Trustee nor any Authenticating Agent assumes any responsibility for their correctness. The Trustee makes

no representations as to the validity or sufficiency of this Indenture or of the Securities or coupons, except that the Trustee represents that it is duly authorized to execute and deliver this Indenture, authenticate the Securities and perform its obligations hereunder. Neither the Trustee nor any Authenticating Agent shall be accountable for the use or application by the Company of Securities or the proceeds thereof. The Trustee shall have no responsibility with respect to any information, statement or recital in any offering prospectus or other disclosure materials prepared or distributed with respect to the Securities.

SECTION 604. May Hold Securities. The Trustee, any Paying Agent, Security Registrar, Authenticating Agent or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and coupons and, subject to TIA Sections 310(b) and 311, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Paying Agent, Security Registrar, Authenticating Agent or such other agent.

SECTION 605. Money Held in Trust. Money held by the Trustee in trust hereunder need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed in writing with the Company.

SECTION 606. Compensation and Reimbursement. The Company agrees:

(1) to pay to the Trustee as agreed upon in writing from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);

(2) except as otherwise expressly provided herein, to reimburse each of the Trustee and any predecessor Trustee upon its request for all reasonable expenses, and disbursements incurred by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the reasonable expenses and disbursements of its agents and counsel), except any such expense or disbursement as shall be determined to have been caused by its own negligence, willful misconduct or bad faith; and

(3) to indemnify each of the Trustee and any predecessor Trustee for, and to hold it harmless against, any loss, liability, claim, damage or expense incurred without negligence, willful misconduct or bad faith on its part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder, including the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 501(7) or Section 501(8), the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to

constitute expenses of administration under any applicable Federal or state bankruptcy, insolvency or other similar law.

As security for the performance of the obligations of the Company under this Section, the Trustee shall have a lien for payment of the Trustee's fees and expenses prior to the Securities upon all property and funds held or collected by the Trustee as such, except funds held in trust for the payment of principal of (or premium or Make-Whole Amount, if any) or interest on particular Securities or any coupons.

The provisions of this Section shall survive the termination of this Indenture and the resignation or removal of the Trustee.

SECTION 607. Corporate Trustee Required; Eligibility; Conflicting Interests. There shall at all times be a Trustee hereunder which shall be eligible to act as Trustee under TIA Section 310(a)(1) and shall have at all times a combined capital and surplus of at least \$50,000,000 (or which shall have a combined capital and surplus of at least \$10,000,000 and whose ultimate parent holding company shall have a combined capital and surplus of at least \$50,000,000. If the Trustee publishes reports of condition at least annually, pursuant to law or the requirements of Federal, state, territorial or District of Columbia supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of the Trustee shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article. Neither the Company nor any Person directly or indirectly controlling, controlled by, or under common control with the Company shall serve as Trustee.

SECTION 608. Resignation and Removal; Appointment of Successor.

(a) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 609.

(b) The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(c) The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Trustee and to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(d) If at any time:

(1) the Trustee shall fail to comply with the provisions of TIA Section 310(b) after written request therefor by the Company or by any Holder of a Security who has been a bona fide Holder of a Security for at least six months, or

(2) the Trustee shall cease to be eligible under Section 607 and shall fail to resign after written request therefor by the Company or by any Holder of a Security who has been a bona fide Holder of a Security for at least six months, or

(3) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, (i) the Company by or pursuant to a Board Resolution may remove the Trustee and appoint a successor Trustee with respect to all Securities, or (ii) subject to TIA Section 315(e), any Holder of a Security who has been a bona fide Holder of a Security for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

(e) If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause with respect to the Securities of one or more series, the Company, by or pursuant to a Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series). If, within one year after such resignation, removal or incapability, or the occurrence of such vacancy, a successor Trustee with respect to the Securities of any series shall be appointed by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders of Securities and accepted appointment in the manner hereinafter provided, any Holder of a Security who has been a bona fide Holder of a Security of such series for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to Securities of such series.

(f) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series in the manner provided for notices to the Holders of Securities in Section 106. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

SECTION 609. Acceptance of Appointment by Successor.

(a) In case of the appointment hereunder of a successor Trustee with respect to all Securities, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee, and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder, subject nevertheless to its claim, if any, provided for in Section 606.

(b) In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto, pursuant to Article Nine hereof, wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

(c) Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section 609, as the case may be.

(d) No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

SECTION 610. Merger, Conversion, Consolidation or Succession to Business. Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all of the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities or coupons shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities or coupons so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities or coupons. In case any Securities or coupons shall not have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities or coupons, in either its own name or that of its predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

SECTION 611. Appointment of Authenticating Agent. At any time when any of the Securities remain Outstanding, the Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon conversion or exchange, registration of transfer or partial redemption or repayment thereof, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Any such appointment shall be evidenced by an instrument in writing signed by a Responsible Officer of the Trustee, a copy of which instrument shall be promptly furnished to the Company. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a bank or trust company or corporation organized and doing business and in good standing under the laws of the United States of America or of any state or the District of Columbia, authorized under such laws to act as Authenticating Agent, having a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by Federal or state authorities. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. In case at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, provided such corporation shall be otherwise eligible under this

Section, without the execution or filing of any paper or further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent for any series of Securities may at any time resign by giving written notice of resignation to the Trustee for such series and to the Company. The Trustee for any series of Securities may at any time terminate the agency of an Authenticating Agent by giving written notice of termination to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, the Trustee for such series may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment to all Holders of Securities of the series with respect to which such Authenticating Agent will serve in the manner set forth in Section 106. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent herein. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Company agrees to pay to each Authenticating Agent from time to time reasonable compensation including reimbursement of its reasonable expenses for its services under this Section, subject to Section 606.

If an appointment with respect to one or more series is made pursuant to this Section, the Securities of such series may have endorsed thereon, in addition to or in lieu of the Trustee's certificate of authentication, an alternate certificate of authentication substantially in the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

_____,
as Trustee

Dated: _____

By: _____
as Authenticating Agent

Dated: _____

By: _____
as Authenticating Agent

SECTION 612. Certain Duties and Responsibilities of the Trustee.

(a) With respect to the Securities of any series, except during the continuance of an Event of Default with respect to the Securities of such series:

(1) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture, but shall not be under any duty to verify the contents or accuracy thereof.

(b) In case an Event of Default with respect to the Securities of any series has occurred and is continuing, the Trustee shall, with respect to Securities of such series, exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(c) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(1) this Subsection shall not be construed to limit the effect of Subsection (a) of this Section;

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of a majority in principal amount of the Outstanding Securities of any series relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such series; and

(4) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it; and, the Trustee shall be under no obligation to exercise any of its rights and powers under this Indenture at the request of any Holder, unless such Holder shall have offered to the Trustee security and indemnity satisfactory to it against any loss, liability or expense.

(d) Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section 612.

(e) The Trustee shall not be liable for interest on any money or assets held by it except to the extent the Trustee may agree in writing with the Company. Assets held in trust by the Trustee need not be segregated from other assets except to the extent required by law.

ARTICLE SEVEN — HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

SECTION 701. Disclosure of Names and Addresses of Holders. Every Holder of Securities or coupons, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any Authenticating Agent nor any Paying Agent nor any Security Registrar shall be held accountable by reason of the disclosure of any information as to the names and addresses of the Holders of Securities in accordance with TIA Section 312, regardless of the source from which such information was derived, and that the Trustee shall not be held accountable by reason of mailing any material pursuant to a request made under TIA Section 312(b).

SECTION 702. Reports by Trustee. The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required by TIA Section 313 at the times and in the manner provided by the TIA, which shall initially be not less than every twelve months commencing on _____, 20_. A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each over-the-counter market or securities exchange, if any, upon which any Securities are quoted or listed, with the Commission and with the Company. The Company will notify the Trustee when any Securities are quoted or listed on any over-the-counter market or securities exchange or delisted therefrom.

SECTION 703. Reports by Company. The Company will:

(1) file with the Trustee, within 15 days after the Company is required to file the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) which the Company may be required to file with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act; or, if the Company is not required to file information, documents or reports pursuant to either of such Sections, then it will file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such of the supplementary and periodic information, documents and reports which may be required pursuant to Section 13 of the Exchange Act in respect of a security quoted or listed and registered on an over-the-counter market or national securities exchange as may be prescribed from time to time in such rules and regulations;

(2) file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such additional information,

documents and reports with respect to compliance by the Company with the conditions and covenants of this Indenture as may be required from time to time by such rules and regulations;

(3) transmit by mail to the Holders of Securities, within 30 days after the filing thereof with the Trustee, in the manner and to the extent provided in TIA Section 313(c), such summaries of any information, documents and reports required to be filed by the Company pursuant to paragraphs (1) and (2) of this Section as may be required by rules and regulations prescribed from time to time by the Commission; and

(4) delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates).

SECTION 704. Company to Furnish Trustee Names and Addresses of Holders. The Company will furnish or cause to be furnished to the Trustee:

(a) semiannually, not later than 15 days after the Regular Record Date for interest for each series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Registered Securities of such series as of such Regular Record Date, or if there is no Regular Record Date for interest for such series of Securities, semiannually, upon such dates as are set forth in the Board Resolution or indenture supplemental hereto authorizing such series, and

(b) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished,

provided, however, that, so long as the Trustee is the Security Registrar, no such list shall be required to be furnished.

ARTICLE EIGHT — CONSOLIDATION, MERGER, SALE, LEASE OR CONVEYANCE

SECTION 801. Consolidations and Mergers of Company and Sales, Leases and Conveyances Permitted Subject to Certain Conditions. The Company may consolidate with, or sell, lease or convey all or substantially all of its assets to, or merge with or into any other corporation, provided that in any such case, (1) either the Company shall be the continuing corporation, or the successor corporation shall be a corporation organized and existing under the laws of the United States or a State thereof and such successor corporation shall expressly assume the due and punctual payment of the principal of (and premium or Make-Whole Amount, if any) and any interest on all of the Securities, according to their tenor, and the due and punctual performance and observance of all of the covenants and conditions of this Indenture to be performed by the Company by supplemental indenture, complying with Article Nine hereof,

satisfactory to the Trustee, executed and delivered to the Trustee by such corporation, (2) immediately after giving effect to such transaction and treating any indebtedness which becomes an obligation of the Company or any Subsidiary as a result thereof as having been incurred by the Company or such Subsidiary at the time of such transaction, no Event of Default, and no event which, after notice or the lapse of time, or both, would become an Event of Default, shall have occurred and be continuing and (3) the Company shall have delivered to the Trustee the Officer's Certificate and Opinion of Counsel required pursuant to Section 803 below.

SECTION 802. Rights and Duties of Successor Corporation. In case of any such consolidation, merger, sale, lease or conveyance and upon any such assumption by the successor corporation, such successor corporation shall succeed to and be substituted for the Company, with the same effect as if it had been named herein as the party of the first part, and the predecessor corporation, except in the event of a lease, shall be relieved of any further obligation under this Indenture and the Securities. Such successor corporation thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Securities issuable hereunder which theretofore shall not have been signed by the Company and delivered to the Trustee; and, upon the order of such successor corporation, instead of the Company, and subject to all the terms, conditions and limitations in this Indenture prescribed, the Trustee shall authenticate and shall deliver any Securities which previously shall have been signed and delivered by the officers of the Company to the Trustee for authentication, and any Securities which such successor corporation thereafter shall cause to be signed and delivered to the Trustee for that purpose. All the Securities so issued shall in all respects have the same legal rank and benefit under this Indenture as the Securities theretofore or thereafter issued in accordance with the terms of this Indenture as though all of such Securities had been issued at the date of the execution hereof.

In case of any such consolidation, merger, sale, lease or conveyance, such changes in phraseology and form (but not in substance) may be made in the Securities thereafter to be issued as may be appropriate.

SECTION 803. Officers' Certificate and Opinion of Counsel. Any consolidation, merger, sale, lease or conveyance permitted under Section 801 is also subject to the condition that the Trustee receive an Officers' Certificate and an Opinion of Counsel to the effect that any such consolidation, merger, sale, lease or conveyance, and the assumption by any successor corporation, complies with the provisions of this Article and that all conditions precedent herein provided for relating to such transaction have been complied with.

ARTICLE NINE — SUPPLEMENTAL INDENTURES

SECTION 901. Supplemental Indentures Without Consent of Holders. Without the consent of any Holders of Securities or coupons, the Company, when authorized by or pursuant to a Board Resolution, and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any of the following purposes:

(1) to evidence the succession of another Person to the Company and the assumption by any such successor of the covenants of the Company contained herein and in the Securities; or

(2) to add to the covenants of the Company for the benefit of the Holders of all or any series of Securities (and if such covenants are to be for the benefit of less than all series of Securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any right or power herein conferred upon the Company; or

(3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such Events of Default are to be for the benefit of less than all series of Securities, stating that such Events of Default are expressly being included solely for the benefit of such series); provided, however, that in respect of any such additional Events of Default such supplemental indenture may provide for a particular period of grace after default (which period may be shorter or longer than that allowed in the case of other defaults) or may provide for an immediate enforcement upon such default or may limit the remedies available to the Trustee upon such default or may limit the right of the Holders of a majority in aggregate principal amount of that or those series of Securities to which such additional Events of Default apply to waive such default; or

(4) to add to or change any of the provisions of this Indenture to provide that Bearer Securities may be registrable as to principal, to change or eliminate any restrictions on the payment of principal of or premium or Make-Whole Amount, if any, or interest on Bearer Securities, to permit Bearer Securities to be issued in exchange for Registered Securities, to permit Bearer Securities to be issued in exchange for Bearer Securities of other authorized denominations or to permit or facilitate the issuance of Securities in uncertificated form, provided that any such action shall not adversely affect the interests of the Holders of Securities of any series or any related coupons in any material respect; or

(5) to change or eliminate any of the provisions of this Indenture, provided that any such change or elimination shall become effective only when there is no Security Outstanding of any series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision; or

(6) to secure the Securities; or

(7) to establish the form or terms of Securities of any series and any related coupons as permitted or contemplated by Sections 201 and 301; or

(8) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee; or

(9) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture which shall not be inconsistent with the provisions of this Indenture, provided such provisions shall not adversely affect the interests of the Holders of Securities of any series or any related coupons in any material respect; or

(10) to supplement any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the Defeasance and discharge of any series of Securities pursuant to Sections 401, 1402 and 1403; provided that any such action shall not adversely affect the interests of the Holders of Securities of such series and any related coupons or any other series of Securities in any material respect; or

(11) to make provisions with respect to Holders' rights of conversion with respect to any series of Securities pursuant to Article Sixteen.

SECTION 902. Supplemental Indentures with Consent of Holders. With the consent of the Holders of not less than a majority in principal amount of all Outstanding Securities affected by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by or pursuant to a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities and any related coupons under this Indenture; provided, however, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby:

(1) change the Stated Maturity of the principal of (or premium or Make-Whole Amount, if any, on) or any installment of principal of or interest on, any Security; or reduce the principal amount thereof or the rate or amount of interest thereon, or any premium or Make-Whole Amount payable upon the redemption thereof, or reduce the amount of the principal of an Original Issue Discount Security that would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 502 or the amount thereof provable in bankruptcy pursuant to Section 504, or adversely affect any right of repayment at the option of the Holder of any Security, or change any Place of Payment where, or the currency or currencies, currency unit or units or composite currency or currencies in which, any Security or any premium or Make-Whole Amount or the interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption or repayment at the option of the Holder, on or after the Redemption Date or the Repayment Date, as the case may be), or (if Securities of such series are convertible) adversely affect the right of the Holder to convert any Security as provided in Article Sixteen; or

(2) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver with respect to such series (or

compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture, or reduce the requirements of Section 1504 for quorum or voting, or

(3) modify any of the provisions of this Section, Section 513 or Section 1009, except to increase the required percentage to effect such action or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby, provided, however, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to “the Trustee” and concomitant changes in this Section 902 and Section 1009, or the deletion of this proviso, in accordance with the requirements of Sections 609(b) and 901(11).

It shall not be necessary for any Act of Holders under this Section 902 to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof.

A supplemental indenture which changes or eliminates any covenant or other provision of this Indenture which has expressly been included solely for the benefit of one or more particular series of Securities, or which modifies the rights of the Holders of Securities of such series with respect to such covenant or other provision, shall be deemed not to affect the rights under this Indenture of the Holders of Securities of any other series.

SECTION 903. Execution of Supplemental Indentures. In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modification thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 612) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee’s own rights, duties or immunities under this Indenture or otherwise.

SECTION 904. Effect of Supplemental Indentures. Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder and of any coupon appertaining thereto shall be bound thereby.

SECTION 905. Conformity with Trust Indenture Act. Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

SECTION 906. Reference in Securities to Supplemental Indentures. Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall, if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so

determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series.

ARTICLE TEN — COVENANTS

SECTION 1001. Payment of Principal, Premium or Make-Whole Amount, if any; and Interest. The Company covenants and agrees for the benefit of the Holders of each series of Securities that it will duly and punctually pay the principal of (and premium or Make-Whole Amount, if any) and interest on the Securities of that series in accordance with the terms of such series of Securities, any coupons appertaining thereto and this Indenture. Unless otherwise specified as contemplated by Section 301 with respect to any series of Securities, any interest due on Bearer Securities on or before Maturity shall be payable only upon presentation and surrender of the several coupons for such interest installments as are evidenced thereby as they severally mature. Unless otherwise specified with respect to Securities of any series pursuant to Section 301, at the option of the Company (upon written notice to the Trustee), all payments of principal may be paid by check to the registered Holder of the Registered Security or other Person entitled thereto against surrender of such Security.

SECTION 1002. Maintenance of Office or Agency. If Securities of a series are issuable only as Registered Securities, the Company shall maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment or conversion, where Securities of that series may be surrendered for registration of transfer or conversion or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. If Securities of a series are issuable as Bearer Securities, the Company will maintain: (A) in the Borough of Manhattan, The City of New York, an office or agency where any Registered Securities of that series may be presented or surrendered for payment or conversion, where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange, where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served and where Bearer Securities of that series and related coupons may be presented or surrendered for payment or conversion in the circumstances described in the following paragraph (and not otherwise); (B) subject to any laws or regulations applicable thereto, in a Place of Payment for that series which is located outside the United States, an office or agency where Securities of that series and related coupons may be presented and surrendered for payment; provided, however, that if the Securities of that series are listed on any stock exchange located outside the United States and such stock exchange shall so require, the Company will maintain a Paying Agent for the Securities of that series in any required city located outside the United States, as the case may be, so long as the Securities of that series are listed on such exchange; and (C) subject to any laws or regulations applicable thereto, in a Place of Payment for that series located outside the United States an office or agency where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange and where notices and demands to or upon

the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of each such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, except that Bearer Securities of that series and the related coupons may be presented and surrendered for payment or conversion at the offices specified in the Security, in London, England, and the Company hereby appoints the same as its agent to receive such respective presentations, surrenders, notices and demands, and the Company hereby appoints the Trustee its agent to receive all such presentations, surrenders, notices and demands.

Unless otherwise specified with respect to any Securities pursuant to Section 301, no payment of principal, premium or Make-Whole Amount or interest on Bearer Securities shall be made at any office or agency of the Company in the United States or by check mailed to any address in the United States or by transfer to an account maintained with a bank located in the United States; provided, however, that, if the Securities of a series are payable in Dollars, payment of principal of and any premium or Make-Whole Amount and interest on any Bearer Security shall be made at the office of the Company's Paying Agent in the Borough of Manhattan, The City of New York, if (but only if) payment in Dollars of the full amount of such principal, premium or Make-Whole Amount, or interest, as the case may be, at all offices or agencies outside the United States maintained for the purpose by the Company in accordance with this Indenture, is illegal or effectively precluded by exchange controls or other similar restrictions.

The Company may from time to time designate one or more other offices or agencies (in or outside the Place of Payment) where the Securities of one or more series may be presented or surrendered for any or all of such purposes, and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in accordance with the requirements set forth above for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency. Unless otherwise specified with respect to any Securities pursuant to Section 301 with respect to a series of Securities, the Company hereby designates as a Place of Payment for each series of Securities, each of (i) the office or agency of the Company in the Borough of Manhattan, The City of New York, and (ii) the Corporate Trust Office of the Trustee (as Paying Agent); and the Company hereby initially appoints the Trustee at its Corporate Trust Office as Paying Agent in such city; and the Company hereby initially appoints as its agent to receive all such presentations, surrenders, notices and demands each of the Trustee, at its Corporate Trust Office.

Unless otherwise specified with respect to any Securities pursuant to Section 301, if and so long as the Securities of any series (i) are denominated in a Foreign Currency or (ii) may be payable in a Foreign Currency, or so long as it is required under any other provision of the Indenture, then the Company will maintain with respect to each such series of Securities, or as so required, at least one exchange rate agent (of which it shall give written notice to the Trustee).

SECTION 1003. Money for Securities Payments to Be Held in Trust. If the Company shall at any time act as its own Paying Agent with respect to any series of any Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any of the Securities of that series, segregate and hold in trust for the benefit of the Persons entitled thereto a sum in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided, and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any Securities of that series, deposit with a Paying Agent a sum (in the currency or currencies, currency unit or units or composite currency or currencies described in the preceding paragraph) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or Make-Whole Amount, if any, or interest and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

The Company will cause each Paying Agent for any series of Securities other than the Trustee to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent will

(1) hold all sums held by it for the payment of principal of (and premium or Make-Whole Amount, if any) or interest on Securities in trust for the benefit of the Persons entitled thereto until such sums shall be paid to such Persons or otherwise disposed of as herein provided;

(2) give the Trustee notice of any default by the Company (or any other obligor upon the Securities) in the making of any such payment of principal (and premium or Make-Whole Amount, if any) or interest on the Securities of that series; and

(3) at any time during the continuance of any such default upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such Paying Agent.

The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same trusts as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such sums.

Except as otherwise provided in the Securities of any series, and subject to applicable laws, any money deposited with the Trustee or any Paying Agent, or then held by the Company,

in trust for the payment of the principal of (and premium or Make-Whole Amount, if any) or interest on any Security of any series and remaining unclaimed for two years after such principal (and premium or Make-Whole Amount, if any) or interest has become due and payable shall be paid to the Company upon Company Request or (if then held by the Company) shall be discharged from such trust; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment of such principal of (and premium or Make-Whole Amount, if any) or interest on any Security, without interest thereon, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; provided, however, that the Trustee or such Paying Agent, before being required to make any such repayment, may at the expense of the Company cause to be published once, in an Authorized Newspaper, notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid to the Company.

SECTION 1004. Existence. Subject to Article Eight, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, all material rights (by certificate of incorporation, by-laws and statute) and material franchises; provided, however, that the Company shall not be required to preserve any such right or franchise if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company.

SECTION 1005. Maintenance of Properties. The Company will cause all of its material properties used or useful in the conduct of its business or the business of any Subsidiary to be maintained and kept in good condition, repair and working order, normal wear and tear, casualty and condemnation excepted, and supplied with all necessary equipment and will cause to be made all necessary repairs, renewals, replacements, betterments and improvements thereof (and the Company may take out of service for a period of time, any of its properties that have been condemned or suffered any loss due to casualty in order to make such repairs, betterments and improvements), all as in the judgment of the Company may be necessary so that the business carried on in connection therewith may be properly and advantageously conducted at all times; provided, however, that the Company and its Subsidiaries shall not be prevented from (i) removing permanently any property that has been condemned or suffered a loss due to casualty based on the Company's reasonable judgment that such removal is in the best interest of the Company, or (ii) selling or otherwise disposing of their properties for value in the ordinary course of business.

SECTION 1006. Insurance. The Company will cause each of its and its Subsidiaries' insurable properties to be insured against loss or damage in an amount deemed reasonable by the Board of Directors with insurers of recognized responsibility.

SECTION 1007. Payment of Taxes and Other Claims. The Company will pay or discharge or cause to be paid or discharged, before the same shall become delinquent, (1) all taxes, assessments and governmental charges levied or imposed upon it or any Subsidiary or upon the income, profits or property of the Company or any Subsidiary, and (2) all lawful claims

for labor, materials and supplies which, if unpaid, might by law become a lien upon the property of the Company or any Subsidiary; provided, however, that the Company shall not be required to pay or discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings.

SECTION 1008. Statement as to Compliance. The Company will deliver to the Trustee, within 120 days after the end of each fiscal year, a brief certificate from the principal executive officer, principal financial officer or principal accounting officer as to his or her knowledge of the Company's compliance with all conditions and covenants under this Indenture and, in the event of any noncompliance, specifying such noncompliance and the nature and status thereof. For purposes of this Section 1008, such compliance shall be determined without regard to any period of grace or requirement of notice under this Indenture.

SECTION 1009. Waiver of Certain Covenants. The Company may omit in any particular instance to comply with any term, provision or condition set forth in Sections 1004 to 1008, inclusive, if before or after the time for such compliance the Holders of at least a majority in principal amount of all outstanding Securities of such series, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such covenant or condition, but no such waiver shall extend to or affect such covenant or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

ARTICLE ELEVEN — REDEMPTION OF SECURITIES

SECTION 1101. Applicability of Article. Securities of any series which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article.

SECTION 1102. Election to Redeem; Notice to Trustee. The election of the Company to redeem any Securities shall be evidenced by or pursuant to a Board Resolution. In case of any redemption at the election of the Company of less than all of the Securities of any series, the Company shall, at least 45 days prior to the giving of the notice of redemption in Section 1104 (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee of such Redemption Date and of the principal amount of Securities of such series to be redeemed. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officers' Certificate evidencing compliance with such restriction.

SECTION 1103. Selection by Trustee of Securities to Be Redeemed. If less than all the Securities of any series issued on the same day with the same terms are to be redeemed, the

particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series issued on such date with the same terms not previously called for redemption, by such method as the Trustee shall deem fair and appropriate and which may provide for the selection for redemption of portions (equal to the minimum authorized denomination for Securities of that series or any integral multiple thereof) of the principal amount of Securities of such series of a denomination larger than the minimum authorized denomination for Securities of that series.

The Trustee shall promptly notify the Company and the Security Registrar (if other than itself) in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the principal amount thereof to be redeemed.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Security redeemed or to be redeemed only in part, to the portion of the principal amount of such Security which has been or is to be redeemed.

SECTION 1104. Notice of Redemption. Notice of redemption shall be given in the manner provided in Section 106, not less than 30 days nor more than 60 days prior to the Redemption Date, unless a shorter period is specified by the terms of such series established pursuant to Section 301, to each Holder of Securities to be redeemed, but failure to give such notice in the manner herein provided to the Holder of any Security designated for redemption as a whole or in part, or any defect in the notice to any such Holder, shall not affect the validity of the proceedings for the redemption of any other such Security or portion thereof.

Any notice that is mailed to the Holders of Registered Securities in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the Holder receives the notice.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price, accrued interest to the Redemption Date payable as provided in Section 1106, if any,
- (3) if less than all Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amount) of the particular Security or Securities to be redeemed,
- (4) in case any Security is to be redeemed in part only, the notice which relates to such Security shall state that on and after the Redemption Date, upon surrender of such Security, the holder will receive, without a charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed,
- (5) that on the Redemption Date the Redemption Price and accrued interest to the Redemption Date payable as provided in Section 1106, if any, will become due and

payable upon each such Security, or the portion thereof, to be redeemed and, if applicable, that interest thereon shall cease to accrue on and after said date,

(6) the Place or Places of Payment where such Securities, together in the case of Bearer Securities with all coupons appertaining thereto, if any, maturing after the Redemption Date, are to be surrendered for payment of the Redemption Price and accrued interest, if any, or for conversion,

(7) that the redemption is for a sinking fund, if such is the case,

(8) that, unless otherwise specified in such notice, Bearer Securities of any series, if any, surrendered for redemption must be accompanied by all coupons maturing subsequent to the date fixed for redemption or the amount of any such missing coupon or coupons will be deducted from the Redemption Price, unless security or indemnity satisfactory to the Company, the Trustee for such series and any Paying Agent is furnished,

(9) if Bearer Securities of any series are to be redeemed and any Registered Securities of such series are not to be redeemed, and if such Bearer Securities may be exchanged for Registered Securities not subject to redemption on this Redemption Date pursuant to Section 305 or otherwise, the last date, as determined by the Company, on which such exchanges may be made,

(10) the CUSIP number of such Security, if any, and

(11) if applicable, that a Holder of Securities who desires to convert Securities for redemption must satisfy the requirements for conversion contained in such Securities, the then existing conversion price or rate, the place or places where such Securities may be surrendered for conversion, and the date and time when the option to convert shall expire.

Notice of redemption of Securities to be redeemed at the election of the Company shall be given by the Company or, at the Company's request, by the Trustee in the name and at the expense of the Company.

SECTION 1105. Deposit of Redemption Price. On or prior to any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, which it may not do in the case of a sinking fund payment under Article Twelve, segregate and hold in trust as provided in Section 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay on the Redemption Date the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof which are to be redeemed on that date.

If any Securities called for redemption are converted, any money deposited with the Trustee or with any Paying Agent or so segregated and held in trust for the redemption of such

Security shall be paid to the Company upon Company Request or, if then held by the Company, shall be discharged from such trust.

SECTION 1106. Securities Payable on Redemption Date. Notice of redemption having been given as aforesaid, the Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) (together with accrued interest, if any, to the Redemption Date), and from and after such date (unless the Company shall default in the payment of the Redemption Price and accrued interest) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be redeemed, except to the extent provided below, shall be void. Upon surrender of any such Security for redemption in accordance with said notice, together with all coupons, if any, appertaining thereto maturing after the Redemption Date, such Security shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date; provided, however, that installments of interest on Bearer Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of coupons for such interest; and provided further that except as otherwise provided with respect to Securities convertible into the Company's Common Stock or Preferred Stock, installments of interest on Registered Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for redemption shall not be accompanied by all appurtenant coupons maturing after the Redemption Date, such Security may be paid after deducting from the Redemption Price an amount equal to the face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made from the Redemption Price, such Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal (and premium or Make-Whole Amount, if any) shall, until paid, bear interest from the Redemption Date at the rate borne by the Security.

SECTION 1107. Securities Redeemed in Part. Any Registered Security which is to be redeemed only in part (pursuant to the provisions of this Article or of Article Twelve) shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due

endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or his attorney duly authorized in writing) and the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security without service charge a new Security or Securities of the same series, of any authorized denomination as requested by such Holder in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered. If a Global Security is so surrendered, the Company shall execute and the Trustee shall authenticate and deliver to the depository, without service charge, a new Global Security in a denomination equal to and in exchange for the unredeemed portion of the principal of the Global Security so surrendered.

ARTICLE TWELVE — SINKING FUNDS

SECTION 1201. Applicability of Article. The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of a series except as otherwise specified as contemplated by Section 301 for Securities of such series.

The minimum amount of any sinking fund payment provided for by the terms of Securities of any series is herein referred to as a “mandatory sinking fund payment,” and any payment in excess of such minimum amount provided for by the terms of such Securities of any series is herein referred to as an “optional sinking fund payment.” If provided for by the terms of any Securities of any series, the cash amount of any mandatory sinking fund payment may be subject to reduction as provided in Section 1202. Each sinking fund payment shall be applied to the redemption of Securities of any series as provided for by the terms of Securities of such series.

SECTION 1202. Satisfaction of Sinking Fund Payments with Securities. The Company may, in satisfaction of all or any part of any mandatory sinking fund payment with respect to the Securities of a series, (1) deliver Outstanding Securities of such series (other than any previously called for redemption) together in the case of any Bearer Securities of such series with all unmatured coupons appertaining thereto and (2) apply as a credit Securities of such series which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, as provided for by the terms of such Securities, or which have otherwise been acquired by the Company; provided that such Securities so delivered or applied as a credit have not been previously so credited. Such Securities shall be received and credited for such purpose by the Trustee at the applicable Redemption Price specified in such Securities for redemption through operation of the sinking fund and the amount of such mandatory sinking fund payment shall be reduced accordingly.

SECTION 1203. Redemption of Securities for Sinking Fund. Not less than 60 days prior to each sinking fund payment date for Securities of any series, the Company will deliver to the Trustee an Officers’ Certificate specifying the amount of the next ensuing mandatory sinking fund payment for that series pursuant to the terms of that series, the portion thereof, if any, which is to be satisfied by payment of cash in the currency or currencies, currency unit or units or

composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) and the portion thereof, if any, which is to be satisfied by delivering and crediting Securities of that series pursuant to Section 1202, and the optional amount, if any, to be added in cash to the next ensuing mandatory sinking fund payment, and will also deliver to the Trustee any Securities to be so delivered and credited. If such Officers' Certificate shall specify an optional amount to be added in cash to the next ensuing mandatory sinking fund payment, the Company shall thereupon be obligated to pay the amount therein specified. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 1103 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 1104. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 1106 and 1107.

ARTICLE THIRTEEN — REPAYMENT AT THE OPTION OF HOLDERS

SECTION 1301. Applicability of Article. Repayment of Securities of any series before their Stated Maturity at the option of Holders thereof shall be made in accordance with the terms of such Securities, if any, and (except as otherwise specified by the terms of such series established pursuant to Section 301) in accordance with this Article.

SECTION 1302. Repayment of Securities. Securities of any series subject to repayment in whole or in part at the option of the Holders thereof will, unless otherwise provided in the terms of such Securities, be repaid at a price equal to the principal amount thereof, together with interest, if any, thereon accrued to the Repayment Date specified in or pursuant to the terms of such Securities. The Company covenants that on or prior to the Repayment Date it will deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (or, if so provided by the terms of the Securities of any series, a percentage of the principal) of, and (except if the Repayment Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof, as the case may be, to be repaid on such date.

SECTION 1303. Exercise of Option. Securities of any series subject to repayment at the option of the Holders thereof will contain an "Option to Elect Repayment" form on the reverse of such Securities. In order for any Security to be repaid at the option of the Holder, the Trustee must receive at the Place of Payment therefor specified in the terms of such Security (or at such other place or places of which the Company shall from time to time notify the Holders of such Securities) not earlier than 60 days nor later than 30 days prior to the Repayment Date (1) the Security so providing for such repayment together with the "Option to Elect Repayment" form on the reverse thereof duly completed by the Holder (or by the Holder's attorney duly authorized in writing) or (2) a telegram, telex, facsimile transmission or a letter from a member of a national securities exchange, or the FINRA, or a commercial bank or trust company in the

United States setting forth the name of the Holder of the Security, the principal amount of the Security, the principal amount of the Security to be repaid, the CUSIP number, if any, or a description of the tenor and terms of the Security, a statement that the option to elect repayment is being exercised thereby and a guarantee that the Security to be repaid, together with the duly completed form entitled "Option to Elect Repayment" on the reverse of the Security, will be received by the Trustee not later than the fifth Business Day after the date of such telegram, telex, facsimile transmission or letter; provided, however, that such telegram, telex, facsimile transmission or letter shall only be effective if such Security and form duly completed are received by the Trustee by such fifth Business Day. If less than the entire principal amount of such Security is to be repaid in accordance with the terms of such Security, the principal amount of such Security to be repaid, in increments of the minimum denomination for Securities of such series, and the denomination or denominations of the Security or Securities to be issued to the Holder for the portion of the principal amount of such Security surrendered that is not to be repaid, must be specified. The principal amount of any Security providing for repayment at the option of the Holder thereof may not be repaid in part if, following such repayment, the unpaid principal amount of such Security would be less than the minimum authorized denomination of Securities of the series of which such Security to be repaid is a part. Except as otherwise may be provided by the terms of any Security providing for repayment at the option of the Holder thereof, exercise of the repayment option by the Holder shall be irrevocable unless waived by the Company.

SECTION 1304. When Securities Presented for Repayment Become Due and Payable. If Securities of any series providing for repayment at the option of the Holders thereof shall have been surrendered as provided in this Article and as provided by or pursuant to the terms of such Securities, such Securities or the portions thereof, as the case may be, to be repaid shall become due and payable and shall be paid by the Company on the Repayment Date therein specified, and on and after such Repayment Date (unless the Company shall default in the payment of such Securities on such Repayment Date) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be repaid, except to the extent provided below, shall be void. Upon surrender of any such Security for repayment in accordance with such provisions, together with all coupons, if any, appertaining thereto maturing after the Repayment Date, the principal amount of such Security so to be repaid shall be paid by the Company, together with accrued interest, if any, to the Repayment Date; provided, however, that coupons whose Stated Maturity is on or prior to the Repayment Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified pursuant to Section 301, only upon presentation and surrender of such coupons; and provided further that, in the case of Registered Securities, installments of interest, if any, whose Stated Maturity is on or prior to the Repayment Date shall be payable (but without interest thereon, unless the Company shall default in the payment thereof) to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for repayment shall not be accompanied by all appurtenant coupons maturing after the Repayment Date, such Security may be paid after deducting from the amount payable therefor as provided in Section 1302 an amount equal to the

face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made as provided in the preceding sentence, such Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If the principal amount of any Security surrendered for repayment shall not be so repaid upon surrender thereof, such principal amount (together with interest, if any, thereon accrued to such Repayment Date) shall, until paid, bear interest from the Repayment Date at the rate of interest or Yield to Maturity (in the case of Original Issue Discount Securities) set forth in such Security.

SECTION 1305. Securities Repaid in Part. Upon surrender of any Registered Security which is to be repaid in part only, the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security, without service charge and at the expense of the Company, a new Registered Security or Securities of the same series, of any authorized denomination specified by the Holder, in an aggregate principal amount equal to and in exchange for the portion of the principal of such Security so surrendered which is not to be repaid.

ARTICLE FOURTEEN — DEFEASANCE AND COVENANT DEFEASANCE

SECTION 1401. Applicability of Article; Company's Option to Effect Defeasance or Covenant Defeasance. If, pursuant to Section 301, provision is made for either or both of (a) Defeasance of the Securities of or within a series under Section 1402 or (b) Covenant Defeasance of the Securities of or within a series under Section 1403, then the provisions of such Section or Sections, as the case may be, together with the other provisions of this Article (with such modifications thereto as may be specified pursuant to Section 301 with respect to any Securities), shall be applicable to such Securities and any coupons appertaining thereto, and the Company may at its option by Board Resolution, at any time, with respect to such Securities and any coupons appertaining thereto, elect to have Section 1402 (if applicable) or Section 1403 (if applicable) be applied to such Outstanding Securities and any coupons appertaining thereto upon compliance with the conditions set forth below in this Article.

SECTION 1402. Defeasance and Discharge. Upon the Company's exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be deemed to have been discharged from its obligations with respect to such Outstanding Securities and any coupons appertaining thereto on the date the conditions set forth in Section 1404 are satisfied (hereinafter, "Defeasance"). For this purpose, such Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by such Outstanding Securities and any coupons appertaining thereto, which shall

thereafter be deemed to be “Outstanding” only for the purposes of Section 1405 and the other Sections of this Indenture referred to in clauses (A) and (B) below, and to have satisfied all of its other obligations under such Securities and any coupons appertaining thereto and this Indenture insofar as such Securities and any coupons appertaining thereto are concerned (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), except for the following which shall survive until otherwise terminated or discharged hereunder: (A) the rights of Holders of such Outstanding Securities and any coupons appertaining thereto to receive, solely from the trust fund described in Section 1404 and as more fully set forth in such Section, payments in respect of the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto when such payments are due, (B) the Company’s obligations with respect to such Securities under Sections 305, 306, 1002 and 1003, and the Company’s obligations under Section 606 hereof (C) the rights, powers, trusts, duties and immunities of the Trustee hereunder and (D) this Article. Subject to compliance with this Article Fourteen, the Company may exercise its option under this Section notwithstanding the prior exercise of its option under Section 1403 with respect to such Securities and any coupons appertaining thereto.

SECTION 1403. Covenant Defeasance. Upon the Company’s exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be released from its obligations under Sections 1004 to 1009, inclusive, and, if specified pursuant to Section 301, its obligations under any other covenant contained herein or in any indenture supplemental hereto, with respect to such Outstanding Securities and any coupons appertaining thereto on and after the date the conditions set forth in Section 1404 are satisfied (hereinafter, “Covenant Defeasance”), and such Securities and any coupons appertaining thereto shall thereafter be deemed to be not “Outstanding” for the purposes of any direction, waiver, consent or declaration or Act of Holders (and the consequences of any thereof) in connection with Sections 1004 to 1009, inclusive, or such other covenant, but shall continue to be deemed “Outstanding” for all other purposes hereunder. For this purpose, such Covenant Defeasance means that, with respect to such Outstanding Securities and any coupons appertaining thereto, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such Section or such other covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such Section or such other covenant or by reason of reference in any such Section or such other covenant to any other provision herein or in any other document and such omission to comply shall not constitute a default or an Event of Default under Section 501(4) or 501(8) or otherwise, as the case may be, but, except as specified above, the remainder of this Indenture and such Securities and any coupons appertaining thereto shall be unaffected thereby.

SECTION 1404. Conditions to Defeasance or Covenant Defeasance. The following shall be the conditions to application of Section 1402 or Section 1403 to any Outstanding Securities of or within a series and any coupons appertaining thereto:

(a) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee satisfying the requirements of Section 607 who shall agree to comply with the provisions of this Article Fourteen applicable to it) as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to,

the benefit of the Holders of such Securities and any coupons appertaining thereto, (1) an amount in such currency, currencies or currency unit in which such Securities and any coupons appertaining thereto are then specified as payable at Stated Maturity, or (2) Government Obligations applicable to such Securities and coupons appertaining thereto (determined on the basis of the currency, currencies or currency unit in which such Securities and coupons appertaining thereto are then specified as payable at Stated Maturity) which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than the due date of any payment of principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto, money in an amount, or (3) a combination thereof, in any case, in an amount, sufficient, without consideration of any reinvestment of such principal and interest, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay and discharge, and which shall be applied by the Trustee (or other qualifying trustee) to pay and discharge, (i) the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Outstanding Securities and any coupons appertaining thereto on the Stated Maturity of such principal or installment of principal or interest and (ii) any mandatory sinking fund payments or analogous payments applicable to such Outstanding Securities and any coupons appertaining thereto on the day on which such payments are due and payable in accordance with the terms of this Indenture and of such Securities and any coupons appertaining thereto.

(b) Such Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, this Indenture or any other material agreement or instrument to which the Company is a party or by which it is bound.

(c) No Event of Default or event which with notice or lapse of time or both would become an Event of Default with respect to such Securities and any coupons appertaining thereto shall have occurred and be continuing on the date of such deposit or, insofar as Sections 501(6) and 501(7) are concerned, at any time during the period ending on the 91st day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until the expiration of such period).

(d) In the case of an election under Section 1402, the Company shall have delivered to the Trustee an Opinion of Counsel stating that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling, or (ii) since the date of execution of this Indenture, there has been a change in the applicable Federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Defeasance had not occurred.

(e) In the case of an election under Section 1403, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Covenant Defeasance and will be subject to Federal income tax

on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred.

(f) The Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent to the Defeasance under Section 1402 or the Covenant Defeasance under Section 1403 (as the case may be) have been complied with and an Opinion of Counsel to the effect that either (i) as a result of a deposit pursuant to subsection (a) above and the related exercise of the Company's option under Section 1402 or Section 1403 (as the case may be), registration is not required under the Investment Company Act of 1940, as amended, by the Company, with respect to the trust funds representing such deposit or by the Trustee for such trust funds or (ii) all necessary registrations under said Act have been effected.

(g) Notwithstanding any other provisions of this Section, such Defeasance or Covenant Defeasance shall be effected in compliance with any additional or substitute terms, conditions or limitations which may be imposed on the Company in connection therewith pursuant to Section 301.

(h) The payment of amounts payable to the Trustee pursuant to this Indenture shall be paid or provided for to the reasonable satisfaction of the Trustee.

SECTION 1405. Deposited Money and Government Obligations to Be Held in Trust; Other Miscellaneous Provisions. Subject to the provisions of the last paragraph of Section 1003, all money and Government Obligations (or other property as may be provided pursuant to Section 301) (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section 1405, the "Trustee") pursuant to Section 1404 in respect of any Outstanding Securities of any series and any coupons appertaining thereto shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities and any coupons appertaining thereto and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Holders of such Securities and any coupons appertaining thereto of all sums due and to become due thereon in respect of principal (and premium or Make-Whole Amount, if any) and interest, but such money need not be segregated from other funds except to the extent required by law.

Unless otherwise specified with respect to any Security pursuant to Section 301, if, after a deposit referred to in Section 1404(a) has been made, (a) the Holder of a Security in respect of which such deposit was made is entitled to, and does, elect pursuant to Section 301 or the terms of such Security to receive payment in a currency or currency unit other than that in which the deposit pursuant to Section 1404(a) has been made in respect of such Security, or (b) a Conversion Event occurs in respect of the currency or currency unit in which the deposit pursuant to Section 1404(a) has been made, the indebtedness represented by such Security and any coupons appertaining thereto shall be deemed to have been, and will be, fully discharged and satisfied through the payment of the principal of (and premium or Make-Whole Amount, if any), and interest, if any, on such Security as the same becomes due out of the proceeds yielded by converting (from time to time as specified below in the case of any such election) the amount or other property deposited in respect of such Security into the currency or currency unit in which

such Security becomes payable as a result of such election or Conversion Event based on the applicable market exchange rate for such currency or currency unit in effect on the second Business Day prior to each payment date, except, with respect to a Conversion Event, for such currency or currency unit in effect (as nearly as feasible) at the time of the Conversion Event.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the Government Obligations deposited pursuant to Section 1404 or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of such Outstanding Securities and any coupons appertaining thereto.

Anything in this Article to the contrary notwithstanding, subject to Section 606, the Trustee shall deliver or pay to the Company from time to time upon Company Request any money or Government Obligations (or other property and any proceeds therefrom) held by it as provided in Section 1404 which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, are in excess of the amount thereof which would then be required to be deposited to effect a Defeasance or Covenant Defeasance, as applicable, in accordance with this Article.

ARTICLE FIFTEEN — MEETINGS OF HOLDERS OF SECURITIES

SECTION 1501. Purposes for Which Meetings May Be Called. A meeting of Holders of Securities of any series may be called at any time and from time to time pursuant to this Article to make, give or take any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be made, given or taken by Holders of Securities of such series.

SECTION 1502. Call, Notice and Place of Meetings.

(a) The Trustee may at any time call a meeting of Holders of Securities of any series for any purpose specified in Section 1501, to be held at such time and at such place as the Trustee shall determine. Notice of every meeting of Holders of Securities of any series, setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting, shall be given, in the manner provided in Section 106, not less than 20 nor more than 180 days prior to the date fixed for the meeting.

(b) In case at any time the Company, pursuant to a Board Resolution, or the Holders of at least 25% in principal amount of the Outstanding Securities of any series shall have requested the Trustee to call a meeting of the Holders of Securities of such series for any purpose specified in Section 1501, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have made the first publication of the notice of such meeting within 20 days after receipt of such request or shall not thereafter proceed to cause the meeting to be held as provided herein, then the Company or the Holders of Securities of such series in the amount above specified, as the case may be, may determine the time and the place for such meeting and may call such meeting for such purposes by giving notice thereof as provided in subsection (a) of this Section.

SECTION 1503. Persons Entitled to Vote at Meetings. To be entitled to vote at any meeting of Holders of Securities of any series, a Person shall be (1) a Holder of one or more Outstanding Securities of such series, or (2) a Person appointed by an instrument in writing as proxy for a Holder or Holders of one or more Outstanding Securities of such series by such Holder or Holders. The only Persons who shall be entitled to be present or to speak at any meeting of Holders of Securities of any series shall be the Persons entitled to vote at such meeting and their counsel, any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

SECTION 1504. Quorum; Action. The Persons entitled to vote a majority in principal amount of the Outstanding Securities of a series shall constitute a quorum for a meeting of Holders of Securities of such series; provided, however, that if any action is to be taken at such meeting with respect to a consent or waiver which this Indenture expressly provides may be given by the Holders of not less than a specified percentage in principal amount of the Outstanding Securities of a series, the Persons entitled to vote such specified percentage in principal amount of the Outstanding Securities of such series shall constitute a quorum. In the absence of a quorum within 30 minutes after the time appointed for any such meeting, the meeting shall, if convened at the request of Holders of Securities of such series, be dissolved. In any other case the meeting may be adjourned for a period of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such meeting. In the absence of a quorum at the reconvening of any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than 10 days; at the reconvening of any meeting adjourned or further adjourned for lack of a quorum, the Persons entitled to vote 25% in aggregate principal amount of the then Outstanding Securities shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. Notice of the reconvening of any adjourned meeting shall be given as provided in Section 1502(a), except that such notice need be given only once not less than five days prior to the date on which the meeting is scheduled to be reconvened.

Except as limited by the proviso to Section 902, any resolution presented to a meeting or adjourned meeting duly reconvened at which a quorum is present as aforesaid may be adopted by the affirmative vote of the Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities represented at such meeting; provided, however, that, except as limited by the proviso to Section 902, any resolution with respect to any request, demand, authorization, direction, notice, consent, waiver or other action which this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage, which is less than a majority, in principal amount of the Outstanding Securities of a series may be adopted at a meeting or an adjourned meeting duly reconvened and at which a quorum is present as aforesaid by the affirmative vote of the Holders of such specified percentage in principal amount of the Outstanding Securities of that series.

Any resolution passed or decision taken at any meeting of Holders of Securities of any series duly held in accordance with this Section shall be binding on all the Holders of Securities of such series and the related coupons, whether or not present or represented at the meeting.

Notwithstanding the foregoing provisions of this Section 1504, if any action is to be taken at a meeting of Holders of Securities of any series with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage in principal amount of all Outstanding Securities affected thereby, or of the Holders of such series and one or more additional series:

(i) there shall be no minimum quorum requirement for such meeting; and

(ii) the principal amount of the Outstanding Securities of such series that vote in favor of such request, demand, authorization, direction, notice, consent, waiver or other action shall be taken into account in determining whether such request, demand, authorization, direction, notice, consent, waiver or other action has been made, given or taken under this Indenture.

SECTION 1505. Determination of Voting Rights; Conduct and Adjournment of Meetings.

(a) Notwithstanding any provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders of Securities of a series in regard to proof of the holding of Securities of such series and of the appointment of proxies and in regard to the appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall deem appropriate. Except as otherwise permitted or required by any such regulations, the holding of Securities shall be proved in the manner specified in Section 104 and the appointment of any proxy shall be proved in the manner specified in Section 104 or by having the signature of the Person executing the proxy witnessed or guaranteed by any trust company, bank or banker authorized by Section 104 to certify to the holding of Bearer Securities. Such regulations may provide that written instruments appointing proxies, regular on their face, may be presumed valid and genuine without the proof specified in Section 104 or other proof.

(b) The Trustee shall, by an instrument in writing appoint a temporary chairman of the meeting, unless the meeting shall have been called by the Company or by Holders of Securities as provided in Section 1502(b), in which case the Company or the Holders of Securities of the series calling the meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting.

(c) At any meeting each Holder of a Security of such series or proxy shall be entitled to one vote for each \$1,000 principal amount of the Outstanding Securities of such series held or represented by him; provided, however, that no vote shall be cast or counted at any meeting in respect of any Security challenged as not Outstanding and ruled by the chairman of the meeting to be not Outstanding. The chairman of the meeting shall have no right to vote, except as a Holder of a Security of such series or proxy.

(d) Any meeting of Holders of Securities of any series duly called pursuant to Section 1502 at which a quorum is present may be adjourned from time to time by Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting, and the meeting may be held as so adjourned without further notice.

SECTION 1506. Counting Votes and Recording Action of Meetings. The vote upon any resolution submitted to any meeting of Holders of Securities of any series shall be by written ballots on which shall be subscribed the signatures of the Holders of Securities of such series or of their representatives by proxy and the principal amounts and serial numbers of the Outstanding Securities of such series held or represented by them. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports in duplicate of all votes cast at the meeting. A record, at least in duplicate, of the proceedings of each meeting of Holders of Securities of any Series shall be prepared by the secretary of the meeting and there shall be attached to said record the original reports of the inspectors of votes on any vote by ballot taken thereat and affidavits by one or more persons having knowledge of the fact, setting forth a copy of the notice of the meeting and showing that said notice was given as provided in Section 1502 and, if applicable, Section 1504. Each copy shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one such copy shall be delivered to the Company and another to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting. Any record so signed and verified shall be conclusive evidence of the matters therein stated.

ARTICLE SIXTEEN — CONVERSION OF SECURITIES

SECTION 1601. Applicability of Article; Conversion Privilege and Conversion Price. Securities of any series which are convertible shall be convertible in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article Sixteen. Subject to and upon compliance with the provisions of this Article Sixteen, at any time during the period specified in the Securities, at the option of the Holder thereof, any Security or any portion of the principal amount thereof which is \$1,000 or an integral multiple of \$1,000 may be converted at the principal amount thereof, or of such portion thereof, into fully paid and nonassessable shares (calculated as to each conversion to the nearest 1/100 of a share) of Common Stock of the Company, at the Conversion Price, determined as hereinafter provided, in effect at the time of conversion. In case a Security or portion thereof is called for redemption, such conversion right in respect of the Security or portion so called shall expire at the close of business on the Business Day immediately preceding the Redemption Date, unless the Company defaults in making the payment due upon redemption, in which case such conversion right shall terminate on the date such default is cured.

The price at which shares of Common Stock shall be delivered upon conversion (herein called the "Conversion Price") of Securities of any series shall be specified in such Securities. The Conversion Price shall be adjusted in certain instances as provided in Section 1604.

In case the Company shall, by dividend or otherwise, declare or make a distribution on its Common Stock referred to in paragraph (4) of Section 1604, the Holder of each Security, upon the conversion thereof pursuant to this Article Sixteen subsequent to the close of business on the date fixed for the determination of stockholders entitled to receive such distribution and prior to the effectiveness of the Conversion Price adjustment in respect of such distribution pursuant to paragraph (4) of Section 1604, shall be entitled to receive for each share of Common Stock into which such Security is converted, the portion of the evidence of indebtedness, shares of Capital Stock or assets so distributed applicable to one share of Common Stock; provided, however, that, at the election of the Company (whose election shall be evidenced by a Board Resolution filed with the Trustee) with respect to all Holders so converting, the Company may, in lieu of distributing to such Holder any portion of such distribution not consisting of cash or securities of the Company, pay such Holder an amount in cash equal to the fair market value thereof (as determined in good faith by the Board of Directors, whose determination shall be conclusive and described in a Board Resolution filed with the Trustee). If any conversion of a Security entitled to the benefits described in the immediately preceding sentence occurs prior to the payment date for a distribution to holders of Common Stock which the Holder of the Security so converted is entitled to receive in accordance with the immediately preceding sentence, the Company may elect (such election to be evidenced by a Board Resolution filed with the Trustee) to distribute to such Holder a due bill for the evidences of indebtedness, shares of Capital Stock or assets to which such Holder is so entitled, provided that such due bill (i) meets any applicable requirements of the principal over-the-counter market or national securities exchange or other market on which the Common Stock is then traded, and (ii) requires payment or delivery of such evidences of indebtedness or assets no later than the date of payment or delivery thereof to holders of Common Stock receiving such distribution.

SECTION 1602. Exercise of Conversion Privilege. In order to exercise the conversion privilege, the Holder of any Security to be converted shall surrender such Security, duly endorsed or assigned to the Company or in blank, at any office or agency maintained by the Company pursuant to Section 1002, accompanied by written notice to the Company at such office or agency that the Holder elects to convert such Security or, if less than the entire principal amount thereof is to be converted, the portion thereof to be converted and shall comply with any additional requirements set forth in such Security. Securities surrendered for conversion during the period from the close of business on any Regular Record Date next preceding any Interest Payment Date to the opening of business on such Interest Payment Date shall (except for Securities the Maturity of which is prior to such Interest Payment Date) be accompanied by payment in funds acceptable to the Company of an amount equal to the interest payable on such Interest Payment Date on the principal amount of Securities being surrendered for conversion and such interest shall be paid on such Interest Payment Date as provided in Section 307. Except as provided in the preceding sentence, no payment or adjustment shall be made upon any conversion on account of any interest accrued on the Securities surrendered for conversion or on account of any dividends on the Common Stock issued upon conversion.

The Company's delivery to the Holder of the fixed number of shares of the Common Stock of the Company (and any cash in lieu of any fractional share of Common Stock) into which the Security is convertible shall be deemed to satisfy the Company's obligation to pay the principal amount of the Security and all accrued interest and original issue discount that has not

previously been paid. The shares of Common Stock of the Company so delivered shall be treated as issued first in payment of accrued interest and original issue discount and then in payment of principal. Thus, accrued interest and original issue discount shall be treated as paid, rather than canceled, extinguished or forfeited.

Securities shall be deemed to have been converted immediately prior to the close of business on the day of surrender of such Securities for conversion in accordance with the foregoing provisions, and at such time the rights of the Holders of such Securities as Holders shall cease, and the Person or Persons entitled to receive the Common Stock issuable upon conversion shall be treated for all purposes as the record holder or holders of such Common Stock at such time. As promptly as practicable on or after the conversion date, the Company shall issue and shall deliver at such office or agency a certificate or certificates for the number of full shares of Common Stock issuable upon conversion, together with payment in lieu of any fraction of a share, as provided in Section 1603.

In the case of any Security which is converted in part only, as promptly as practicable on or after the conversion date the Company shall execute and the Trustee shall authenticate and make available for delivery to the Holder thereof (or the Depository in the case of a Global Security), at the expense of the Company, a new Security or Securities, of authorized denominations in aggregate principal amount equal to the unconverted portion of the principal amount of such Security.

SECTION 1603. Fractions of Shares. No fractional shares of Common Stock shall be issued upon conversion of Securities. If more than one Security shall be surrendered for conversion at one time by the same Holder, the number of full shares of Common Stock which shall be issuable upon conversion thereof shall be computed on the basis of the aggregate principal amount of the Securities (or specified portions thereof) so surrendered. Instead of any fractional share of Common Stock which would otherwise be issuable upon conversion of any Security or Securities (or specified portions thereof), the Company shall pay a cash adjustment (rounded to the nearest cent) in respect of such fraction in an amount equal to the same fraction of the Closing Price per share of the Common Stock on the day of conversion (or, if such day is not a Trading Day, on the Trading Day immediately preceding such day).

SECTION 1604. Adjustment of Conversion Price. The Conversion Price shall be subject to adjustment from time to time as follows:

(1) If the Company pays or makes a dividend or other distribution (a) on its Common Stock exclusively in Common Stock or (b) on any other class of Capital Stock of the Company, which dividend or distribution includes Common Stock of the Company, the Conversion Price in effect at the opening of business on the day following the date fixed for the determination of stockholders entitled to receive such dividend or other distribution (the "Dividend Record Date") shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Dividend Record Date and the denominator shall be the sum of such number of shares and the total number of shares constituting such dividend or other distribution. Such reduction shall

become effective immediately after the opening of business on the day following the date fixed for such determination. For the purposes of this paragraph (1), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock. The Company shall not pay any dividend or make any distribution on shares of Common Stock held in the treasury of the Company.

(2) Subject to paragraph (6) of this Section, if the Company pays or makes a dividend or other distribution on its Common Stock consisting exclusively of Short Term Rights (as defined below), or otherwise issues Short Term Rights to all holders of its Common Stock, the Conversion Price in effect at the opening of business on the day following the record date for the determination of holders of Common Stock entitled to receive such Short Term Rights (the "Rights Record Date") shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of shares of Common Stock of the Company which the aggregate of the offering price of the total number of shares of Common Stock so offered for subscription or purchase would purchase at such current market price and the denominator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of shares of Common Stock so offered for subscription or purchase. Such reduction shall become effective immediately after the opening of business on the day following the Rights Record Date. For the purposes of this paragraph (2), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock of the Company. The Company shall not issue any rights, options or warrants in respect of shares of its Common Stock held in the treasury of the Company. When used in this Section 1604, the term "Short Term Rights" shall mean rights, warrants or options entitling the holders thereof (for a period commencing no earlier than the Rights Record Date and expiring not more than 45 days after the Rights Record Date) to subscribe for or purchase shares of Common Stock of the Company at a price per share less than the current market price per share (determined as provided in paragraph (7) of this Section 1604) of the Common Stock of the Company on the Rights Record Date.

(3) In case outstanding shares of Common Stock of the Company shall be subdivided into a greater number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such subdivision becomes effective shall be proportionately reduced, and, conversely, in case outstanding shares of Common Stock of the Company shall be combined into a smaller number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such combination becomes effective shall be proportionately increased, such reduction or increase, as the case may be, to become effective immediately after the opening of business on the day following the day upon which such subdivision or combination becomes effective.

(4) Subject to the last sentence of this paragraph (4) of this Section, if the Company, by dividend or otherwise, (a) distributes to all holders of its Common Stock evidences of its indebtedness, shares of any class of Capital Stock of the Company or other assets (other than cash dividends out of current or retained earnings), or (b) distributes to substantially all holders of Common Stock rights or warrants to subscribe for securities (other than Short Term Rights to which paragraph (2) of this Section 1604 applies), the Conversion Price shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the current market price per share (determined as provided in paragraph (7) of this Section 1604) of the Common Stock of the Company on the Reference Date (as defined below) less the fair market value (as determined in good faith by the Board of Directors, whose determination shall be conclusive and described in a Board Resolution filed with the Trustee), on the Reference Date, of the portion of the evidences of indebtedness and other assets so distributed or of such subscription rights or warrants applicable to one share of Common Stock (collectively, the "Market Value of the Distribution") and the denominator shall be such current market price per share of the Common Stock of the Company. Such reduction shall become effective immediately prior to the opening of business on the day (the "Reference Date") following the later of (a) the date fixed for the payment of such distribution and (b) the date 20 days after notice relating to such distribution is required to be given pursuant to Section 1606(a). If the Board of Directors determines the fair market value of any distribution for purposes of this paragraph (4) by reference to the actual or when issued trading market for any securities comprising such distribution, it must in doing so consider the prices in such market over the same period used in computing the current market price per share pursuant to paragraph (7) of this Section 1604. In the event that, with respect to any distribution to which this paragraph (4) of Section 1604 would otherwise apply, the Market Value of the Distribution is greater than the current market price per share of the Common Stock (such distribution being referred to herein as an "Unadjusted Distribution"), then the adjustment provided by this paragraph (4) shall not be made and in lieu thereof the provisions of Section 1611 shall apply with respect to such Unadjusted Distribution.

(5) The Company may, but shall not be required to, make such reductions in the Conversion Price, in addition to those required by paragraphs (1), (2), (3), and (4) of this Section 1604, as it considers to be advisable in order that any event treated for federal income tax purposes as a dividend of stock or stock rights shall not be taxable to the recipients. In addition, the Company, from time to time, may decrease the Conversion Price by any amount and for any reason, temporarily or otherwise, including situations where the Board of Directors determines such decrease to be fair and appropriate with respect to transactions in which holders of Common Stock have the right to participate.

(6) Rights or warrants issued or distributed by the Company to all holders of its Common Stock entitling the holders thereof to subscribe for or purchase shares of Common Stock or Preferred Stock, which rights or warrants (i) are deemed to be transferred with such shares of Common Stock, (ii) are not exercisable and (iii) are also issued or distributed in respect of future issuances of Common Stock, in each case in clauses (i) through (iii) until the occurrence of a specified event or events ("Trigger

Events”), shall for purposes of this Section 1604 not be deemed issued or distributed until the occurrence of the earliest Trigger Event. Each share of Common Stock issued upon conversion of Securities pursuant to this Article Sixteen shall be entitled to receive the appropriate number of Common Stock purchase rights (the “Rights”), if any, and the certificates representing the Common Stock issued upon conversion shall bear such legends, if any. Notwithstanding anything to the contrary in this Article Sixteen, there shall not be any adjustment to the Conversion Price as a result of (i) the distribution of separate certificates representing the Rights; (ii) the occurrence of certain events entitling holders of Rights to receive, upon exercise thereof, Common Stock or other securities of the Company or other securities of another corporation; or (iii) the exercise of such Rights. No adjustment in the Conversion Price need be made for rights to purchase or the sale of Common Stock pursuant to a Company plan providing for reinvestment of dividends or interest.

(7) For the purpose of any computation under paragraph (2), (4) or (5) of this Section 1604, the “current market price” per share of Common Stock of the Company on any date shall be deemed to be the average of the daily Closing Prices for the 15 consecutive Trading Days selected by the Company commencing not more than 30 Trading Days before, and ending not later than, the date in question.

(8) No adjustment in the Conversion Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Price; provided, however, that any adjustments which by reason of this paragraph (8) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Article Sixteen shall be made to the nearest cent or to the nearest one-hundredth of a share of Common Stock, as the case may be.

(9) Anything herein to the contrary notwithstanding, in the event the Company shall declare any dividend or distribution requiring an adjustment in the Conversion Price hereunder and shall, thereafter and before the payment of such dividend or distribution to stockholders, legally abandon its plan to pay such dividend or distribution, the Conversion Price then in effect hereunder, if changed to reflect such dividend or distribution, shall upon the legal abandonment of such plan be changed to the Conversion Price which would have been in effect at the time of such abandonment (after giving effect to all other adjustments not so legally abandoned pursuant to the provisions of this Article Sixteen) had such dividend or distribution never been declared.

(10) Notwithstanding any other provision of this Section 1604, no adjustment to the Conversion Price shall reduce the Conversion Price below the then par value per share of the Common Stock of the Company, and any such purported adjustment shall instead reduce the Conversion Price to such par value. Notwithstanding the foregoing sentence, the Company hereby covenants that it will from time to time take all such action as may be required to assure that the par value per share of the Common Stock is at all times equal to or less than the Conversion Price.

(11) In the event that this Article Sixteen requires adjustments to the Conversion Price under more than one of paragraphs (1), (2), (3) or (4) of this Section

1604, and the record or effective dates for the transaction giving rise to such adjustments shall occur on the same date, then such adjustments shall be made by applying (to the extent they are applicable), first, the provisions of paragraph (3) of this Section 1604, second, the provisions of paragraph (1) of this Section 1604, third, the provisions of paragraph (4) of this Section 1604 and, fourth, the provisions of paragraph (2) of this Section 1604. Anything herein to the contrary notwithstanding, no single event shall require or result in duplicative adjustments in the Conversion Price pursuant to this Section 1604. After an adjustment to the Conversion Price under this Article Sixteen, any subsequent event requiring an adjustment under this Article Sixteen shall cause an adjustment to the Conversion Price as so adjusted. If, after an adjustment, a Holder of a Security upon conversion of such Security receives shares of two or more classes of Capital Stock of the Company, the Conversion Price shall thereafter be subject to adjustment upon the occurrence of an action taken with respect to any such class of Capital Stock as is contemplated by this Article Sixteen with respect to the Common Stock in this Article Sixteen.

SECTION 1605. Notice of Adjustments of Conversion Price. Whenever the Conversion Price is adjusted as herein provided:

(1) the Company shall compute the adjusted Conversion Price in accordance with Section 1604 or Section 1611 and shall prepare an Officer's Certificate setting forth the adjusted Conversion Price and showing in reasonable detail the facts upon which such adjustment is based, and such certificate shall forthwith be filed (with a copy to the Trustee) at each office or agency maintained for the purpose of conversion of any Securities pursuant to Section 1002; and

(2) a notice stating that the Conversion Price has been adjusted and setting forth the adjusted Conversion Price shall forthwith be required, and as soon as practicable after it is required, such notice shall be mailed by the Company to all Holders at their last addresses as they shall appear in the Security Register.

SECTION 1606. Notice of Certain Corporate Action. In case:

(1) the Company shall take any action that would require a Conversion Price adjustment pursuant to Section 1604 or Section 1611; or

(2) there shall occur any reclassification of the Common Stock of the Company (other than a subdivision or combination of its outstanding shares of Common Stock), or any consolidation or merger to which the Company is a party, or the sale, transfer or lease of all or substantially all of the assets of the Company and for which approval of any stockholders of the Company is required; or

(3) there shall occur the voluntary or involuntary dissolution, liquidation or winding up of the Company, then the Company shall cause to be filed at each office or agency maintained for the purpose of conversion of Securities pursuant to Section 1002, and shall cause to be mailed to all Holders at their last addresses as they shall appear in

the Security Register, at least 10 days prior to the applicable record, effective or expiration date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of any dividend, distribution or granting of rights, warrants or options, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights, options or warrants are to be determined, or (y) the date on which such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up is expected to become effective, and, if applicable, the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up.

SECTION 1607. Company to Reserve Common Stock. The Company shall at all times reserve and keep available, free from preemptive rights, out of its authorized but unissued Common Stock, for the purpose of effecting the conversion of Securities, a number of shares of Common Stock for the conversion of all outstanding Securities of any series which is convertible into Common Stock.

SECTION 1608. Taxes on Conversion. The Company will pay any and all taxes that may be payable in respect of the issue or delivery of shares of Common Stock on conversion of Securities pursuant hereto. The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in a name other than that of the Holder of the Security or Securities to be converted, and no such issue or delivery shall be made unless and until the Person requesting such issue has paid to the Company the amount of any such tax, or has established to the satisfaction of the Company that such tax has been paid.

SECTION 1609. Covenants as to Common Stock. The Company covenants that all shares of Common Stock which may be issued upon conversion of Securities will upon issue be duly and validly issued, fully paid and nonassessable, free of preemptive or any similar rights, and, except as provided in Section 1608, the Company will pay all taxes, liens and charges with respect to the issue thereof.

The Company will endeavor promptly to comply with all Federal and state securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Securities, if any, and will list or cause to have quoted such shares of Common Stock on each national securities exchange or in the over-the-counter market or such other market on which the Common Stock is then listed or quoted.

SECTION 1610. Cancellation of Converted Securities. All Securities delivered for conversion shall be delivered to the Trustee to be cancelled by or at the direction of the Trustee, which shall dispose of the same as provided in Section 309.

SECTION 1611. Provisions in Case of Consolidation, Merger or Sale of Assets; Special Distributions. If any of the following shall occur, namely: (i) any reclassification or

change of outstanding shares of Common Stock issuable upon conversion of Securities (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), (ii) any consolidation or merger to which the Company is a party other than a merger in which the Company is the continuing corporation and which does not result in any reclassification of, or change (other than a change in name, or par value, or from par value to no par value, or from no par value to par value or as a result of a subdivision or combination) in, outstanding shares of Common Stock or (iii) any sale or conveyance of all or substantially all of the property or business of the Company as an entirety, then the Person formed by such consolidation or resulting from such merger or which acquires such properties or assets, as the case may be, shall as a condition precedent to such transaction execute and deliver to the Trustee a supplemental indenture providing that the Holder of each Security then outstanding shall have the right thereafter, during the period such Security shall be convertible as specified in Section 1601, to convert such Security only into the kind and amount of securities, cash and other property receivable, if any, upon such consolidation, merger, sale, transfer or lease by a holder of the number of shares of Common Stock of the Company into which such Security might have been converted immediately prior to such consolidation, merger, sale, transfer or lease; provided that the kind and amount of securities, cash and other property so receivable shall be determined on the basis of the following assumptions. The holder of Common Stock referred to in the foregoing sentence:

(1) is not (a) a Person with which the Company consolidated, (b) a Person into which the Company merged or which merged into the Company, or (c) a Person to which such sale, transfer or lease was made (any Person described in the foregoing clauses (a), (b), or (c), hereinafter referred to as a "Constituent Person"), or (d) an Affiliate of a Constituent Person; and

(2) failed to exercise his rights of election, if any, as to the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale, transfer or lease (provided that if the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale transfer or lease is not the same for each share of Common Stock of the Company in respect of which such rights of election shall not have been exercised, then for the purpose of this Section 1611 the kind and amount of securities, cash and other property receivable upon such consolidation, merger, sale, transfer or lease shall be deemed to be the kind and amount so receivable per share by a plurality of such shares of Common Stock).

Such supplemental indenture shall provide for adjustments which, for events subsequent to the effective date of such supplemental indenture, shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article Sixteen. If, in the case of any such consolidation, merger, sale transfer or lease the stock or other securities and property (including cash) receivable thereupon by a holder of Common Stock includes shares of stock or other securities and property of a corporation other than the successor or purchasing corporation, as the case may be, in such consolidation, merger, sale, transfer or lease then such supplemental indenture shall also be executed by such other corporation and shall contain such additional provisions to protect the interests of the Holders of the Securities as the Board of Directors of the Company shall reasonably consider necessary by reason of the foregoing. The above provisions

of this Section 1611 shall similarly apply to successive consolidations, mergers, sales, transfers or leases.

In the event the Company shall execute a supplemental indenture pursuant to this Section 1611, the Company shall promptly file with the Trustee an Officers' Certificate briefly stating the reasons therefor, the kind or amount of shares of stock or securities or property (including cash) receivable by Holders of the Securities upon the conversion of their Securities after any such reclassification, change, consolidation, merger, sale, transfer or lease and any adjustment to be made with respect thereto.

If the Company makes a distribution to all holders of its Common Stock that constitutes an Unadjusted Distribution pursuant to the last sentence of paragraph (4) of Section 1604, then, from and after the record date for determining the holders of Common Stock entitled to receive such distribution (the "Distribution Record Date"), a Holder of a Security who converts such Security in accordance with the provisions of this Indenture shall, upon conversion, be entitled to receive, in addition to the shares of Common Stock into which the Security is convertible, the kind and amount of evidences of indebtedness, shares of Capital Stock, or other assets or subscription rights or warrants, as the case may be, comprising the distribution that such Holder would have received if such Holder had converted the Security immediately prior to the Distribution Record Date.

SECTION 1612. Trustee Adjustment Disclaimer; Company Determination Final. The Trustee has no duty to determine when an adjustment under this Article Sixteen should be made, how it should be made or what it should be. The Trustee has no duty to determine whether a supplemental indenture under Section 1611 need be entered into or whether any provisions of any supplemental indenture are correct. The Trustee shall not be accountable for and makes no representation as to the validity or value of any securities or assets issued upon conversion of Securities. The Trustee shall not be responsible for the Company's failure to comply with this Article Sixteen. Any determination that the Company or the Board of Directors must make pursuant to this Article Sixteen is conclusive, absent manifest error.

SECTION 1613. When No Adjustment Required. Except as expressly set forth in Section 1604, no adjustment in the Conversion Price shall be made because the Company issues, in exchange for cash, property or services, shares of its Common Stock, or any securities convertible into or exchangeable for shares of its Common Stock, or securities (including warrants, rights and options) carrying the right to subscribe for or purchase shares of its Common Stock or such convertible or exchangeable securities.

(1) Notwithstanding anything herein to the contrary, no adjustment in the Conversion Price shall be made pursuant to Section 1604 in respect of any dividend or distribution if the Holders may participate therein (on a basis to be determined in good faith by the Board of Directors) and receive the same consideration they would have received if they had converted the Securities immediately prior to the record date with respect to such dividend or distribution.

SECTION 1614. Equivalent Adjustments. In the event that, as a result of an adjustment made pursuant to Section 1604 above, the holder of any Security thereafter surrendered for conversion shall become entitled to receive any shares of Capital Stock of the Company other than shares of its Common Stock, thereafter the Conversion Price of such other shares so receivable upon conversion of any Securities shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to Common Stock contained in this Article Sixteen.

SIGNATURES

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed all as of the day and year first above written.

AASTROM BIOSCIENCES, INC.

By: _____
Name:
Title:

_____,
as Trustee

By: _____
Name:
Title:

EXHIBIT A

FORM OF REDEEMABLE OR NON-REDEEMABLE SENIOR SECURITY

[Face of Security]

[If the Holder of this Security (as indicated below) is The Depository Trust Company (“DTC”) or a nominee of DTC, this Security is a Global Security and the following two legends apply:

Unless this Security is presented by an authorized representative of The Depository Trust Company, a New York corporation, (“DTC”) to the Company or its agent for registration of transfer, conversion, exchange or payment, and such Security issued is registered in the name of Cede & Co., or in such other name as requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL, inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Unless and until this Security is exchanged in whole or in part for Securities in certificated form, this Security may not be transferred except as a whole by DTC to a nominee thereof or by a nominee thereof to DTC or another nominee of DTC or by DTC or any such nominee to a successor of DTC or a nominee of such successor.]

[If this Security is an Original Issue Discount Security, insert — FOR PURPOSES OF SECTION 1273 and 1275 OF THE UNITED STATES INTERNAL REVENUE CODE, THE AMOUNT OF ORIGINAL ISSUE DISCOUNT ON THIS SECURITY IS ___% OF ITS PRINCIPAL AMOUNT, THE ISSUE DATE IS _____, 20___, AND THE YIELD TO MATURITY IS ___%. THE METHOD USED TO DETERMINE THE AMOUNT OF ORIGINAL ISSUE DISCOUNT APPLICABLE TO THE SHORT ACCRUAL PERIOD OF _____, 20___ TO _____, 20___, IS ___% OF THE PRINCIPAL AMOUNT OF THIS SECURITY.]

AASTROM BIOSCIENCES, INC.

[Designation of Series]

No. _____

\$ _____

CUSIP No. _____

AASTROM BIOSCIENCES, INC., a Michigan corporation (herein referred to as the “Company,” which term includes any successor corporation under the Indenture referred to on the reverse hereof), for value received, hereby promises to pay to _____ or registered assigns the principal sum of _____ Dollars on _____ (the “Stated Maturity Date”) [or insert date fixed for earlier redemption (the “Redemption Date,” and together with the Stated Maturity Date with respect to principal repayable on such date, the “Maturity Date.”)]

[If the Security is to bear interest prior to Maturity, insert — and to pay interest thereon from _____ or from the most recent Interest Payment Date to which interest has been paid or

duly provided for, semi-annually on _____ and _____ in each year (each, an “Interest Payment Date”), commencing _____, at the rate of ___% per annum, until the principal hereof is paid or duly provided for. The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date will, as provided in such Indenture, be paid to the Holder in whose name this Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest, which shall be the _____ or _____ (whether or not a Business Day), as the case may be, next preceding such Interest Payment Date [at the office or agency of the Company maintained for such purpose; provided, however, that such interest may be paid, at the Company’s option, by mailing a check to such Holder at its registered address or by transfer of funds to an account maintained by such Holder within the United States]. Any such interest not so punctually paid or duly provided for shall forthwith cease to be payable to the Holder on such Regular Record Date, and may be paid to the Holder in whose name this Security (or one or more Predecessor Securities) is registered at the close of business on a Special Record Date for the payment of such Defaulted Interest to be fixed by the Trustee, notice whereof shall be given to Holders of Securities of this series not less than 10 days prior to such Special Record Date, or may be paid at any time in any other lawful manner not inconsistent with the requirements of any over-the-counter market or securities exchange on which the Securities of this series may be quoted or listed, and upon such notice as may be required by such market or exchange, all as more fully provided in the Indenture. Interest will be computed on the basis of a 360-day year of twelve 30-day months.]

[If the Security is not to bear interest prior to Maturity, insert — The principal of this Security shall not bear interest except in the case of a default in payment of principal upon acceleration, upon redemption or at the [Stated] Maturity Date and in such case the overdue principal of this Security shall bear interest at the rate of ___% per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such default in payment to the date payment of such principal has been made or duly provided for. Interest on any overdue principal shall be payable on demand. Any such interest on any overdue principal that is not so paid on demand shall bear interest at the rate of ___% per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such demand for payment to the date payment of such interest has been made or duly provided for, and such interest shall also be payable on demand.]

The principal of this Security payable on the Stated Maturity Date [or the principal of, premium or Make-Whole Amount, if any, and, if the Redemption Date is not an Interest Payment Date, interest on this Security payable on the Redemption Date] will be paid against presentation of this Security at the office or agency of the Company maintained for that purpose in _____, in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

Interest payable on this Security on any Interest Payment Date and on the [Stated] Maturity Date [or Redemption Date, as the case may be,] will include interest accrued from and including the next preceding Interest Payment Date in respect of which interest has been paid or duly provided for (or from and including _____, if no interest has been paid on this Security) to but excluding such Interest Payment Date or the [Stated] Maturity Date [or Redemption Date, as the case may be.] If any Interest Payment Date or the [Stated] Maturity Date or [Redemption Date] falls on a day that is not a Business Day, as defined below, principal, premium or Make-Whole

Amount, if any, and/or interest payable with respect to such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be,] will be paid on the next succeeding Business Day with the same force and effect as if it were paid on the date such payment was due, and no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be.] “Business Day” means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in The City of New York are required or authorized by law, regulation or executive order to close.

[If this Security is a Global Security, insert — All payments of principal, premium or Make-Whole Amount, if any, and interest in respect of this Security will be made by the Company in immediately available funds.]

Reference is hereby made to the further provisions of this Security set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.

Unless the Certificate of Authentication hereon has been executed by the Trustee by manual signature of one of its authorized signatories, this Security shall not be entitled to any benefit under the Indenture, or be valid or obligatory for any purpose.

IN WITNESS WHEREOF, the Company has caused this instrument to be duly executed under its facsimile corporate seal.

Dated: _____

AASTROM BIOSCIENCES, INC.

By: _____
Name:
Title:

Attest:

Secretary

[Reverse of Security]

AASTROM BIOSCIENCES, INC.

This Security is one of a duly authorized issue of securities of the Company (herein called the "Securities"), issued and to be issued in one or more series under an

Indenture, dated as of _____, 20__ (herein called the "Indenture") between the Company and _____, as Trustee (herein called the "Trustee," which term includes any successor trustee under the Indenture with respect to the series of which this Security is a part), to which Indenture and all indentures supplemental thereto reference is hereby made for a statement of the respective rights, limitations of rights, duties and immunities thereunder of the Company, the Trustee and the Holders of the Securities, and of the terms upon which the Securities are, and are to be, authenticated and delivered. This Security is one of the duly authorized series of Securities designated on the face hereof (collectively, the "Securities"), [if applicable, insert — and the aggregate principal amount of the Securities to be issued under such series is limited to \$_____ (except for Securities authenticated and delivered upon transfer of, or in exchange for, or in lieu of other Securities).] All terms used in this Security which are defined in the Indenture shall have the meanings assigned to them in the Indenture.

If an Event of Default, as defined in the Indenture, shall occur and be continuing, the principal of the Securities of this series may be declared due and payable in the manner and with the effect provided in the Indenture.

[If applicable, insert — The Securities may not be redeemed prior to the Stated Maturity Date.]

[If applicable, insert — The Securities are subject to redemption [(1) (If applicable, insert — on _____ in any year commencing with the year _____ and ending with the year _____ through operation of the sinking fund for this series at a Redemption Price equal to 100% of the principal amount, and (2)] [If applicable, insert — at any time [on or after _____], as a whole or in part, at the election of the Company, at the following Redemption Prices (expressed as percentages of the principal amount):

If redeemed on or before _____, ___% and if redeemed during the 12-month period beginning _____ of the years indicated at the Redemption Prices indicated below.

Year	Redemption Price	Year	Redemption Price
------	------------------	------	------------------

and thereafter at a Redemption Price equal to ___% of the principal amount, together in the case of any such redemption [If applicable, insert — (whether through operation of the sinking fund or otherwise)] with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the

close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — The Securities are subject to redemption (1) on _____ in any year commencing with the year _____ and ending with the year _____ through operation of the sinking fund for this series at the Redemption Prices for redemption through operation of the sinking fund (expressed as percentages of the principal amount) set forth in the table below, and (2) at any time [on or after _____], as a whole or in part, at the election of the Company, at the Redemption Prices for redemption otherwise than through operation of the sinking fund (expressed as percentages of the principal amount) set forth in the table below: If redeemed during the 12-month period beginning _____ of the years indicated,

Year	Redemption Price for Redemption Through Operation of the Sinking Fund	Redemption Price for Redemption Otherwise Than Through Operation of the Sinking Fund
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and thereafter at a Redemption Price equal to ___% of the principal amount, together in the case of any such redemption (whether through operation of the sinking fund or otherwise) with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — Notwithstanding the foregoing, the Company may not, prior to _____, redeem any Securities as contemplated by [Clause (2) of] the preceding paragraph as a part of, or in anticipation of, any refunding operation by the application, directly or indirectly, of moneys borrowed having an interest cost to the Company (calculated in accordance with generally accepted financial practice) of less than ___% per annum.]

[If applicable, insert — The sinking fund for the Securities provides for the redemption on _____ in each year, beginning with the year _____ and ending with the year _____, of [not less than] \$_____ [“(mandatory sinking fund)”] and not more than \$_____ aggregate principal amount of the Securities. [The Securities acquired or redeemed by the Company otherwise than through [mandatory] sinking fund payments may be credited against subsequent [mandatory] sinking fund payments otherwise required to be made in the [describe order] order in which they become due.]]

Notice of redemption will be given by mail to Holders of Securities, not less than 30 nor more than 60 days prior to the Redemption Date, all as provided in the Indenture.

In the event of redemption of this Security in part only, a new Security or Securities for the unredeemed portion hereof shall be issued in the name of the Holder hereof upon the cancellation hereof.

[If applicable, insert conversion provisions set forth in any Board Resolution or indenture supplemental to the Indenture.]

The Indenture permits, with certain exceptions as therein provided, the amendment thereof and the modification of the rights and obligations of the Company and the rights of the Holders of the Securities under the Indenture at any time by the Company and the Trustee with the consent of the Holders of not less than a majority of the aggregate principal amount of all Securities issued under the Indenture at the time Outstanding and affected thereby. The Indenture also contains provisions permitting the Holders of not less than a majority of the aggregate principal amount of the Outstanding Securities, on behalf of the Holders of all such Securities, to waive compliance by the Company with certain provisions of the Indenture. Furthermore, provisions in the Indenture permit the Holders of not less than a majority of the aggregate principal amount, in certain instances, of the Outstanding Securities of any series to waive, on behalf of all of the Holders of Securities of such series, certain past defaults under the Indenture and their consequences. Any such consent or waiver by the Holder of this Security shall be conclusive and binding upon such Holder and upon all future Holders of this Security and other Securities issued upon the registration of transfer hereof or conversion or in exchange hereof or in lieu hereof, whether or not notation of such consent or waiver is made upon this Security.

No reference herein to the Indenture and no provision of this Security or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of (and premium or Make-Whole Amount, if any) and interest on this Security at the times, places and rate, and in the coin or currency, herein prescribed.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, the transfer of this Security is registrable in the Security Register of the Company upon surrender of this Security for registration of transfer at the office or agency of the Company in any place where the principal of (and premium or Make-Whole Amount, if any) and interest on this Security are payable, duly endorsed by, or accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed by, the Holder hereof or by his attorney duly authorized in writing, and thereupon one or more new Securities, of authorized denominations and for the same aggregate principal amount, will be issued to the designated transferee or transferees.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, this Security is exchangeable for a like aggregate principal amount of Securities of different authorized denominations but otherwise having the same terms and conditions, as requested by the Holder hereof surrendering the same.

The Securities of this series are issuable only in registered form [without coupons] in denominations of \$_____ and any integral multiple thereof.

No service charge shall be made for any such registration of transfer or conversion or exchange, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith,

Prior to due presentment of this Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name this Security is registered as the owner hereof for all purposes, whether or not this Security be overdue, and neither the Company, the Trustee nor any such agent shall be affected by notice to the contrary.

No recourse shall be had for the payment of the principal of or premium or Make-Whole Amount, if any, or the interest on this Security, or for any claim based hereon, or otherwise in respect hereof, or based on or in respect of the Indenture or any indenture supplemental thereto, against any past, present or future stockholder, employee, officer or director, as such, of the Company or of any successor, either directly or through the Company or any successor, whether by virtue of any constitution, statute or rule of law or by the enforcement of any assessment or penalty or otherwise, all such liability being, by the acceptance hereof and as part of the consideration for the issue hereof, expressly waived and released.

The Indenture and the Securities shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed entirely in such State.

EXHIBIT B
FORMS OF CERTIFICATION

EXHIBIT B-1

FORM OF CERTIFICATE TO BE GIVEN BY PERSON ENTITLED TO RECEIVE BEARER
SECURITY OR TO OBTAIN INTEREST PAYABLE PRIOR TO THE EXCHANGE DATE

CERTIFICATE

[Insert title or sufficient description of Securities to be delivered]

This is to certify that, as of the date hereof, and except as set forth below, the above-captioned Securities held by you for our account (i) are owned by person(s) that are not citizens or residents of the United States, domestic partnerships, domestic corporations or any estate or trust the income of which is subject to United States Federal income taxation regardless of its source ("United States person(s)"), (ii) are owned by United States person(s) that are (a) foreign branches of United States financial institutions (financial institutions, as defined in United States Treasury Regulations Section 2.165-12(c)(1)(v) are herein referred to as "financial institutions") purchasing for their own account or for resale, or (b) United States person(s) who acquired the Securities through foreign branches of United States financial institutions and who hold the Securities through such United States financial institutions on the date hereof (and in either case (a) or (b), each such United States financial institution hereby agrees, on its own behalf or through its agent, that you may advise Aastrom Biosciences, Inc. or its agent that such financial institution will comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the United States Internal Revenue Code of 1986, as amended, and the regulations thereunder), or (iii) are owned by United States or foreign financial institution(s) for purposes of resale during the restricted period (as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), and, in addition, if the owner is a United States or foreign financial institution described in clause (iii) above (whether or not also described in clause (i) or (ii)), this is to further certify that such financial institution has not acquired the Securities for purposes of resale directly or indirectly to a United States person or to a person within the United States or its possessions.

As used herein, "United States" means the United States of America (including the States and the District of Columbia); and its "possessions" include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands.

We undertake to advise you promptly by tested telex or by telecopy on or prior to the date on which you intend to submit your certification relating to the above-captioned Securities held by you for our account in accordance with your operating procedures if any applicable statement herein is not correct on such date, and in the absence of any such notification it may be assumed that this certification applies as of such date.

This certificate excepts and does not relate to [U.S.\$] of such interest in the above-captioned Securities in respect of which we are not able to certify and as to which we

understand an exchange for an interest in a permanent Global Security or an exchange for and delivery of definitive Securities (or, if relevant, collection of any interest) cannot be made until we do so certify.

We understand that this certificate may be required in connection with certain tax legislation in the United States. If administrative or legal proceedings are commenced or threatened in connection with which this certificate is or would be relevant, we irrevocably authorize you to produce this certificate or a copy thereof to any interested party in such proceedings.

Dated: _____

[To be dated no earlier than the 15th day prior to (i) the Exchange Date or (ii) the relevant Interest Payment Date occurring prior to the Exchange Date, as applicable]

[Name of Person Making Certification]

(Authorized Signature)

Name:

Title:

EXHIBIT B-2

FORM OF CERTIFICATE TO BE GIVEN BY EUROCLEAR AND CLEARSTREAM S.A. IN
CONNECTION WITH THE EXCHANGE OF A PORTION OF A TEMPORARY GLOBAL
SECURITY OR TO OBTAIN INTEREST PAYABLE PRIOR TO THE EXCHANGE DATE

CERTIFICATE

[Insert title or sufficient description of Securities to be delivered]

This is to certify that, based solely on written certifications that we have received in writing, by tested telex or by electronic transmission from each of the persons appearing in our records as persons entitled to a portion of the principal amount set forth below (our "Member Organizations") substantially in the form attached hereto, as of the date hereof, [U.S.\$] principal amount of the above-captioned Securities (i) is owned by person(s) that are not citizens or residents of the United States, domestic partnerships, domestic corporations or any estate or trust the income of which is subject to United States Federal income taxation regardless of its source ("United States person(s)"), (ii) is owned by United States person(s) that are (a) foreign branches of United States financial institutions (financial institutions, as defined in U.S. Treasury Regulations Section 1.165-12(c)(1)(v) are herein referred to as "financial institutions") purchasing for their own account or for resale, or (b) United States person(s) who acquired the Securities through foreign branches of United States financial institutions and who hold the Securities through such United States financial institutions on the date hereof (and in either case (a) or (b), each such financial institution has agreed, on its own behalf or through its agent, that we may advise Aastrom Biosciences, Inc. or its agent that such financial institution will comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the Internal Revenue Code of 1986, as amended, and the regulations thereunder), or (iii) is owned by United States or foreign financial institution(s) for purposes of resale during the restricted period (as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), and, to the further effect, that financial institutions described in clause (iii) above (whether or not also described in clause (i) or (ii)) have certified that they have not acquired the Securities for purposes of resale directly or indirectly to a United States person or to a person within the United States or its possessions.

As used herein, "United States" means the United States of America (including the States and the District of Columbia); and its "Possessions" include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands.

We further certify that (i) we are not making available herewith for exchange (or, if relevant, collection of any interest) any portion of the temporary Global Security representing the above-captioned Securities excepted in the above-referenced certificates of Member Organizations and (ii) as of the date hereof we have not received any notification from any of our Member Organizations to the effect that the statements made by such Member Organizations with respect to any portion of the part submitted herewith for exchange (or, if relevant, collection of any interest) are no longer true and cannot be relied upon as of the date hereof.

We understand that this certification is required in connection with certain tax legislation in the United States. If administrative or legal proceedings are commenced or threatened in

connection with which this certificate is or would be relevant, we irrevocably authorize you to produce this certificate or a copy thereof to any interested party in such proceedings.

Dated: _____

[To be dated no earlier than the Exchange Date or the relevant Interest Payment Date occurring prior to the Exchange Date, as applicable]

[_____, as Operator of the Euroclear System] [Clearstream Banking Luxembourg]

By: _____

Name:

Title:

B-4

AASTROM BIOSCIENCES, INC.

TO

Trustee

Indenture

Dated as of _____, 20__

Subordinated Debt Securities

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AASTROM BIOSCIENCES, INC.

Reconciliation and tie between the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act” or “TIA”) and the Indenture, dated as of _____, 20____.

Trust Indenture Act Section	Indenture Section
§ 310(a)(1)	607
(a)(2)	607
(b)	607,608
§ 312(c)	701
§ 313(a)	702
(c)	702
§ 314(a)	703
(a)(4)	1008
(c)(1)	102
(c)(2)	102
(e)	102
§ 315(b)	601
§ 316(a) (last sentence)	101(“Outstanding”)
(a)(1)(A)	502, 512
(a)(1)(B)	513
(b)	508
§ 317(a)(1)	503
(a)(2)	504
§ 318(a)	111
(c)	111

NOTE: This reconciliation and tie shall not, for any purpose, be deemed to be a part of the Indenture.

Attention should also be directed to Section 318(c) of the Trust Indenture Act, which provides that the provisions of Sections 310 to and including 317 of the Trust Indenture Act are a part of and govern every qualified indenture, whether or not physically contained therein.

INDENTURE, dated as of _____, 20__, between AASTROM BIOSCIENCES, INC., a corporation organized under the laws of the State of Michigan (hereinafter called the “Company”), having its principal office at 24 Frank Lloyd Wright Drive, Ann Arbor, Michigan 48106, and _____, as Trustee hereunder (hereinafter called the “Trustee”), having a Corporate Trust Office at _____.

RECITALS OF THE COMPANY

The Company deems it necessary to issue from time to time for its lawful purposes subordinated debt securities (hereinafter called the “Securities”) evidencing its unsecured and subordinated indebtedness, and has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of the Securities, to be issued in one or more Series as provided in this Indenture.

This Indenture is subject to the provisions of the Trust Indenture Act of 1939, as amended (the “Trust Indenture Act” or “TIA”), that are deemed to be incorporated into this Indenture and shall, to the extent applicable, be governed by such provisions.

All things necessary to make this Indenture a valid and legally binding agreement of the Company, in accordance with its terms, have been done.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

For and in consideration of the premises and the purchase of the Securities by the Holders thereof, it is mutually covenanted and agreed, for the equal and proportionate benefit of all Holders of the Securities or of a Series thereof, as follows:

ARTICLE ONE — DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

SECTION 101. Definitions. For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (1) the terms defined in this Article have the meanings assigned to them in this Article, and include the plural as well as the singular;
 - (2) all other terms used herein which are defined in the TIA, either directly or by reference therein, have the meanings assigned to them therein, and the terms “cash transactions” and “self-liquidating paper,” as used in TIA Section 311, shall have the meanings assigned to them in the rules of the Commission adopted under the TIA;
 - (3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with GAAP;
 - (4) any reference to an “Article” or a “Section” refers to an Article or Section, as the case may be, of this Indenture; and
-

(5) the words “herein,” “hereof” “and “hereunder” and other words of similar import refer to this Indenture as a whole and not to any particular Article, Section or other subdivision.

“Act,” when used with respect to any Holder, has the meaning specified in Section 104.

“Affiliate” of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For the purposes of this definition, “control” when used with respect to any specified Person means the power to direct the management and policies of such Person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms “controlling” and “controlled” have meanings correlative to the foregoing.

“Authenticating Agent” means any Person authorized by the Trustee pursuant to Section 611 hereof to act on behalf of the Trustee to authenticate Securities of one or more Series.

“Authorized Newspaper” means a newspaper, printed in the English language or in an official language of the country of publication, customarily published on each Business Day, whether or not published on Saturdays, Sundays or holidays, and of general circulation in each place in connection with which the term is used or in the financial community of each such place. Whenever successive publications are required to be made in Authorized Newspapers, the successive publications may be made in the same or in different Authorized Newspapers in the same city meeting the foregoing requirements and in each case on any Business Day.

“Bankruptcy Law” has the meaning specified in Section 501.

“Bearer Security” means any Security established pursuant to Section 201 which is payable to the bearer.

“Board of Directors” when used with reference to the Company, means the board of directors of the Company, or any committee of that board duly authorized to act hereunder, or any director or directors and/or officer or officers of the Company, to whom the board or committee shall have duly delegated its authority.

“Board Resolution” means a copy of (1) a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors or a duly authorized committee of the Board of Directors and to be in full force and effect on the date of such certification, or (2) a certificate signed by the director or directors and/or officer or officers to whom the Board of Directors shall have duly delegated its authority, together with a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification authorizing such delegation, and, in each case, delivered to the Trustee.

“Business Day,” when used with respect to any Place of Payment or any other particular location referred to in this Indenture or in the Securities, means, unless otherwise specified with respect to any Securities issued pursuant to Section 301, any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in that Place of

Payment or particular location are authorized or required by law, regulation or executive order to close.

“Capital Stock” means, with respect to any Person, any capital stock (including preferred stock), shares, interests, participations or other ownership interests (however designated) of such Person and any rights (other than debt securities convertible into or exchangeable for corporate stock), warrants or options to purchase any thereof.

“Clearstream” means Clearstream Banking Luxembourg, société anonyme, or its successor.

“Closing Price” means the closing price of a share of Common Stock of the Company as reported on the NASDAQ Capital Market.

“Code” means the Internal Revenue Code of 1986, as amended, and the regulations thereunder.

“Commission” means the Securities and Exchange Commission, as from time to time constituted, created under the Exchange Act, or, if at any time after execution of this instrument such Commission is not existing and performing the duties now assigned to it under the Trust Indenture Act, then the body performing such duties on such date.

“Common Depository” has the meaning specified in Section 304.

“Common Stock” means, with respect to any Person, all shares of capital stock issued by such Person other than Preferred Stock.

“Company” means the Person named as the “Company” in the first paragraph of this Indenture until a successor corporation shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Company” shall mean such successor corporation.

“Company Request” and “Company Order” mean, respectively, a written request or order signed in the name of the Company by its Chairman of the Board, the Chief Executive Officer, the President, or a Vice President, and by its Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee.

“Constituent Person” has the meaning specified in Section 1711.

“Conversion Event” means the cessation of use of (i) a Foreign Currency both by the government of the country which issued such currency and for the settlement of transactions by a central bank or other public institutions of or within the international banking community, (ii) the ECU both within the European Monetary System and for the settlement of transactions by public institutions of or within the European Communities or (iii) any currency unit (or composite currency) other than the ECU for the purposes for which it was established.

“Conversion Price” has the meaning specified in Section 1701.

“Corporate Trust Office” means the office of the Trustee at which, at any particular time, its corporate trust business shall be principally administered, which office at the date hereof is located at [_____].

“corporation” includes corporations, associations, companies and business trusts.

“coupon” means any interest coupon appertaining to a Bearer Security.

“Covenant Defeasance” has the meaning specified in Section 1403.

“Custodian” has the meaning specified in Section 501.

“Defaulted Interest” has the meaning specified in Section 307.

“Defeasance” has the meaning specified in Section 1402.

“Distribution Record Date” has the meaning specified in Section 1711.

“Dividend Record Date” has the meaning specified in Section 1704.

“Dollar” or the sign “\$” means a dollar or other equivalent unit in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

“DTC” means The Depository Trust Company and any successor to DTC in its capacity as depository for any Securities.

“ECU” means the European Currency Unit as defined and revised from time to time by the Council of the European Communities.

“Euroclear” means the operator of the Euroclear System.

“European Communities” means the European Economic Community, the European Coal and Steel Community and the European Atomic Energy Community.

“European Monetary System” means the European Monetary System established by the Resolution of December 5, 1978 of the Council of the European Communities.

“Event of Default” has the meaning specified in Article Five.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, as in force at the date as of which this Indenture was executed; provided, however, that in the event the Exchange Act is amended after such date, “Exchange Act” means to the extent required by any such amendment, the Exchange Act as so amended.

“Exchange Date” has the meaning specified in Section 304.

“FINRA” means the Financial Industry Regulatory Authority, Inc.

“Foreign Currency” means any currency, currency unit or composite currency, including, without limitation, the ECU issued by the government of one or more countries other than the United States of America or by any recognized confederation or association of such governments.

“GAAP” means, except as otherwise provided herein, generally accepted accounting principles, as in effect from time to time, as used in the United States applied on a consistent basis.

“Global Security” means a Security evidencing all or a part of a series of Securities issued to and registered in the name of the depository for such series, or its nominee, in accordance with Section 305, and bearing the legend prescribed in Section 203.

“Government Obligations” means (i) securities which are (A) direct obligations of the United States of America or the government which issued the Foreign Currency in which the Securities of a particular series are payable, for the payment of which its full faith and credit is pledged or (B) obligations of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America or such government which issued the Foreign Currency in which the Securities of such series are payable, the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America or such other government, which, in either case, are not callable or redeemable at the option of the issuer thereof, and (iii) a depository receipt issued by a bank or trust company as custodian with respect to any such Government Obligation or a specific payment of interest on or principal of any such Government Obligation held by such custodian for the account of the holder of a depository receipt, provided that (except as required by law) such custodian is not authorized to make any deduction from the amount payable to the holder of such depository receipt from any amount received by the custodian in respect of the Government Obligation or the specific payment of interest on or principal of the Government Obligation evidenced by such depository receipt.

“Guaranty” by any Person means any Obligation, contingent or otherwise, of such Person guaranteeing any Indebtedness of any other Person (the “primary obligor”) in any manner, whether directly or indirectly, and including, without limitation, every Obligation of such Person (i) to purchase or pay (or advance or supply funds for the purchase or payment of) such Indebtedness or to purchase (or to advance or supply funds for the purchase of) any security for the payment of such Indebtedness, (ii) to purchase property, securities or services for the purpose of assuring the holder of such Indebtedness of the payment of such Indebtedness or (iii) to maintain working capital, equity capital or other financial statement condition or liquidity of the primary obligor so as to enable the primary obligor to pay such Indebtedness; provided, however, that a Guaranty by any Person shall not include endorsements by such Person for collection or deposit, in either case in the ordinary course of business. The terms “Guaranteed,” “Guaranteeing” and “Guarantor” shall have meanings correlative to the foregoing.

“Holder” means, in the case of a Registered Security, the Person in whose name a Security is registered in the Security Register and, in the case of a Bearer Security, the bearer thereof and, when used with respect to any coupon, shall mean the bearer thereof.

“Indebtedness” means, with respect to any Person, without duplication, (i) any Obligation of such Person relating to any indebtedness of such Person (A) for borrowed money (whether or not the recourse of the lender is to the whole of the assets, of such person or only to a portion thereof), (B) evidenced by notes, debentures or similar instruments (including purchase money obligations) given in connection with the acquisition of any property or assets (other than trade accounts payable for inventory or similar property acquired in the ordinary course of business), including securities, for the payment of which such Person is liable, directly or indirectly, or the payment of which is secured by a lien, charge or encumbrance on property or assets of such Person, (C) for goods, materials or services purchased in the ordinary course of business (other than trade accounts payable arising in the ordinary course of business), (D) with respect to letters of credit or bankers acceptances issued for the account of such Person or performance, surety or similar bonds, (E) for the payment of money relating to a capitalized lease Obligation or (F) under interest rate swaps, caps or similar agreements and foreign exchange contracts, currency swaps or similar agreements; (ii) any liability of others of the kind described in the preceding clause (i), which such Person has Guaranteed or which is otherwise its legal liability; and (iii) any and all deferrals, renewals, extensions and refunding of, or amendments, modifications or supplements to, any liability of the kind described in any of the preceding clauses (i) or (ii).

“Indenture” means this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, and shall include the terms of particular series of Securities established as contemplated by Section 301; provided, however, that, if at any time more than one Person is acting as Trustee under this instrument, “Indenture” shall mean, with respect to any one or more series of Securities for which such Person is Trustee, this instrument as originally executed or as it may be supplemented or amended from time to time by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof and shall include the terms of the or those particular series of Securities for which such Person is Trustee established as contemplated by Section 301, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is Trustee, regardless of when such terms or provisions were adopted, and exclusive of any provisions or terms adopted by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee but to which such Person, as such Trustee, was not a party.

“Indexed Security” means a Security the terms of which provide that the principal amount thereof payable at Stated Maturity may be more or less than the principal face amount thereof at original issuance.

“Interest,” when used with respect to an Original Issue Discount Security which by its terms bears interest only after Maturity, shall mean interest payable after Maturity.

“Interest Payment Date,” when used with respect to any Security, means the Stated Maturity of an installment of interest on such Security.

“Make-Whole Amount,” when used with respect to any Security, means the amount, if any, in addition to principal (and accrued interest thereon, if any) which is required by a Security, under the terms and conditions specified therein or as otherwise specified as

contemplated by Section 301, to be paid by the Company to the Holder thereof in connection with any optional redemption or accelerated payment of such Security.

“mandatory sinking fund payment” has the meaning specified in Section 1201.

“Market Value of the Distribution” has the meaning specified in Section 1704.

“Maturity,” when used with respect to any Security, means the date on which the principal (or, if the context so requires, in the case of an Original Issue Discount Security, or lesser amount or, in the case of an Indexed Security, an amount determined in accordance with the specified terms of that Security) of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, notice of redemption, notice of option to elect repayment or otherwise.

“Obligation” of any Person with respect to any specified Indebtedness means any obligation of such Person to pay principal, premium, interest (including interest accruing on or after the filing of any petition in bankruptcy or for reorganization relating to such Person, whether or not a claim for such post-petition interest is allowed in such proceeding), penalties, reimbursement or indemnification amounts, fees, expenses or other amounts relating to such Indebtedness.

“Officers’ Certificate” means a certificate signed by the Chairman of the Board of Directors, the Chief Executive Officer, the President, or a Vice President (whether or not designated by a number or word or words added before or after the title “Vice President”), and by the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary of the Company, and delivered to the Trustee.

“Opinion of Counsel” means a written opinion of counsel, who may be counsel for the Company or who may be an employee of or other counsel for the Company.

“optional sinking fund payment” has the meaning specified in Section 1201.

“Original Issue Discount Security” means any Security which provides for an amount (excluding any amounts attributable to accrued but unpaid interest thereon) less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 502.

“Outstanding,” when used with respect to Securities, means, as of the date of determination, all Securities theretofore authenticated and delivered under this Indenture, except:

- (i) Securities theretofore canceled by the Trustee or delivered to the Trustee for cancellation;
- (ii) Securities, or portions thereof, for whose payment or redemption (including repayment at the option of the Holder) money in the necessary amount has been theretofore deposited with the Trustee or any Paying Agent (other than the Company) in trust or set aside and segregated in trust by the Company (if the

Company shall act as its own Paying Agent) for the Holders of such Securities and any coupons appertaining thereto; provided, however, that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;

(iii) Securities, except to the extent provided in Sections 1402 and 1403, with respect to which the Company has effected Defeasance and/or Covenant Defeasance as provided in Article Fourteen; and

(iv) Securities which have been paid pursuant to Section 306 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company.

provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given any request, demand, authorization, direction, notice, consent or waiver hereunder or are present at a meeting of Holders for quorum purposes, and for the purpose of making the calculations required by TIA Section 313, (i) the principal amount of an Original Issue Discount Security that may be counted in making such determination or calculation and that shall be deemed to be Outstanding for such purpose shall be equal to the amount of principal thereof that would be (or shall have been declared to be) due and payable, at the time of such determination, upon a declaration of acceleration of the maturity thereof pursuant to Section 502, (ii) the principal amount of any Security denominated in a Foreign Currency that may be counted in making such determination or calculation and that shall be deemed Outstanding for such purpose shall be equal to the Dollar equivalent, determined pursuant to Section 301 as of the date such Security is originally issued by the Company, of the principal amount (or, in the case of an Original Issue Discount Security, the Dollar equivalent as of such date of original issuance of the amount determined as provided in clause (i) above) of such Security, (iii) the principal amount of any Indexed Security that may be counted in making such determination or calculation and that shall be deemed outstanding for such purpose shall be equal to the principal face amount of such Indexed Security at original issuance, unless otherwise provided with respect to such Security pursuant to Section 301, and (iv) Securities owned by the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor shall be disregarded and deemed not to be Outstanding, except that, in determining whether the Trustee shall be protected in making such calculation or in relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities which a Responsible Officer of the Trustee actually knows to be so owned shall be so disregarded. Securities owned as provided in clause (iv) above which have been pledged in good faith may be regarded as Outstanding if the pledgee establishes to the satisfaction of the Trustee the pledgee's right so to act with respect to such Securities and that the pledgee is not the Company or any other obligor upon the Securities or any Affiliate of the Company or of such other obligor. In case of a dispute as to such right, the advice of counsel shall be full protection in respect of any decision made by the Trustee in accordance with such advice.

“Paying Agent” means any Person authorized by the Company to pay the principal of (and premium or Make-Whole Amount, if any) or interest on any Securities or coupons on behalf of the Company.

“Payment Blockage Notice” and “Payment Blockage Period” have the respective meanings specified in Section 1603.

“Person” means any individual, corporation, limited liability company, partnership, joint venture, association, joint-stock company, trust, unincorporated organization or government or any agency or political subdivision thereof, or any other entity or organization.

“Place of Payment,” when used with respect to the Securities of or within any series, means the place or places where the principal of (and premium or Make-Whole Amount, if any) and interest on such Securities are payable as specified as contemplated by Sections 301 and 1002.

“Predecessor Security” of any particular Security means every previous Security evidencing all or a portion of the same debt as that evidenced by such particular Security; and, for the purposes of this definition, any Security authenticated and delivered under Section 306 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security or a Security to which a mutilated, destroyed, lost or stolen coupon appertains shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security or the Security to which the mutilated, destroyed, lost or stolen coupon appertains.

“Preferred Stock” means, with respect to any Person, all capital stock issued by such Person that is entitled to a preference or priority over any other capital stock issued by such Person with respect to any distribution of such Person’s assets, whether by dividend or upon any voluntary or involuntary liquidation, dissolution or winding up.

“Proceeding” has the meaning specified in Section 1602.

“Redemption Date,” when used with respect to any Security to be redeemed, in whole or in part, means the date fixed for such redemption by or pursuant to this Indenture.

“Redemption Price,” when used with respect to any Security to be redeemed, means the price specified in the related Officers’ Certificate or supplemental indenture contemplated by and pursuant to Section 301, at which it is to be redeemed pursuant to this Indenture.

“Reference Date” has the meaning specified in Section 1704.

“Registered Security” shall mean any Security which is registered in the Security Register.

“Regular Record Date” for the interest payable on any Interest Payment Date on the Registered Securities of or within any series means the date specified for that purpose as contemplated by Section 301, whether or not a Business Day.

“Repayment Date” means, when used with respect to any Security to be repaid at the option of the Holder, the date fixed for such repayment by or pursuant to this Indenture.

“Repayment Price” means, when used with respect to any Security to be repaid at the option of the Holder, the price at which it is to be repaid by or pursuant to this Indenture.

“Responsible Officer,” when used with respect to the Trustee, means any Vice President (whether or not designated by a number or a word or words added before or after the title “Vice President”), Assistant Vice President, Trust Officer or Assistant Trust Officer working in its Corporate Trust Department, or any other officer of the Trustee customarily performing functions similar to those performed by any of the above designated officers and working in its Corporate Trust Department, and also means, with respect to a particular corporate trust matter, any other officer to whom such matter is referred because of such officer’s knowledge and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

“Rights” has the meaning specified in Section 1704.

“Rights Record Date” has the meaning specified in Section 1704.

“Securities Payment” has the meaning specified in Section 1602.

“Security” and “Securities” has the meaning stated in the first recital of this Indenture and, more particularly, means any Security or Securities authenticated and delivered under this Indenture; provided, however, that, if at any time there is more than one Person acting as Trustee under this Indenture, “Securities” with respect to the Indenture as to which such Person is Trustee shall have the meaning stated in the first recital of this Indenture and shall more particularly mean Securities authenticated and delivered under this Indenture, exclusive, however, of Securities of any series as to which such Person is not Trustee.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 305.

“Senior Indebtedness” means Indebtedness of the Company, whether outstanding on the date of this Indenture or thereafter created, incurred, assumed or guaranteed by the Company, other than the following: (1) any Indebtedness as to which, in the instrument evidencing such Indebtedness or pursuant to which such Indebtedness was issued, it is expressly provided that such Indebtedness is subordinate in right of payment to all Indebtedness of the Company not expressly subordinated to such Indebtedness; (2) any Indebtedness which by its terms refers explicitly to the Securities and states that such Indebtedness shall not be senior, shall be pari passu or shall be subordinated in right of payment to the Securities; and (3) with respect to any series of Securities, any Indebtedness of the Company evidenced by Securities of the same or of another series. Notwithstanding anything to the contrary in the foregoing, Senior Indebtedness shall not include: (a) Indebtedness of or amounts owed by the Company for compensation to employees, or for goods, materials or services purchased in the ordinary course of business, or (b) Indebtedness of the Company to a Subsidiary of the Company.

A “Series” of Securities means all securities denoted as part of the same series authorized by or pursuant to a particular Board Resolution.

“Short Term Rights” has the meaning specified in Section 1704.

“Significant Subsidiary” means any Subsidiary which is a “significant subsidiary” (as defined in Article I, Rule 1-02 of Regulation S-X, promulgated under the Securities Act of 1933, as amended) of the Company.

“Special Record Date” for the payment of any Defaulted Interest on the Registered Securities of or within any series means a date fixed by the Company pursuant to Section 307.

“Stated Maturity,” when used with respect to any Security or any installment of principal thereof or interest thereon, means the date specified in such Security or a coupon representing such installment of interest as the fixed date on which the principal of such Security or such installment of principal or interest is due and payable.

“Subsidiary” means, with respect to any Person, any corporation, limited liability company, partnership or other entity of which a majority of (i) the voting power of the voting equity securities or (ii) the outstanding equity interests are owned, directly or indirectly, by such Person. For the purposes of this definition, “voting equity securities” means equity securities having voting power for the election of directors, whether at all times or only so long as no senior class of security has such voting power by reason of any contingency.

“Trading Day” means any day on which the NASDAQ Capital Market is open for business.

“Trigger Events” has the meaning specified in Section 1704.

“Trust Indenture Act” or “TIA” means the Trust Indenture Act of 1939, as amended and as in force at the date as of which this Indenture was executed, except as provided in Section 905.

“Trustee” means the Person named as the “Trustee” in the first paragraph of this Indenture until a successor Trustee shall have become such pursuant to the applicable provisions of this Indenture, and thereafter “Trustee” shall mean or include each Person who is then a Trustee hereunder; provided, however, that if at any time there is more than one such Person, “Trustee” as used with respect to the Securities of any series shall mean only the Trustee with respect to Securities of that series.

“Unadjusted Distribution” has the meaning specified in Section 1704.

“United States” means, unless otherwise specified with respect to any Securities pursuant to Section 301, the United States of America (including the states and the District of Columbia), its territories, its possessions and other areas subject to its jurisdiction.

“United States Person” means, unless otherwise specified with respect to any Securities pursuant to Section 301, an individual who is a citizen or resident of the United States, a

corporation, partnership or other entity created or organized in or under the laws of the United States or an estate or trust the income of which is subject to United States Federal income taxation regardless of its source.

“Yield to Maturity” means the yield to maturity, computed at the time of issuance of a Security (or, if applicable, at the most recent redetermination of interest on such Security) and as set forth in such Security in accordance with generally accepted United States bond yield computation principles.

SECTION 102. Compliance Certificates and Opinions. Upon any application or request by the Company to the Trustee to take any action under any provision of this Indenture, the Company shall furnish to the Trustee an Officers’ Certificate stating that all conditions precedent, if any, provided for in this Indenture relating to the proposed action have been complied with and an Opinion of Counsel stating that in the opinion of such counsel all such conditions precedent, if any, have been complied with, except that in the case of any such application or request as to which the furnishing of such documents is specifically required by any provision of this Indenture relating to such particular application or request, no additional certificate or opinion need be furnished.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (including certificates delivered pursuant to Section 1008) shall include:

- (1) a statement that each individual signing such certificate or opinion has read such condition or covenant and the definitions herein relating thereto;
- (2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;
- (3) a statement that, in the opinion of each such individual, he has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such condition or covenant has been complied with; and
- (4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

SECTION 103. Form of Documents Delivered to Trustee. In any case where several matters are required to be certified by, or covered by an opinion of, any specified Person, it is not necessary that all such matters be certified by, or covered by the opinion of, only one such Person, or that they be so certified or covered by only one document, but one such Person may certify or give an opinion with respect to some matters and one or more other such Persons as to other matters, and any such Person may certify or give an opinion as to such matters in one or several documents.

Any certificate or opinion of an officer of the Company may be based, insofar as it relates to legal matters, upon an Opinion of Counsel, or a certificate or representations by counsel,

unless such officer knows, or in the exercise of reasonable care should know, that the opinion, certificate or representations with respect to the matters upon which his certificate or opinion is based are erroneous. Any such Opinion of Counsel or certificate or representations may be based, insofar as it relates to factual matters, upon a certificate or opinion of, or representations by, an officer or officers of the Company stating that the information as to such factual matters is in the possession of the Company, unless such counsel knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to such matters are erroneous.

Where any Person is required to make, give or execute two or more applications, requests, consents, certificates, statements, opinions or other instruments under this Indenture, they may, but need not, be consolidated and form one instrument.

SECTION 104. Acts of Holders.

(a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of the Outstanding Securities of all series or one or more series, as the case may be, may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by agents duly appointed in writing. If Securities of a series are issuable as Bearer Securities, any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders of Securities of such series may, alternatively, be embodied in and evidenced by the record of Holders of Securities of such series voting in favor thereof, either in person or by proxies duly appointed in writing, at any meeting of Holders of Securities of such series duly called and held in accordance with the provisions of Article Fifteen, or a combination of such instruments and any such record. Except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments or record or both are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments and any such record (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments or so voting at any such meeting. Proof of execution of any such instrument or of a writing appointing any such agent, or of the holding by any Person of a Security, shall be sufficient for any purpose of this Indenture and conclusive in favor of the Trustee and the Company and any agent of the Trustee or the Company, if made in the manner provided in this Section. The record of any meeting of Holders of Securities shall be proved in the manner provided in Section 1506.

(b) The fact and date of the execution by any Person of any such instrument or writing may be proved by the affidavit of a witness of such execution or by a certificate of a notary public or other officer authorized by law to take acknowledgments of deeds, certifying that the individual signing such instrument or writing acknowledged to him the execution thereof. Where such execution is by a signer acting in a capacity other than his individual capacity, such certificate or affidavit shall also constitute sufficient proof of his authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other reasonable manner which the Trustee deems sufficient.

(c) The ownership of Registered Securities shall be proved by the Security Register. As to any matter relating to beneficial ownership interests in any Global Security, the appropriate depository's records shall be dispositive for purposes of this Indenture.

(d) The ownership of Bearer Securities may be proved by the production of such Bearer Securities or by a certificate executed, as depository, by any trust company, bank, banker or other depository, wherever situated, if such certificate shall be deemed by the Trustee to be satisfactory, showing that at the date therein mentioned such Person had on deposit with such depository, or exhibited to it, the Bearer Securities therein described; or such facts may be proved by the certificate or affidavit of the Person holding such Bearer Securities, if such certificate or affidavit is deemed by the Trustee to be satisfactory. The Trustee and the Company may assume that such ownership of any Bearer Security continues until (1) another certificate or affidavit bearing a later date issued in respect of the same Bearer Security is produced, or (2) such Bearer Security is produced to the Trustee by some other Person, or (3) such Bearer Security is surrendered in exchange for a Registered Security, or (4) such Bearer Security is no longer Outstanding. The ownership of Bearer Securities may also be proved in any other manner which the Trustee deems sufficient.

(e) If the Company shall solicit from the Holders of Registered Securities any request, demand, authorization, direction, notice, consent, waiver or other Act, the Company may, at its option, in or pursuant to a Board Resolution, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other Act, but the Company shall have no obligation to do so. Notwithstanding TIA Section 316(c), such record date shall be the record date specified in or pursuant to such Board Resolution, which shall be a date not earlier than the date 30 days prior to the first solicitation of Holders generally in connection therewith and not later than the date such solicitation is completed. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other Act may be given before or after such record date, but only the Holders of record at the close of business on such record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of Outstanding Securities have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other Act, and for that purpose the Outstanding Securities shall be computed as of such record date; provided that no such authorization, agreement or consent by the Holders on such record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than eleven months after the record date.

(f) Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Security shall bind every future Holder of the same Security and the Holder of every Security issued upon the registration of transfer thereof or upon the conversion thereof or in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee, any Security Registrar, any Paying Agent, any Authenticating Agent or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

SECTION 105. Notices, etc., to Trustee and Company. Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing to or with the Trustee at [_____] or at any other address previously furnished in writing to the Company by the Trustee, Attention: [_____] ; or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to the Company addressed to it at the address of its principal office specified in the first paragraph of this Indenture or at any other address previously furnished in writing to the Trustee by the Company, Attention: [_____] ; or

(3) either the Trustee or the Company, by the other party or by any Holder, shall be sufficient for every purpose hereunder if given by facsimile transmission, receipt confirmed by telephone followed by an original copy delivered by guaranteed overnight courier; if to the Trustee at facsimile number [_____] ; and if to the Company at facsimile number [_____] .

SECTION 106. Notice to Holders; Waiver. Where this Indenture provides for notice of any event to Holders of Registered Securities by the Company or the Trustee, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each such Holder affected by such event, at his address as it appears in the Security Register, not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. In any case where notice to Holders of Registered Securities is given by mail, neither the failure to mail such notice, nor any defect in any notice so mailed, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders of Registered Securities or the sufficiency of any notice to Holders of Bearer Securities given as provided herein. Any notice mailed to a Holder in the manner herein prescribed shall be conclusively deemed to have been received by such Holder, whether or not such Holder actually receives such notice.

If by reason of the suspension of or irregularities in regular mail service or by reason of any other cause it shall be impracticable to give such notice by mail, then such notification to Holders of Registered Securities as shall be made with the approval of the Trustee shall constitute a sufficient notification to such Holders for every purpose hereunder.

Except as otherwise expressly provided herein or otherwise specified with respect to any Securities pursuant to Section 301, where this Indenture provides for notice to Holders of Bearer Securities of any event, such notice shall be sufficiently given if published in an Authorized Newspaper in The City of New York and in such other city or cities as may be specified in such Securities on a Business Day, such publication to be not later than the latest date, if any, and not earlier than the earliest date, if any, prescribed for the giving of such notice. Any such notice shall be deemed to have been given on the date of such publication or, if published more than once, on the date of the first such publication.

If by reason of the suspension of publication of any Authorized Newspaper or Authorized Newspapers or by reason of any other cause it shall be impracticable to publish any notice to Holders of Bearer Securities as provided above, then such notification to Holders of Bearer Securities as shall be given with the approval of the Trustee shall constitute sufficient notice to such Holders for every purpose hereunder. Neither the failure to give notice by publication to any particular Holder of Bearer Securities as provided above, nor any defect in any notice so published, shall affect the sufficiency of such notice with respect to other Holders of Bearer Securities or the sufficiency of any notice to Holders of Registered Securities given as provided herein.

Any request, demand, authorization, direction, notice, consent or waiver required or permitted under this Indenture shall be in the English language, except that any published notice may be in an official language of the country of publication.

Where this Indenture provides for notice in any manner, such notice may be waived in writing by the Person entitled to receive such notice, either before or after the event, and such waiver shall be the equivalent of such notice. Waivers of notice by Holders shall be filed with the Trustee, but such filing shall not be a condition precedent to the validity of any action taken in reliance upon such waiver.

SECTION 107. Counterparts; Effect of Headings and Table of Contents. This Indenture may be executed in any number of counterparts, each of which so executed shall be deemed to be an original, but all such counterparts shall together constitute but one and the same Indenture. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

SECTION 108. Successors and Assigns. All covenants and agreements in this Indenture by the Company shall bind its successors and assigns, whether so expressed or not.

SECTION 109. Severability Clause. In case any provision in this Indenture or in any Security or coupon shall be held invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 110. Benefits of Indenture. Nothing in this Indenture or in the Securities or coupons, if any, express or implied, shall give to any Person, other than the parties hereto, any Security Registrar, any Paying Agent, any Authenticating Agent and their successors hereunder and the Holders any benefit or any legal or equitable right, remedy or claim under this Indenture.

SECTION 111. Governing Law. This Indenture and the Securities and coupons shall be governed by and construed in accordance with the laws of the State of New York. This Indenture is subject to the provisions of the TIA that are required to be part of this Indenture and shall, to the extent applicable, be governed by such provisions.

SECTION 112. Legal Holidays. In any case where any Interest Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity of any Security or the last date on which a Holder has the right to convert or exchange a Security shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or any Security or coupon other than a provision in the Securities of any series which specifically states that such provision shall apply in lieu hereof), payment of interest or principal (and premium or Make-Whole Amount, if any) or conversion or exchange of such Security need not be made at such Place of Payment on such date, but (except as otherwise provided in the supplemental indenture with respect to such Security) may be made on the next succeeding Business Day at such Place of Payment with the same force and effect as if made on the Interest Payment Date, Redemption Date, Repayment Date or sinking fund payment date, or at the Stated Maturity or Maturity, or on such last day for conversion or exchange, provided that no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date, Redemption Date, Repayment Date, sinking fund payment date, Stated Maturity or Maturity, as the case may be.

SECTION 113. Limited Liability; Immunity of Stockholders, Directors, Officers and Agents of the Company. Notwithstanding any other provision of this Indenture or of the Securities of any series to the contrary, no recourse under or upon any obligation, covenant or agreement contained in this Indenture or in any Security, or for the payment of any sums due on account of any indebtedness evidenced thereby, including without limitation principal, premium or interest, if any, or for any claim based on this Indenture or any Security or otherwise in respect of this Indenture or any Security, shall be had, whether by levy or execution or otherwise, against (i) the Company, the Company's assets or against any past, present or future stockholder, employee, officer, director or agent, as such, of the Company or any successor, either directly or through the Company or any successor, under any rule of law, statute, constitutional provision or by the enforcement of any assessment or penalty, or by any legal or equitable proceeding or otherwise, nor shall any such parties be personally liable for any such amounts, obligations or claims, or liable for any deficiency judgment based thereon or with respect thereto, it being expressly understood that the sole remedies hereunder or under any other document with respect to the Securities against such parties with respect to such amounts, obligations or claims shall be against the Company and that all such liability of and recourse against such parties is expressly waived and released by the acceptance of the Securities by the Holders and as part of the consideration for the issue of the Securities.

SECTION 114. Conflict with Trust Indenture Act. If any provision hereof limits, qualifies or conflicts with another provision hereof which is required or deemed to be included in this Indenture by any of the provisions of the Trust Indenture Act, such required provision shall control. If any provision of this Indenture modifies or excludes any provision of the Trust Indenture Act that may be so modified or excluded, the latter provision shall be deemed to apply to this Indenture as so modified or to be excluded, as the case may be.

ARTICLE TWO — SECURITIES FORMS

SECTION 201. Forms of Securities. The Registered Securities, if any, of each series and the Bearer Securities, if any, of each series and related coupons shall be substantially in the form of Exhibit A hereto or in such other form as shall be established in one or more indentures supplemental hereto or approved from time to time by or pursuant to a Board Resolution in accordance with Section 301, shall have such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture or any indenture supplemental hereto, and may have such letters, numbers or other marks of identification or designation and such legends or endorsements placed thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Indenture, or as may be required to comply with any law or with any rule or regulation made pursuant thereto or with any rule or regulation of any over-the-counter market or securities exchange, on which the Securities may be quoted or listed, or to conform to usage.

Unless otherwise specified as contemplated by Section 301, Bearer Securities shall have interest coupons attached.

The definitive Securities and coupons shall be printed, lithographed or engraved or produced by any combination of these methods on a steel engraved border or steel engraved borders or mechanically reproduced on safety paper or may be produced in any other manner, all as determined by the officers executing such Securities or coupons, as evidenced by their execution of such Securities or coupons.

SECTION 202. Form of Trustee's Certificate of Authentication. Subject to Section 611, the Trustee's certificate of authentication shall be in substantially the following form:

This is one of the Securities of the series designated therein referred to in the within- mentioned Indenture.

_____,
as Trustee

Dated: _____

By: _____
Authorized Signatory

SECTION 203. Securities Issuable in Global Form. If Securities of or within a series are issuable in the form of one or more Global Securities, then, notwithstanding clause (8) of Section 301 and the provisions of Section 302, any such Global Security or Securities may provide that it or they shall represent the aggregate amount of all Outstanding Securities of such series (or such lesser amount as is permitted by the terms thereof) from time to time endorsed thereon and may also provide that the aggregate amount of Outstanding Securities of such series represented thereby may from time to time be increased or decreased to reflect exchanges. Any endorsement of any Global Security to reflect the amount, or any increase or decrease in the amount, or changes in the rights of Holders thereof, of Outstanding Securities represented thereby shall be made (or caused to be made) by the Trustee in such manner or by such Person or

Persons as shall be specified therein or in the Company Order to be delivered to the Trustee pursuant to Section 303 or 304. Subject to the provisions of Section 303 and, if applicable, Section 304, the Trustee shall deliver and redeliver any Global Security in permanent global form in the manner and upon instructions given by the Person or Persons specified therein or in the applicable Company Order. If a Company Order pursuant to Section 303 or 304 has been, or simultaneously is, delivered, any instructions by the Company with respect to endorsement or delivery or redelivery of a Global Security shall be in writing but need not comply with Section 102 and need not be accompanied by an Opinion of Counsel.

The provisions of the last sentence of Section 303 shall apply to any Security represented by a Global Security if such Security was never issued and sold by the Company and the Company delivers to the Trustee the Global Security together with written instructions (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) with regard to the reduction in the principal amount of Securities represented thereby, together with the written statement contemplated by the last sentence of Section 303.

Notwithstanding the provisions of Section 307, unless otherwise specified as contemplated by Section 301, payment of principal of and any premium or Make-Whole Amount, if any, and interest on any Global Security in permanent global form shall be made to the registered Holder thereof.

Notwithstanding the provisions of Section 308 and except as provided in the preceding paragraph, the Company, the Trustee and any agent of the Company and the Trustee shall treat as the Holder of such principal amount of Outstanding Securities represented by a permanent Global Security (i) in the case of a permanent Global Security in registered form, the Holder of such permanent Global Security in registered form, or (ii) in the case of a permanent Global Security in bearer form, Euroclear or Clearstream.

Any Global Security authenticated and delivered hereunder shall bear a legend in substantially the following form:

“This Security is a Global Security within the meaning set forth in the Indenture hereinafter referred to and is registered in the name of a Depository or a nominee of a Depository. This Security is exchangeable for Securities registered in the name of a person other than the Depository or its nominee only in the limited circumstances described in the Indenture, and may not be transferred except as a whole by the Depository to a nominee of the Depository or by a nominee of the Depository to the Depository or another nominee of the Depository or by the Depository or its nominee to a successor Depository or its nominee.”

ARTICLE THREE — THE SECURITIES

SECTION 301. Amount Unlimited; Issuable in Series. The aggregate principal amount of Securities which may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series, each of which shall be authorized pursuant to Board Resolutions of the Company. There shall be established in one or more Board

Resolutions or pursuant to authority granted by one or more Board Resolutions and, subject to Section 303, set forth in an Officers' Certificate, or established in one or more indentures supplemental hereto, prior to the issuance of Securities of any series:

- (1) The title of the Securities of the series, including "CUSIP" numbers (which shall distinguish the Securities of such series from all other series of Securities);
- (2) Any limit upon the aggregate principal amount of the Securities of the series that may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or upon conversion of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 304, 305, 306, 906, 1107 or 1305) and the minimum authorized denominations with respect to the Securities of such series;
- (3) The price (expressed as a percentage of the principal amount thereof) at which such Securities will be issued and, if other than the principal amount thereof, the portion of the principal amount thereof payable upon declaration of acceleration of the maturity thereof or (if applicable) the portion of the principal amount of such Securities that is convertible into Common Stock or Preferred Stock or the method by which any such portion shall be determined;
- (4) If convertible, the terms on which such Securities are convertible, including the initial conversion price or rate and the conversion period and any applicable limitations on the ownership or transferability of Common Stock or Preferred Stock receivable on conversion;
- (5) The date or dates, or the method for determining such date or dates, on which the principal of such Securities will be payable;
- (6) The rate or rates (which may be fixed or variable), or the method by which such rate or rates shall be determined, at which such Securities will bear interest, if any;
- (7) The date or dates, or the method for determining such date or dates, from which any such interest will accrue, the Interest Payment Dates on which any such interest will be payable, the Regular Record Dates for such Interest Payment Dates, or the method by which such dates shall be determined, the Persons to whom such interest shall be payable, and the basis upon which interest shall be calculated if other than that of a 360-day year of twelve 30-day months;
- (8) The Make-Whole Amount, if any, or method for determining the Make-Whole Amount, if any, payable with respect to such Securities, and the terms upon which such amount, if any, will be payable;
- (9) The place or places where the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities will be payable, where such Securities may be surrendered for registration of transfer or conversion or exchange and

where notices or demands to or upon the Company in respect of such Securities and this Indenture may be served;

(10) The period or periods, if any, within which, the price or prices at which and the other terms and conditions upon which such Securities may, pursuant to any optional or mandatory redemption provisions, be redeemed, as a whole or in part, at the option of the Company;

(11) The obligation, if any, of the Company to redeem, repay or purchase such Securities pursuant to any sinking fund or analogous provision or at the option of a Holder thereof, and the period or periods within which, the price or prices at which and the other terms and conditions upon which such Securities will be redeemed, repaid or purchased, as a whole or in part, pursuant to such obligation;

(12) If other than Dollars, the currency or currencies in which such Securities are denominated and payable, which may be a foreign currency or units of two or more foreign currencies or a composite currency or currencies, the manner of determining the equivalent thereof in Dollars for purposes of the definition of "Outstanding" in Section 101, and the terms and conditions relating thereto;

(13) Whether the amount of payments of principal of (and premium or Make-Whole Amount, if any, including any amount due upon redemption, if any) or interest on such Securities may be determined with reference to an index, formula or other method (which index, formula or method may, but need not be, based on the yield on or trading price of other securities, including United States Treasury securities or on a currency, currencies, currency unit or units, or composite currency or currencies) and the manner in which such amounts shall be determined;

(14) Whether the principal of (and premium or Make-Whole Amount, if any) or interest on the Securities of the series are to be payable, at the election of the Company or a Holder thereof, in a currency or currencies, currency unit or units or composite currency or currencies other than that in which such Securities are denominated or stated to be payable, the period or periods within which, and the terms and conditions upon which, such election may be made, and the time and manner of, and identity of the exchange rate agent with responsibility for, determining the exchange rate between the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are denominated or stated to be payable and the currency or currencies, currency unit or units or composite currency or currencies in which such Securities are to be so payable;

(15) Provisions, if any, granting special rights to the Holders of Securities of the series upon the occurrence of such events as may be specified;

(16) Any deletions from, modifications of or additions to the Events of Default or covenants of the Company with respect to Securities of the series, whether or not such Events of Default or covenants are consistent with the Events of Default or covenants set forth herein;

(17) Whether and under what circumstances the Company will pay any additional amounts on such Securities in respect of any tax, assessment or governmental charge and, if so, whether the Company will have the option to redeem such Securities in lieu of making such payment;

(18) Whether Securities of the series are to be issuable as Registered Securities, Bearer Securities (with or without coupons) or both, any restrictions applicable to the offer, sale or delivery of Bearer Securities and the terms upon which Bearer Securities of the series may be exchanged for Registered Securities of the series and vice versa (if permitted by applicable laws and regulations), whether any Securities of the series are to be issuable initially in temporary global form and whether any Securities of the series are to be issuable in permanent global form with or without coupons and, if so, whether beneficial owners of interests in any such permanent global Security may, or shall be required to, exchange such interests for Securities of such series and of like tenor of any authorized form and denomination and the circumstances under which any such exchanges may, or shall be required to, occur, if other than in the manner provided in the Indenture, and, if Registered Securities of the series are to be issuable as a Global Security, the identity of the depository for such series;

(19) The date as of which any Bearer Securities of the series and any temporary Global Security representing outstanding Securities of the series shall be dated if other than the date of original issuance of the first Security of the series to be issued;

(20) The Person to whom any interest on any Registered Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest the manner in which, or the Person to whom, any interest on any Bearer Security of the series shall be payable, if otherwise than upon presentation and surrender of the coupons appertaining thereto as they severally mature, and the extent to which, or the manner in which, any interest payable on a temporary Global Security on an Interest Payment Date will be paid if other than in the manner provided herein; provided, however, in each case, that the manner of determining such Person or making such payment shall be acceptable to the Trustee (as not imposing on it any undue administrative burden or risk of liability);

(21) The applicability, if any, of the Defeasance and Covenant Defeasance provisions of Article Fourteen hereof to the Securities of the series;

(22) The obligation, if any, of the Company to permit the conversion of the Securities of such series into Common Stock or Preferred Stock, as the case may be, and the terms and conditions upon which such conversion shall be effected (including, without limitation, the initial conversion price or rate, the conversion period, any adjustment of the applicable conversion price and any requirements relative to the reservation of such shares for purposes of conversion);

(23) If the Securities of such series are to be issuable in definitive form (whether upon original issue or upon exchange of a temporary Security of such series)

only upon receipt of certain certificates or other documents or satisfaction of other conditions, then the form and/or terms of such certificates, documents or conditions;

(24) Designation of the Trustee, if different from the Trustee under the Indenture, with respect to such series and the terms applicable to such Trustee (which shall be accepted by such Trustee by its execution and delivery of a supplemental indenture as provided therein); and

(25) Any other terms of the series (which terms shall not be inconsistent with the provisions of this Indenture).

All Securities of any one series and the coupons appertaining to any Bearer Securities of such series shall be substantially identical except, in the case of Registered Securities, as to denomination and except as may otherwise be provided in or pursuant to such Board Resolution (subject to Section 303) and set forth in such Officers' Certificate or in any such indenture supplemental hereto. All Securities of any one series need not be issued at the same time and, unless otherwise provided, a series may be reopened, without the consent of the Holders, for issuances of additional Securities of such series.

If any of the terms of the Securities of any series are established by action taken pursuant to one or more Board Resolutions, a copy of an appropriate record of such action(s) shall be certified by the Secretary or an Assistant Secretary of the Company and delivered to the Trustee at or prior to the delivery of the Officers' Certificate setting forth the terms of the Securities of such series.

SECTION 302. Denominations. The Securities of each series shall be issuable in such denominations as shall be specified as contemplated by Section 301. With respect to Securities of any series denominated in Dollars, in the absence of any such provisions with respect to the Securities of any series, the Securities of such series, other than Global Securities (which may be of any denomination), shall be issuable in denominations of \$1,000 and any integral multiple thereof or the equivalent amounts thereof in the case of Securities denominated in the Foreign Currency or currency unit.

SECTION 303. Execution, Authentication, Delivery and Dating. The Securities and any coupons appertaining thereto shall be executed on behalf of the Company by its Chairman of the Board, its Chief Executive Officer, its President, or one of its Vice Presidents, under its corporate seal reproduced thereon, and attested by its Secretary or one of its Assistant Secretaries. The signature of any of these officers on the Securities and coupons may be manual or facsimile signatures of the present or any future such authorized officer and may be imprinted or otherwise reproduced on the Securities.

Securities and coupons bearing the manual or facsimile signatures of individuals who were at any time the proper officers of the Company shall bind the Company, notwithstanding that such individuals or any of them have ceased to hold such offices prior to the authentication and delivery of such Securities or did not hold such offices at the date of such Securities or coupons.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series, together with any coupon appertaining thereto, executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities (accompanied by a copy of the Board Resolution and the Officers' Certificate or supplemental indenture contemplated by Section 301), and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities; provided, however, that, in connection with its original issuance, no Bearer Security shall be mailed or otherwise delivered to any location in the United States; and provided further that, unless otherwise specified with respect to any series of Securities pursuant to Section 301, a Bearer Security may be delivered in connection with its original issuance only if the Person entitled to receive such Bearer Security shall have furnished a certificate to Euroclear or Clearstream, as the case may be, in the form set forth in Exhibit B-1 to this Indenture or such other certificate as may be specified by the Company with respect to any series of Securities pursuant to Section 301, dated no earlier than 15 days prior to the earlier of the date on which such Bearer Security is delivered and the date on which any temporary Security first becomes exchangeable for such Bearer Security in accordance with the terms of such temporary Security and this Indenture. If any Security shall be represented by a permanent Global Security, then, for purposes of this Section and Section 304, the notation of a beneficial owner's interest therein upon original issuance of such Security or upon exchange of a portion of a temporary Global Security shall be deemed to be delivery in connection with its original issuance of such beneficial owner's interest in such permanent Global Security. Except as permitted by Section 306, the Trustee shall not authenticate and deliver any Bearer Security unless all appurtenant coupons for interest then matured have been detached and canceled.

If all the Securities of any series are not to be issued at one time and if the Board Resolution or supplemental indenture establishing such series shall so permit, such Company Order may set forth procedures acceptable to the Trustee for the issuance of such Securities and determining the terms of particular Securities of such series, such as interest rate or formula, maturity date, date of issuance and date from which interest shall accrue. In authenticating such Securities, and accepting the additional responsibilities under this Indenture in relation to such Securities, the Trustee shall be entitled to receive, and (subject to TIA Section 315(a) through 315(d)) shall be fully protected in relying upon,

- (i) an Opinion of Counsel stating that
 - (a) the form or forms of such Securities and any coupons have been established in conformity with the provisions of this Indenture;
 - (b) the terms of such Securities and any coupons have been established in conformity with the provisions of this Indenture; and
 - (c) such Securities, together with any coupons appertaining thereto, when completed by appropriate insertions and executed and delivered by the Company to the Trustee for authentication in accordance with this Indenture, authenticated and delivered by the Trustee in accordance with this Indenture and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will

constitute legal, valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization and other similar laws of general applicability relating to or affecting the enforcement of creditors' rights generally and to general equitable principles; and

(ii) an Officers' Certificate stating that all conditions precedent provided for in this Indenture relating to the issuance of the Securities have been complied with and that, to the best of the knowledge of the signers of such certificate, that no Event of Default with respect to any of the Securities shall have occurred and be continuing.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities (or to enter into the related supplemental indenture, if applicable) if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties, obligations or immunities under the Securities and this Indenture or otherwise in a manner which is not reasonably acceptable to the Trustee.

Notwithstanding the provisions of Section 301 and of the preceding paragraph, if all the Securities of any series are not to be issued at one time, it shall not be necessary to deliver an Officers' Certificate otherwise required pursuant to Section 301 or a Company Order, or an Opinion of Counsel or an Officers' Certificate otherwise required pursuant to the preceding paragraph at the time of issuance of each Security of such series, but such order, opinion and certificates, with appropriate modifications to cover such future issuances, shall be delivered at or before the time of issuance of the first Security of such series.

Each Registered Security shall be dated the date of its authentication and each Bearer Security shall be dated as of the date specified as contemplated by Section 301.

No Security or coupon shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security or Security to which such coupon appertains a certificate of authentication substantially in the form provided for herein duly executed by the Trustee (subject to Section 611) by manual signature of an authorized signatory, and such certificate upon any Security shall be conclusive evidence, and the only evidence, that such Security has been duly authenticated and delivered hereunder and is entitled to the benefits of this Indenture. Notwithstanding the foregoing, if any Security (including a Global Security) shall have been authenticated and delivered hereunder but never issued and sold by the Company, and the Company shall deliver such Security to the Trustee for cancellation as provided in Section 309 together with a written statement (which need not comply with Section 102 and need not be accompanied by an Opinion of Counsel) stating that such Security has never been issued and sold by the Company, for all purposes of this Indenture such Security shall be deemed never to have been authenticated and delivered hereunder and shall never be entitled to the benefits of this Indenture.

SECTION 304. Temporary Securities.

(a) Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued, in registered form, or, if authorized, in bearer form with one or more coupons or without coupons, and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as conclusively evidenced by their execution of such Securities. In the case of Securities of any series, such temporary Securities may be in global form.

Except in the case of temporary Global Securities (which shall be exchanged as otherwise provided herein or as otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301), if temporary Securities of any series are issued, the Company will cause definitive Securities of that series to be prepared without unreasonable delay. After the preparation of definitive Securities of such series, the temporary Securities of such series shall be exchangeable for definitive Securities of such series upon surrender of the temporary Securities of such series at the office or agency of the Company in a Place of Payment for that series, without charge to the Holder. Upon surrender for cancellation of any one or more temporary Securities of any series (accompanied by any non-matured coupons appertaining thereto), the Company shall execute (in accordance with a Company Order delivered at or prior to the authentication of the first definitive security to such series) and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series of authorized denominations; provided, however, that no definitive Bearer Security shall be delivered in exchange for a temporary Registered Security; and provided further that a definitive Bearer Security shall be delivered in exchange for a temporary Bearer Security only in compliance with the conditions set forth in Section 303. Until so exchanged, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of such series.

(b) Unless otherwise provided in or pursuant to a Board Resolution or supplemental indenture pursuant to Section 301, the following provisions of this Section 304(b) shall govern the exchange of temporary Securities other than through the facilities of the DTC. If any such temporary Security is issued in global form, then such temporary Global Security shall, unless otherwise provided therein, be delivered to the London office of a depository or common depository upon and pursuant to written direction of the Company (the "Common Depository"), for the benefit of Euroclear and Clearstream, for credit to the respective accounts of the beneficial owners of such Securities (or to such other accounts as they may direct).

Without unnecessary delay but in any event not later than the date specified in, or determined pursuant to the terms of, any such temporary Global Security (the "Exchange Date"), the Company shall deliver to the Trustee definitive Securities, in aggregate principal amount equal to the principal amount of such temporary Global Security, executed by the Company. On or after the Exchange Date, such temporary Global Security shall be surrendered by the Common Depository to the Trustee, as the Company's agent for such purpose, to be exchanged, in whole or from time to time in part, for definitive Securities without charge, and the Trustee shall authenticate and deliver, in exchange for each portion of such temporary Global Security, an equal aggregate principal amount of definitive Securities of the same series of authorized

denominations and of like tenor as the portion of such temporary Global Security to be exchanged. The definitive Securities to be delivered in exchange for any such temporary Global Security shall be in bearer form, registered form, permanent global bearer form or permanent global registered form, or any combination thereof, as specified as contemplated by Section 301, and, if any combination thereof is so specified, as requested by the beneficial owner thereof (as directed by or pursuant to information provided by the Common Depository); provided, however, that, unless otherwise specified in such temporary Global Security, upon such presentation by the Common Depository, such temporary Global Security shall be accompanied by a certificate dated the Exchange Date or a subsequent date and signed by Euroclear as to the portion of such temporary Global Security held for its account then to be exchanged and a certificate dated the Exchange Date or a subsequent date and signed by Clearstream as to the portion of such temporary Global Security held for its account then to be exchanged, each in the form set forth in Exhibit B-2 to this Indenture or in such other form as may be established pursuant to Section 301; and provided further that definitive Bearer Securities shall be delivered in exchange for a portion of a temporary Global Security only in compliance with the requirements of Section 303.

Unless otherwise specified in such temporary Global Security, the interest of a beneficial owner of Securities of a series in a temporary Global Security shall be exchanged for definitive Securities of the same series and of like tenor following the Exchange Date when the account holder instructs Euroclear or Clearstream, as the case may be, to request such exchange on his behalf and delivers to Euroclear or Clearstream, as the case may be, a certificate in the form set forth in Exhibit B-1 to this Indenture (or in such other form as may be established pursuant to Section 301), dated no earlier than 15 days prior to the Exchange Date, copies of which certificate shall be available from the offices of Euroclear and Clearstream, the Trustee, any Authenticating Agent appointed for such series of Securities and each Paying Agent. Unless otherwise specified in such temporary Global Security, any such exchange shall be made free of charge to the beneficial owners of such temporary Global Security, except that a Person receiving definitive Securities must bear the cost of insurance, postage, transportation and the like unless such Person takes delivery of such definitive Securities in person at the offices of Euroclear or Clearstream. Definitive Securities in bearer form to be delivered in exchange for any portion of a temporary Global Security shall be delivered only to an address located outside the United States.

Until exchanged in full as hereinabove provided, the temporary Securities of any series shall in all respects be entitled to the same benefits under this Indenture as definitive Securities of the same series and of like tenor authenticated and delivered hereunder, except that, unless otherwise specified as contemplated by Section 301, interest payable on a temporary Global Security on an Interest Payment Date for Securities of such series occurring prior to the applicable Exchange Date shall be payable to Euroclear and Clearstream on such Interest Payment Date upon delivery by Euroclear and Clearstream to the Trustee of a certificate or certificates in the form set forth in Exhibit B-2 to this Indenture (or in such other forms as may be established pursuant to Section 301), for credit without further interest on or after such Interest Payment Date to the respective accounts of Persons who are the beneficial owners of such temporary Global Security on such Interest Payment Date and who have each delivered to Euroclear or Clearstream, as the case may be, a certificate dated no earlier than 15 days prior to the Interest Payment Date occurring prior to such Exchange Date in the form set forth as Exhibit

B-1 to this Indenture (or in such other forms as may be established pursuant to Section 301). Notwithstanding anything to the contrary herein contained, the certifications made pursuant to this paragraph shall satisfy the certification requirements of the preceding two paragraphs of this Section 304(b) and of the third paragraph of Section 303 of this Indenture and the interests of the Persons who are the beneficial owners of the temporary Global Security with respect to which such certification was made will be exchanged for definitive Securities of the same series and of like tenor on the Exchange Date or the date of certification if such date occurs after the Exchange Date, without further act or deed by such beneficial owners. Except as otherwise provided in this paragraph, no payments of principal or interest owing with respect to a beneficial interest in a temporary Global Security will be made unless and until such interest in such temporary Global Security shall have been exchanged for an interest in a definitive Security. Any interest so received by Euroclear and Clearstream and not paid as herein provided shall be returned to the Trustee prior to the expiration of two years after such Interest Payment Date in order to be repaid to the Company.

With respect to Exhibit B-1 or B-2 to this Indenture, the Company may, in its discretion and if required or desirable under applicable law, substitute one or more other forms of such exhibits for such exhibits, eliminate the requirement that any or all certificate be provided, or change the time that any certificate may be required, provided that such substitute form or forms or notice of elimination or change of such certification requirement have theretofore been delivered to the Trustee with a Company Request and such form or forms, elimination or change is reasonably acceptable to the Trustee.

SECTION 305. Registration, Registration of Transfer, Conversion and Exchange. The Company shall cause to be kept at the Corporate Trust Office of the Trustee or in any office or agency of the Company in a Place of Payment a register for each series of Securities (the registers maintained in such office or in any such office or agency of the Company in a Place of Payment being herein sometimes referred to collectively as the "Security Register") in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Registered Securities and of transfers of Registered Securities. The Security Register shall be in written form or any other form capable of being converted into written form within a reasonable time. The Trustee, at its Corporate Trust Office, is hereby initially appointed "Security Registrar" for the purpose of registering Registered Securities and transfers of Registered Securities on such Security Register as herein provided. In the event that the Trustee shall cease to be Security Registrar, it shall have the right to examine, and be provided a copy of, the Security Register at all reasonable times.

Subject to the provisions of this Section 305, upon surrender for registration of transfer of any Registered Security of any series at any office or agency of the Company in a Place of Payment for that series, the Company shall execute, and the Trustee shall authenticate and deliver, in the name of the designated transferee or transferees, one or more new Registered Securities of the same series, of any authorized denominations and of a like aggregate principal amount, bearing a number not contemporaneously outstanding, and containing identical terms and provisions.

Subject to the provisions of this Section 305, at the option of the Holder, Registered Securities of any series may be exchanged for other Registered Securities of the same series, of any authorized denomination or denominations and of a like aggregate principal amount, containing identical terms and provisions, upon surrender of the Registered Securities to be exchanged at any such office or agency. Whenever any such Registered Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Registered Securities which the Holder making the exchange is entitled to receive. Unless otherwise specified with respect to any series of Securities as contemplated by Section 301, Bearer Securities may not be issued in exchange for Registered Securities.

If (but only if) permitted by the applicable Board Resolution and (subject to Section 303) set forth in the applicable Officers' Certificate, or in any indenture supplemental hereto, delivered as contemplated by Section 301, at the option of the Holder, Bearer Securities of any series may be exchanged for Registered Securities of the same series of any authorized denominations and of a like aggregate principal amount and tenor, upon surrender of the Bearer Securities to be exchanged at any such office or agency, with all unmatured coupons and all matured coupons in default thereto appertaining. If the Holder of a Bearer Security is unable to produce any such unmatured coupon or coupons or matured coupon or coupons in default, any such permitted exchange may be effected if the Bearer Securities are accompanied by payment in funds acceptable to the Company (or to the Trustee for the Security in case of matured coupons in default) in an amount equal to the face amount of such missing coupon or coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there is furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to any Paying Agent any such missing coupon in respect of which such a payment shall have been made, such Holder shall be entitled to receive the amount of such payment; provided, however, that, except as otherwise provided in Section 1002, interest represented by coupons shall be payable only upon presentation and surrender of those coupons at an office or agency located outside the United States. Notwithstanding the foregoing, in case a Bearer Security of any series is surrendered at any such office or agency in a permitted exchange for a Registered Security of the same series and like tenor after the close of business at such office or agency on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date or proposed date for payment, as the case may be, and interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture. Whenever any Securities are so surrendered for exchange, the Company shall execute, and the Trustee shall authenticate and deliver, the Securities which the Holder making the exchange is entitled to receive.

Notwithstanding the foregoing, except as otherwise specified as contemplated by Section 301, any permanent Global Security shall be exchangeable only as provided in this paragraph. If the depository for any permanent Global Security is DTC, then, unless the terms of such Global Security expressly permit such Global Security to be exchanged in whole or in part for definitive

Securities, a Global Security may be transferred, in whole but not in part, only to a nominee of DTC, or by a nominee of DTC to DTC, or to a successor to DTC for such Global Security selected or approved by the Company or to a nominee of such successor to DTC. If at any time DTC notifies the Company that it is unwilling or unable to continue as depository for the applicable Global Security or Securities or if at any time DTC ceases to be a clearing agency registered under the Exchange Act if so required by applicable law or regulation, the Company shall appoint a successor depository with respect to such Global Security or Securities. If (w) a successor depository for such Global Security or Securities is not appointed by the Company within 90 days after the Company receives such notice or becomes aware of such unwillingness, inability or ineligibility, (x) the Company delivers to the Trustee for Securities of such series in registered form a Company Order stating that the Securities of such series shall be exchangeable, (y) an Event of Default has occurred and is continuing and the beneficial owners representing a majority in principal amount of the applicable series of Securities represented by such Global Security or Securities advise DTC to cease acting as depository for such Global Security or Securities or (z) the Company, in its sole discretion, determines at any time that all Outstanding Securities (but not less than all) of any series issued or issuable in the form of one or more Global Securities shall no longer be represented by such Global Security or Securities, then the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities of like series, rank, tenor and terms in definitive form in an aggregate principal amount equal to the principal amount of such Global Security or Securities. If any beneficial owner of an interest in a permanent global Security is otherwise entitled to exchange such interest for Securities of such series and of like tenor and principal amount of another authorized form and denomination, as specified as contemplated by Section 301 and provided that any applicable notice provided in the permanent Global Security shall have been given, then without unnecessary delay but in any event not later than the earliest date on which such interest may be so exchanged, the Company shall execute, and the Trustee shall authenticate and deliver definitive Securities in aggregate principal amount equal to the principal amount of such beneficial owner's interest in such permanent Global Security. On or after the earliest date on which such interests may be so exchanged, such permanent Global Security shall be surrendered for exchange by DTC or such other depository as shall be specified in the Company Order with respect thereto to the Trustee, as the Company's agent for such purpose; provided, however, that no such exchanges may occur during a period beginning at the opening of business 15 days before any selection of Securities to be redeemed and ending on the relevant Redemption Date if the Security for which exchange is requested may be among those selected for redemption; and provided further that no Bearer Security delivered in exchange for a portion of a permanent Global Security shall be mailed or otherwise delivered to any location in the United States. If a Registered Security is issued in exchange for any portion of a permanent Global Security after the close of business at the office or agency where such exchange occurs on (i) any Regular Record Date and before the opening of business at such office or agency on the relevant Interest Payment Date, or (ii) any Special Record Date and the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, interest or Defaulted Interest, as the case may be, will not be payable on such Interest Payment Date or proposed date for payment, as the case may be, in respect of such Registered Security, but will be payable on such Interest Payment Date or proposed date for payment, as the case may be, only to the Person to whom interest in respect of such portion of such permanent Global Security is payable in accordance with the provisions of this Indenture.

All Securities issued upon any registration of transfer or conversion or exchange of Securities shall be the valid obligations of the Company, evidencing the same debt, and entitled to the same benefits under this Indenture, as the Securities surrendered upon such registration of transfer or conversion or exchange.

Every Registered Security presented or surrendered for registration of transfer or for conversion, exchange or redemption shall (if so required by the Company or the Security Registrar) be duly endorsed, or be accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar, duly executed by the Holder thereof or his attorney duly authorized in writing.

No service charge shall be made to the Holder for any registration of transfer or conversion or exchange of Securities, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in connection with any registration of transfer or conversion or exchange of Securities, other than exchanges pursuant to Section 304, 906, 1107 or 1305 not involving any transfer.

The Company or the Trustee, as applicable, shall not be required (i) to issue, register the transfer of or exchange any Security if such Security may be among those selected for redemption during a period beginning at the opening of business 15 days before selection of the Securities to be redeemed under Section 1103 and ending at the close of business on (A) if such Securities are issuable only as Registered Securities, the day of the mailing of the relevant notice of redemption and (B) if such Securities are issuable as Bearer Securities, the day of the first publication of the relevant notice of redemption or, if such Securities are also issuable as Registered Securities and there is no publication, the mailing of the relevant notice of redemption, or (ii) to register the transfer of or exchange any Registered Security so selected for redemption in whole or in part, except, in the case of any Registered Security to be redeemed in part, the portion thereof not to be redeemed, or (iii) to exchange any Bearer Security so selected for redemption except that such a Bearer Security may be exchanged for a Registered Security of that series and like tenor, provided that such Registered Security shall be simultaneously surrendered for redemption, or (iv) to issue, register the transfer of or exchange any Security which has been surrendered for repayment at the option of the Holder, except the portion, if any, of such Security not to be so repaid.

Furthermore, notwithstanding any other provision of this Section 305, the Company will not be required to exchange any Securities if, as a result of the exchange, the Company would suffer adverse consequences under any United States law or regulation.

SECTION 306. Mutilated, Destroyed, Lost and Stolen Securities. If any mutilated Security or a Security with a mutilated coupon appertaining to it is surrendered to the Trustee or the Company, together with, in proper cases, such security or indemnity as may be required by the Company or the Trustee to save each of them or any agent of either of them harmless, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to the surrendered Security.

If there shall be delivered to the Company and to the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security or coupon, and (ii) such security or indemnity as may be required by them to save each of them and any agent of either of them harmless, then, in the absence of notice to the Company or the Trustee that such Security or coupon has been acquired by a bona fide purchaser, the Company shall execute and upon its request the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security or in exchange for the Security to which a destroyed, lost or stolen coupon appertains (with all appurtenant coupons not destroyed, lost or stolen), a new Security of the same series and principal amount, containing identical terms and provisions and bearing a number not contemporaneously outstanding, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains.

Notwithstanding the provisions of the previous two paragraphs, in case any such mutilated, destroyed, lost or stolen Security or coupon has become or is about to become due and payable, the Company in its discretion may, instead of issuing a new Security, with coupons corresponding to the coupons, if any, appertaining to such destroyed, lost or stolen Security or to the Security to which such destroyed, lost or stolen coupon appertains, pay such Security or coupon if the applicant for such payment shall furnish to the Company and the Trustee for such Security such security or indemnity as may be required by them to save each of them harmless, and in the case of destruction, loss or theft, evidence satisfactory to the Company and Trustee and any agent of any of them of the destruction, loss or theft of such Security and the ownership thereof; provided, however, that payment of principal of (and premium or Make-Whole Amount, if any), and interest, if any, on, Bearer Securities shall, except as otherwise provided in Section 1002, be payable only at an office or agency located outside the United States and, unless otherwise specified as contemplated by Section 301, any interest on Bearer Securities shall be payable only upon presentation and surrender of the coupons appertaining thereto.

Upon the issuance of any new Security under this Section, the Company may require the payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto and any other expenses (including the fees and expenses of the Trustee) connected therewith.

Every new Security of any series with its coupons, if any, issued pursuant to this Section in lieu of any destroyed, lost or stolen Security, or in exchange for a Security to which a destroyed, lost or stolen coupon appertains, shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security and its coupons, if any, or the destroyed, lost or stolen coupon shall be at any time enforceable by anyone, and shall be entitled to all the benefits of this Indenture equally and proportionately with any and all other Securities of that series and their coupons, if any, duly issued hereunder.

The provisions of this Section are exclusive and shall preclude (to the extent lawful) all other rights and remedies with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities or coupons.

SECTION 307. Payment of Interest; Interest Rights Preserved. Except as otherwise specified with respect to a series of Securities in accordance with the provisions of

Section 301, interest on any Registered Security that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest payment at the office or agency of the Company maintained for such purpose pursuant to Section 1002; provided, however, that each installment of interest on any Registered Security may at the Company's option be paid by (i) mailing a check for such interest, payable to or upon the written order of the Person entitled thereto pursuant to Section 308, to the address of such Person as it appears on the Security Register or (ii) transfer to an account maintained by the payee located inside the United States.

Unless otherwise provided as contemplated by Section 301 with respect to the Securities of any series, payment of interest may be made, in the case of a Bearer Security, by transfer to an account maintained by the payee with a bank located outside the United States.

Unless otherwise provided as contemplated by Section 301, every permanent Global Security will provide that interest, if any, payable on any Interest Payment Date will be paid to DTC, Euroclear and/or Clearstream, as the case may be, with respect to that portion of such permanent Global Security held for its account by Cede & Co. or the Common Depository, as the case may be, for the purpose of permitting such party to credit the interest received by it in respect of such permanent Global Security to the accounts of the beneficial owners thereof.

In case a Bearer Security of any series is surrendered in exchange for a Registered Security of such series after the close of business (at an office or agency in a Place of Payment for such series) on any Regular Record Date and before the opening of business (at such office or agency) on the next succeeding Interest Payment Date, such Bearer Security shall be surrendered without the coupon relating to such Interest Payment Date and interest will not be payable on such Interest Payment Date in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

Except as otherwise specified with respect to a series of Securities in accordance with the provisions of Section 301, any interest on any Registered Security of any series that is payable, but is not punctually paid or duly provided for, on any Interest Payment Date (herein called "Defaulted Interest") shall forthwith cease to be payable to the registered Holder thereof on the relevant Regular Record Date by virtue of having been such Holder, and such Defaulted Interest may be paid by the Company, at its election in each case, as provided in clause (1) or (2) below:

(1) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on a Special Record Date for the payment of such Defaulted Interest, which shall be fixed in the following manner. The Company shall notify the Trustee in writing of the amount of Defaulted Interest proposed to be paid on each Registered Security of such series and the date of the proposed payment (which shall not be less than 20 days after such notice is received by the Trustee), and at the same time the Company shall deposit with the Trustee an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise

specified pursuant to Section 301 for the Securities of such series) equal to the aggregate amount proposed to be paid in respect of such Defaulted Interest or shall make arrangements satisfactory to the Trustee for such deposit on or prior to the date of the proposed payment, such money when deposited to be held in trust for the benefit of the Persons entitled to such Defaulted Interest as in this clause provided. Thereupon the Trustee shall fix a Special Record Date for the payment of such Defaulted Interest which shall be not more than 15 days and not less than 10 days prior to the date of the proposed payment and not less than 10 days after the receipt by the Trustee of the notice of the proposed payment. The Trustee shall promptly notify the Company of such Special Record Date and, in the name and at the expense of the Company, shall cause notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor to be mailed, first-class postage prepaid, to each Holder of Registered Securities of such series at his address as it appears in the Security Register not less than 10 days prior to such Special Record Date. The Trustee may, in its discretion, in the name and at the expense of the Company, cause a similar notice to be published at least once in an Authorized Newspaper in each Place of Payment, but such publications shall not be a condition precedent to the establishment of such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been mailed as aforesaid, such Defaulted Interest shall be paid to the Persons in whose names the Registered Securities of such series (or their respective Predecessor Securities) are registered at the close of business on such Special Record Date and shall no longer be payable pursuant to the following clause (2). In case a Bearer Security of any series is surrendered at the office or agency in a Place of Payment for such series in exchange for a Registered Security of such series after the close of business at such office or agency on any Special Record Date and before the opening of business at such office or agency on the related proposed date for payment of Defaulted Interest, such Bearer Security shall be surrendered without the coupon relating to such proposed date of payment and Defaulted Interest will not be payable on such proposed date of payment in respect of the Registered Security issued in exchange for such Bearer Security, but will be payable only to the Holder of such coupon when due in accordance with the provisions of this Indenture.

(2) The Company may make payment of any Defaulted Interest on the Registered Securities of any series in any other lawful manner not inconsistent with the requirements of any over-the-counter market or securities exchange on which such Securities may be quoted or listed, and upon such notice as may be required by such market or exchange, if, after notice given by the Company to the Trustee of the proposed payment pursuant to this clause, such manner of payment shall be deemed practicable by the Trustee.

Subject to the foregoing provisions of this Section and Section 305, each Security delivered under this Indenture upon registration of transfer of or upon conversion of or in exchange for or in lieu of any other Security shall carry the rights to interest accrued and unpaid, and to accrue, which were carried by such other Security.

SECTION 308. Persons Deemed Owners. Prior to due presentment of a Registered Security for registration of transfer, the Company, the Trustee and any agent of the Company or

the Trustee may treat the Person in whose name such Registered Security is registered as the owner of such Security for the purpose of receiving payment of principal of (and premium or Make-Whole Amount, if any), and (subject to Sections 305 and 307) interest on, such Registered Security and for all other purposes whatsoever, whether or not such Registered Security be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary. All such payments so made to any such Person, or upon such Person's order, shall be valid, and, to the extent of the sum or sums so paid, effectual to satisfy and discharge the liability for money payable upon any such Security.

Title to any Bearer Security and any coupons appertaining thereto shall pass by delivery. The Company, the Trustee and any agent of the Company or the Trustee may treat the Holder of any Bearer Security and the Holder of any coupon as the absolute owner of such Security or coupon for the purpose of receiving payment thereof or on account thereof and for all other purposes whatsoever, whether or not such Security or coupon be overdue, and neither the Company, the Trustee nor any agent of the Company or the Trustee shall be affected by notice to the contrary.

No holder of any beneficial interest in any Global Security held on its behalf by a depository shall have any rights under this Indenture with respect to such Global Security and such depository (which is the Holder of such security) shall be treated by the Company, the Trustee, and any agent of the Company or the Trustee as the owner of such Global Security for all purposes whatsoever. None of the Company, the Trustee, any Paying Agent or the Security Registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests of a Global Security or for maintaining, supervising or reviewing any records relating to such beneficial ownership interests.

Notwithstanding the foregoing, with respect to any Global Security, nothing herein shall prevent the Company, the Trustee, or any agent of the Company or the Trustee, from giving effect to any written certification, proxy or other authorization furnished by any depository, as a Holder, with respect to such Global Security or impair, as between such depository and owners of beneficial interests in such Global Security, the operation of customary practices governing the exercise of the rights of such depository (or its nominee) as Holder of such Global Security.

SECTION 309. Cancellation. All Securities and coupons surrendered for payment, redemption, repayment at the option of the Holder, registration of transfer or conversion or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee, and any such Securities and coupons and Securities and coupons surrendered directly to the Trustee for any such purpose, upon direction by the Company, shall be promptly cancelled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly cancelled by the Trustee. If the Company shall so acquire any of the Securities, however, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are surrendered to the

Trustee for cancellation. No Securities shall be authenticated in lieu of or in exchange for any Securities cancelled as provided in this Section, except as expressly permitted by this Indenture. Cancelled Securities and coupons held by the Trustee shall be disposed of by the Trustee in accordance with its customary practices (subject to the record retention requirements of the Exchange Act).

SECTION 310. Computation of Interest. Except as otherwise specified as contemplated by Section 301 with respect to Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year consisting of twelve 30-day months.

SECTION 311. CUSIP Numbers. The Company in issuing the Securities may use "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption as a convenience to Holders; provided, however, that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Securities or as contained in any notice of a redemption and that reliance may be placed only on the other identification numbers printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers. The Company will promptly notify the Trustee of any change in the "CUSIP" numbers.

ARTICLE FOUR — SATISFACTION AND DISCHARGE

SECTION 401. Satisfaction and Discharge of Indenture. This Indenture shall upon Company Request cease to be of further effect with respect to any series of Securities specified in such Company Request (except as to any surviving rights of registration of transfer or conversion or exchange of Securities of such series herein expressly provided for), and the Trustee, upon receipt of a Company Order, and at the expense of the Company, shall execute instruments in form and substance satisfactory to the Trustee and the Company acknowledging satisfaction and discharge of this Indenture as to such series when

(1) either

(A) all Securities of such series theretofore authenticated and delivered and all coupons, if any, appertaining thereto (other than (i) coupons appertaining to Bearer Securities surrendered for exchange for Registered Securities and maturing after such exchange, whose surrender is not required or has been waived as provided in Section 305, (ii) Securities and coupons of such series which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 306, (iii) coupons appertaining to Securities called for redemption and maturing after the relevant Redemption Date, whose surrender has been waived as provided in Section 1106, and (iv) Securities and coupons of such series for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 1003) have been delivered to the Trustee for cancellation; or

(B) all Securities of such series and, in the case of (i) or (ii) below, any coupons appertaining thereto not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

(ii) will become due and payable at their Stated Maturity within one year, or

(iii) if redeemable at the option of the Company, are to be called for redemption within one year under arrangements satisfactory to the Trustee for the giving of notice of redemption by the Trustee in the name, and at the expense, of the Company,

and the Company, in the case of (i), (ii) or (iii) above, has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose an amount in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable, sufficient to pay and discharge the entire indebtedness on such Securities and such coupons not theretofore delivered to the Trustee for cancellation, for principal (and premium or Make-Whole Amount, if any) and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

(2) the Company has paid or caused to be paid all other sums payable hereunder by the Company; and

(3) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent herein provided for relating to the satisfaction and discharge of this Indenture as to such series have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee and any predecessor Trustee under Section 606, the obligations of the Company to any Authenticating Agent under Section 611 and, if money shall have been deposited with and held by the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 402 and the last paragraph of Section 1003 shall survive such satisfaction and discharge.

SECTION 402. Application of Trust Funds. Subject to the provisions of the last paragraph of Section 1003, all money deposited with the Trustee pursuant to Section 401 shall be held in trust and applied by it, in accordance with the provisions of the Securities, the coupons and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the principal (and premium or Make-Whole Amount, if any), and any interest for whose payment such money has been deposited with or received by the Trustee, but such money need not be segregated from other funds except to the extent required by law.

ARTICLE FIVE — REMEDIES

SECTION 501. Events of Default. “Event of Default,” wherever used herein with respect to any particular series of Securities, means any one of the following events (whatever the reason for such Event of Default and whether or not it shall be voluntary or involuntary or be effected by operation of law or pursuant to any judgment, decree or order of any court or any order, rule or regulation of any administrative or governmental body):

(1) default in the payment of any interest on any Security of that series or of any coupon appertaining thereto, when such interest or coupon becomes due and payable, and continuance of such default for a period of 30 days; or

(2) default in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of that series when it becomes due and payable at its Maturity; or

(3) default in the deposit of any sinking fund payment, to the extent applicable to such series of Securities, when and as due by the terms of any Security of that series; or

(4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture with respect to any Security of that series (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of a series of Securities other than that series), and continuance of such default or breach for a period of 60 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities of that series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a “Notice of Default” hereunder; or

(5) default under any bond, debenture, note, mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any indebtedness for money borrowed by the Company (or by any Subsidiary, the repayment of which the Company has guaranteed or for which the Company is directly responsible or liable as obligor or guarantor), having an aggregate principal amount outstanding of at least \$75,000,000, whether such indebtedness now exists or shall hereafter be created, which default shall have resulted in such indebtedness becoming or being declared due and payable prior to the date on which it would otherwise have become due and payable, without such indebtedness having been discharged, or such acceleration having been rescinded or annulled, within a period of 30 days after there shall have been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 10% in principal amount of the Outstanding Securities of that series a written notice specifying such default and requiring the Company to cause such indebtedness to be discharged or cause such acceleration to be rescinded or annulled and stating that such notice is a “Notice of

Default” hereunder; provided, however, that, subject to the provisions of Sections 601 and 602, the Trustee shall not be deemed to have knowledge of such default unless either (A) a Responsible Officer of the Trustee shall have knowledge of such default or (B) the Trustee shall have received written notice thereof from the Company, from any Holder, from the holder of any such indebtedness or from the trustee under any such mortgage, indenture or other instrument; or

(6) the Company or any Significant Subsidiary pursuant to or within the meaning of any Bankruptcy Law:

- (A) commences a voluntary case,
- (B) consents to the entry of an order for relief against it in an involuntary case,
- (C) consents to the appointment of a Custodian of it or for all or substantially all of its property, or
- (D) makes a general assignment for the benefit of its creditors; or

(7) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

- (A) is for relief against the Company or any Significant Subsidiary in an involuntary case,
- (B) appoints a Custodian of the Company or any Significant Subsidiary or for all or substantially all of either of its property, or
- (C) orders the liquidation of the Company or any Significant Subsidiary, and the order or decree remains unstayed and in effect for 90 days; or

(8) any other Event of Default provided with respect to Securities of that series.

As used in this Section 501, the term “Bankruptcy Law” means title 11, U.S. Code or any similar Federal or state law for the relief of debtors and the term “Custodian” means any receiver, trustee, assignee, liquidator or other similar official under any Bankruptcy Law.

SECTION 502. Acceleration of Maturity; Rescission and Annulment. If an Event of Default with respect to Securities of any series at the time Outstanding occurs and is continuing, then and in every such case the Trustee or the Holders of not less than 25% in principal amount of the Outstanding Securities of that series may declare the principal amount (or, if Securities of that Series are Original Issue Discount Securities or Indexed Securities, such portion of the principal as may be specified in the terms thereof) of all the Securities of that series to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by the Holders), and upon any such declaration such principal or specified portion thereof shall become immediately due and payable.

At any time after such a declaration of acceleration with respect to Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the Trustee as hereinafter in this Article provided, the Holders of a majority in principal amount of the Outstanding Securities of that series, by written notice to the Company and the Trustee, may rescind and annul such declaration of acceleration and its consequences if:

(1) the Company has paid or deposited with the Trustee a sum sufficient to pay in the currency, currency unit or composite currency in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series):

(A) all overdue installments of interest on all Outstanding Securities of that series and any related coupons,

(B) the principal of (and premium or Make-Whole Amount, if any, on) any Outstanding Securities of that series which have become due otherwise than by such declaration of acceleration and interest thereon at the rate or rates borne by or provided for in such Securities,

(C) to the extent that payment of such interest is lawful, interest upon overdue installments of interest at the rate or rates borne by or provided for in such Securities, and

(D) all sums paid or advanced by the Trustee hereunder and the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel; and

(2) all Events of Default with respect to Securities of that series, other than the nonpayment of the principal of (or premium or Make-Whole Amount, if any) or interest on Securities of that series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 513.

No such rescission shall affect any subsequent default or impair any right consequent thereon.

SECTION 503. Collection of Indebtedness and Suits for Enforcement by Trustee. The Company covenants that if:

(1) default is made in the payment of any installment of interest on any Security of any series and any related coupon when such interest becomes due and payable and such default continues for a period of 30 days, or

(2) default is made in the payment of the principal of (or premium or Make-Whole Amount, if any, on) any Security of any series at its Maturity,

then the Company will, upon demand of the Trustee, pay to the Trustee, for the benefit of the Holders of such Securities of such series and coupons, the whole amount then due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and

interest, with interest upon any overdue principal (and premium or Make-Whole Amount, if any) and, to the extent that payment of such interest shall be legally enforceable, upon any overdue installments of interest at the rate or rates borne by or provided for in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If the Company fails to pay such amounts forthwith upon such demand, the Trustee, in its own name and as trustee of an express trust, may institute a judicial proceeding for the collection of the sums so due and unpaid, and may prosecute such proceeding to judgment or final decree, and may enforce the same against the Company or any other obligor upon such Securities of such series and collect the moneys adjudged or decreed to be payable in the manner provided by law out of the property of the Company or any other obligor upon such Securities of such series, wherever situated.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series and any related coupons by such appropriate judicial proceedings as the Trustee shall deem necessary to protect and enforce any such rights, whether for the specific enforcement of any covenant or agreement in this Indenture or in aid of the exercise of any power granted herein, or to enforce any other proper remedy.

SECTION 504. Trustee May File Proofs of Claim. In case of the pendency of any receivership, insolvency, liquidation, bankruptcy, reorganization, arrangement, adjustment, composition or other judicial proceeding relative to the Company or any other obligor upon the Securities or the property of the Company or of such other obligor or their creditors, the Trustee (irrespective of whether the principal of the Securities of any series shall then be due and payable as therein expressed or by declaration or otherwise and irrespective of whether the Trustee shall have made any demand on the Company for the payment of overdue principal, premium or Make-Whole Amount, if any, or interest) shall be entitled and empowered, by intervention in such proceeding or otherwise:

(i) to file and prove a claim for the whole amount, or such lesser amount as may be provided for in the Securities of such series, of principal (and premium or Make-Whole Amount, if any) and interest owing and unpaid in respect of the Securities and to file such other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel) and of the Holders allowed in such judicial proceeding, and

(ii) to collect and receive any moneys or other property payable or deliverable on any such claims and to distribute the same;

and any custodian, receiver, assignee, trustee, liquidator, sequestrator (or other similar official) in any such judicial proceeding is hereby authorized by each Holder of Securities of such series and coupons to make such payments to the Trustee, and in the event that the Trustee shall consent to

the making of such payments directly to the Holders, to pay to the Trustee any amount due to it for the reasonable compensation, expenses, disbursements and advances of the Trustee and any predecessor Trustee, their agents and counsel, and any other amounts due the Trustee or any predecessor Trustee under Section 606.

Nothing herein contained shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder of a Security or coupon any plan of reorganization, arrangement, adjustment or composition affecting the Securities or coupons or the rights of any Holder thereof, or to authorize the Trustee to vote in respect of the claim of any Holder of a Security or coupon in any such proceeding.

In any proceedings brought by the Trustee (and also any proceedings involving the interpretation of any provision of this Indenture to which the Trustee shall be a party) the Trustee shall be held to represent all the Holders of the Securities, and it shall not be necessary to make any Holders of the Securities parties to any such proceedings.

SECTION 505. Trustee May Enforce Claims Without Possession of Securities or Coupons. All rights of action and claims under this Indenture or any of the Securities or coupons may be prosecuted and enforced by the Trustee without the possession of any of the Securities or coupons or the production thereof in any proceeding relating thereto, and any such proceeding instituted by the Trustee shall be brought in its own name as trustee of an express trust, and any recovery of judgment shall, after provision for the payment of the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, be for the ratable benefit of the Holders of the Securities and coupons in respect of which such judgment has been recovered.

SECTION 506. Application of Money Collected. Any money collected by the Trustee pursuant to this Article shall be applied in the following order, at the date or dates fixed by the Trustee and, in case of the distribution of such money on account of principal (or premium or Make-Whole Amount, if any) or interest, upon presentation of the Securities or coupons, or both, as the case may be, and the notation thereon of the payment if only partially paid and upon surrender thereof if fully paid:

FIRST: To the payment of all amounts due the Trustee and any predecessor Trustee under Section 606;

SECOND: To the payment of the amounts then due and unpaid upon the Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, in respect of which or for the benefit of which such money has been collected, ratably, without preference or priority of any kind, according to the aggregate amounts due and payable on such Securities and coupons for principal (and premium or Make-Whole Amount, if any) and interest, respectively; and

THIRD: To the payment of the remainder, if any, to the Company.

SECTION 507. Limitation on Suits. No Holder of any Security of any series or any related coupon shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless:

- (1) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that series;
- (2) the Holders of not less than 25% in principal amount of the Outstanding Securities of that series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default in its own name as Trustee hereunder;
- (3) such Holder or Holders have offered to the Trustee indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities to be incurred in compliance with such request;
- (4) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and
- (5) no direction inconsistent with such written request has been given to the Trustee during such 60-day period by the Holders of a majority in principal amount of the Outstanding Securities of that series;

it being understood and intended that no one or more of such Holders shall have any right in any manner whatever by virtue of, or by availing of, any provision of this Indenture to affect, disturb or prejudice the rights of any other of such Holders, or to obtain or to seek to obtain priority or preference over any other of such Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all such Holders.

SECTION 508. Unconditional Right of Holders to Receive Principal, Premium or Make-Whole Amount, if any, and Interest. Notwithstanding any other provision in this Indenture, the Holder of any Security or coupon shall have the right which is absolute and unconditional to receive payment of the principal of (and premium or Make-Whole Amount, if any) and (subject to Sections 305 and 307) interest on such Security or payment of such coupon on the respective due dates expressed in such Security or coupon (or, in the case of redemption, on the Redemption Date) and to institute suit for the enforcement of any such payment, and such rights shall not be impaired without the consent of such Holder.

SECTION 509. Restoration of Rights and Remedies. If the Trustee or any Holder of a Security or coupon has instituted any proceeding to enforce any right or remedy under this Indenture and such proceeding has been discontinued or abandoned for any reason, or has been determined adversely to the Trustee or to such Holder, then and in every such case, the Company, the Trustee and the Holders of Securities and coupons shall, subject to any determination in such proceeding, be restored severally and respectively to their former positions hereunder and thereafter all rights and remedies of the Trustee and the Holders shall continue as though no such proceeding had been instituted.

SECTION 510. Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities or coupons in the last paragraph of Section 306, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders of Securities or coupons is intended to be exclusive of any other right or remedy, and every right and remedy shall, to the extent permitted by law, be cumulative and in addition to every other right and remedy given hereunder or now or hereafter existing at law or in equity or otherwise. The assertion or employment of any right or remedy hereunder, or otherwise, shall not prevent the concurrent assertion or employment of any other appropriate right or remedy.

SECTION 511. Delay or Omission Not Waiver. No delay or omission of the Trustee or of any Holder of any Security or coupon to exercise any right or remedy accruing upon any Event of Default shall impair any such right or remedy or constitute a waiver of any such Event of Default or an acquiescence therein. Every right and remedy given by this Article or by law to the Trustee or to the Holders may be exercised from time to time, and as often as may be deemed expedient, by the Trustee or by the Holders of Securities or coupons, as the case may be.

SECTION 512. Control by Holders of Securities. The Holders of not less than a majority in principal amount of the Outstanding Securities of any series shall have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee or exercising any trust or power conferred on the Trustee with respect to the Securities of such series, provided that:

- (1) such direction shall not be in conflict with any rule of law or with this Indenture,
- (2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction, and
- (3) the Trustee need not take any action which might involve it in personal liability or be unduly prejudicial to the Holders of Securities of such series not joining therein.

Nothing in this Indenture shall impair the right of the Trustee in its discretion to take any action deemed proper by the Trustee and which is not inconsistent with such direction by Holders.

SECTION 513. Waiver of Past Defaults. The Holders of not less than a majority in principal amount of the Outstanding Securities of any series may on behalf of the Holders of all the Securities of such series and any related coupons waive any past default hereunder with respect to such series and its consequences, except a default

- (1) in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series or any related coupons, or

(2) in respect of a covenant or provision hereof which under Article Nine cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected; or

(3) in respect of a covenant or provision hereof for the benefit or protection of the Trustee, without its express written consent.

Upon any such waiver, such default shall cease to exist, and any Event of Default arising therefrom shall be deemed to have been cured, for every purpose of this Indenture; but no such waiver shall extend to any subsequent or other default or Event of Default or impair any right consequent thereon.

SECTION 514. Waiver of Usury, Stay or Extension Laws. The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

SECTION 515. Undertaking for Costs. All parties to this Indenture agree, and each Holder of any Security by his acceptance thereof shall be deemed to have agreed, that any court may in its discretion require, in any suit for the enforcement of any right or remedy under this Indenture, or in any suit against the Trustee for any action taken or omitted by it as Trustee, the filing by any party litigant in such suit of an undertaking to pay the costs of such suit, and that such court may in its discretion assess reasonable costs, including reasonable attorneys' fees and expenses, against any party litigant in such suit having due regard to the merits and good faith of the claims or defenses made by such party litigant; but the provisions of this Section shall not apply to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in principal amount of the Outstanding Securities of any series, or to any suit instituted by any Holder for the enforcement of the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security on or after the respective Stated Maturities expressed in such Security (or, in the case of redemption, on or after the Redemption Date).

ARTICLE SIX — THE TRUSTEE

SECTION 601. Notice of Defaults. Within 90 days after the occurrence of any default hereunder with respect to the Securities of any series, the Trustee shall transmit in the manner and to the extent provided in TIA Section 313(c), notice of such default hereunder known to the Trustee, unless such default shall have been cured or waived; provided, however, that, except in the case of a default in the payment of the principal of (or premium or Make-Whole Amount, if any) or interest on any Security of such series, or in the payment of any

sinking or purchase fund installment with respect to the Securities of such series, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee, or a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interests of the Holders of the Securities and coupons of such series; and provided further that in the case of any default or breach of the character specified in Section 501(4) with respect to the Securities and coupons of such series, no such notice to Holders shall be given until at least 60 days after the occurrence thereof. For the purpose of this Section, the term “default” means any event which is, or after notice or lapse of time or both would become, an Event of Default with respect to the Securities of such series.

SECTION 602. Certain Rights of Trustee. Subject to the provisions of TIA Section 315(a) through 315(d):

(1) the Trustee may conclusively rely and shall be fully protected in acting or refraining from acting upon any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, coupon or other paper or document (whether in its original or facsimile form) reasonably believed by it to be genuine and to have been signed or presented by the proper party or parties;

(2) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order (other than delivery of any Security, together with any coupons appertaining thereto, to the Trustee for authentication and delivery pursuant to Section 303 which shall be sufficiently evidenced as provided therein) and any resolution of the Board of Directors may be sufficiently evidenced by a Board Resolution;

(3) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) may, in the absence of bad faith on its part, rely upon an Officers' Certificate;

(4) the Trustee may consult with counsel of its own selection and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders of Securities of any series or any related coupons pursuant to this Indenture, unless such Holders shall have offered to the Trustee security or indemnity reasonably satisfactory to the Trustee against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;

(6) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice,

request, direction, consent, order, bond, debenture, note, coupon or other paper or document, unless requested in writing so to do by the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of any series; provided that, if the payment within a reasonable time to the Trustee of the costs, expenses or liabilities likely to be incurred by it in the making of such investigation is, in the opinion of the Trustee, not reasonably assured to the Trustee by the security afforded to it by the terms of this Indenture, the Trustee may require reasonable indemnity against such expenses or liabilities as a condition to proceeding; the reasonable expenses of every such examination shall be paid by the Holders or, if paid by the Trustee, shall be repaid by the Holders upon demand. The Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, relevant to the facts or matters that are the subject of its inquiry, personally or by agent or attorney at the expense of the Company and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation;

(7) the Trustee may execute any of the trusts or powers hereunder or perform any duties hereunder either directly or by or through agents or attorneys and the Trustee shall not be responsible for any misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder;

(8) the Trustee shall not be liable for any action taken, suffered or omitted by it in good faith and reasonably believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture;

(9) any permissive right or power available to the Trustee under this Indenture or any supplement hereto shall not be construed to be a mandatory duty or obligation;

(10) the Trustee shall not be charged with knowledge of any matter (including any default, other than as described in Section 501(1), (2) or (3)) unless and except to the extent actually known to a Responsible Officer of the Trustee or to the extent written notice thereof is received by the Trustee at the Corporate Trust Office;

(11) the Trustee shall have no liability for any inaccuracy in the books and records of, or for any actions or omissions of, DTC, Euroclear or Clearstream or any depository acting on behalf of any of them;

(12) the rights, privileges, protections, immunities and benefits given to the Trustee, including, without limitation, its right to be indemnified, are extended to, and shall be enforceable by, the Trustee in each of its capacities hereunder, and each agent, custodian and other Person employed by the Trustee to act hereunder; and

(13) the Trustee may request that the Company deliver an Officers' Certificate setting forth the names of individuals and/or titles of officers authorized at such time to take specified actions pursuant to this Indenture, which Officers' Certificate may be

signed by any person authorized to sign an Officers' Certificate, including any person specified as so authorized in any such certificate previously delivered and not superseded.

The Trustee shall not be required to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it.

Except during the continuance of an Event of Default, the Trustee undertakes to perform only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee.

SECTION 603. Not Responsible for Recitals or Issuance of Securities. The recitals contained herein and in the Securities, except the Trustee's certificate of authentication, and in any coupons shall be taken as the statements of the Company, and neither the Trustee nor any Authenticating Agent assumes any responsibility for their correctness. The Trustee makes no representations as to the validity or sufficiency of this Indenture or of the Securities or coupons, except that the Trustee represents that it is duly authorized to execute and deliver this Indenture, authenticate the Securities and perform its obligations hereunder. Neither the Trustee nor any Authenticating Agent shall be accountable for the use or application by the Company of Securities or the proceeds thereof. The Trustee shall have no responsibility with respect to any information, statement or recital in any offering prospectus or other disclosure materials prepared or distributed with respect to the Securities.

SECTION 604. May Hold Securities. The Trustee, any Paying Agent, Security Registrar, Authenticating Agent or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and coupons and, subject to TIA Sections 310(b) and 311, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Paying Agent, Security Registrar, Authenticating Agent or such other agent.

SECTION 605. Money Held in Trust. Money held by the Trustee in trust hereunder need not be segregated from other funds except to the extent required by law. The Trustee shall be under no liability for interest on any money received by it hereunder except as otherwise agreed in writing with the Company.

SECTION 606. Compensation and Reimbursement. The Company agrees:

(1) to pay to the Trustee as agreed upon in writing from time to time reasonable compensation for all services rendered by it hereunder (which compensation shall not be limited by any provision of law in regard to the compensation of a trustee of an express trust);

(2) except as otherwise expressly provided herein, to reimburse each of the Trustee and any predecessor Trustee upon its request for all reasonable expenses, and disbursements incurred by the Trustee in accordance with any provision of this Indenture

(including the reasonable compensation and the reasonable expenses and disbursements of its agents and counsel), except any such expense or disbursement as shall be determined to have been caused by its own negligence, willful misconduct or bad faith; and

(3) to indemnify each of the Trustee and any predecessor Trustee for, and to hold it harmless against, any loss, liability, claim, damage or expense incurred without negligence, willful misconduct or bad faith on its part, arising out of or in connection with the acceptance or administration of the trust or trusts hereunder, including the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

When the Trustee incurs expenses or renders services in connection with an Event of Default specified in Section 501(7) or Section 501(8), the expenses (including the reasonable charges and expenses of its counsel) and the compensation for the services are intended to constitute expenses of administration under any applicable Federal or state bankruptcy, insolvency or other similar law.

As security for the performance of the obligations of the Company under this Section, the Trustee shall have a lien for payment of the Trustee's fees and expenses prior to the Securities upon all property and funds held or collected by the Trustee as such, except funds held in trust for the payment of principal of (or premium or Make-Whole Amount, if any) or interest on particular Securities or any coupons.

The provisions of this Section shall survive the termination of this Indenture and the resignation or removal of the Trustee.

SECTION 607. Corporate Trustee Required; Eligibility; Conflicting Interests. There shall at all times be a Trustee hereunder which shall be eligible to act as Trustee under TIA Section 310(a)(1) and shall have at all times a combined capital and surplus of at least \$50,000,000 (or which shall have a combined capital and surplus of at least \$10,000,000 and whose ultimate parent holding company shall have a combined capital and surplus of at least \$50,000,000. If the Trustee publishes reports of condition at least annually, pursuant to law or the requirements of Federal, state, territorial or District of Columbia supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of the Trustee shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. If at any time the Trustee shall cease to be eligible in accordance with the provisions of this Section, it shall resign immediately in the manner and with the effect hereinafter specified in this Article. Neither the Company nor any Person directly or indirectly controlling, controlled by, or under common control with the Company shall serve as Trustee.

SECTION 608. Resignation and Removal; Appointment of Successor.

(a) No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of

appointment by the successor Trustee in accordance with the applicable requirements of Section 609.

(b) The Trustee may resign at any time with respect to the Securities of one or more series by giving written notice thereof to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(c) The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series delivered to the Trustee and to the Company. If an instrument of acceptance by a successor Trustee shall not have been delivered to the Trustee within 60 days after the giving of such notice of resignation, the resigning Trustee may petition, at the expense of the Company, any court of competent jurisdiction for the appointment of a successor Trustee.

(d) If at any time:

(1) the Trustee shall fail to comply with the provisions of TIA Section 310(b) after written request therefor by the Company or by any Holder of a Security who has been a bona fide Holder of a Security for at least six months, or

(2) the Trustee shall cease to be eligible under Section 607 and shall fail to resign after written request therefor by the Company or by any Holder of a Security who has been a bona fide Holder of a Security for at least six months, or

(3) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent or a receiver of the Trustee or of its property shall be appointed or any public officer shall take charge or control of the Trustee or of its property or affairs for the purpose of rehabilitation, conservation or liquidation,

then, in any such case, (i) the Company by or pursuant to a Board Resolution may remove the Trustee and appoint a successor Trustee with respect to all Securities, or (ii) subject to TIA Section 315(e), any Holder of a Security who has been a bona fide Holder of a Security for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

(e) If the Trustee shall resign, be removed or become incapable of acting, or if a vacancy shall occur in the office of Trustee for any cause with respect to the Securities of one or more series, the Company, by or pursuant to a Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series). If, within one year after such resignation, removal or incapability, or the occurrence of such vacancy, a successor Trustee with respect to the Securities of any series shall be appointed by Act of the Holders of a majority in principal amount of the

Outstanding Securities of such series delivered to the Company and the retiring Trustee, the successor Trustee so appointed shall, forthwith upon its acceptance of such appointment, become the successor Trustee with respect to the Securities of such series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders of Securities and accepted appointment in the manner hereinafter provided, any Holder of a Security who has been a bona fide Holder of a Security of such series for at least six months may, on behalf of himself and all others similarly situated, petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to Securities of such series.

(f) The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series in the manner provided for notices to the Holders of Securities in Section 106. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

SECTION 609. Acceptance of Appointment by Successor.

(a) In case of the appointment hereunder of a successor Trustee with respect to all Securities, every such successor Trustee so appointed shall execute, acknowledge and deliver to the Company and to the retiring Trustee an instrument accepting such appointment, and thereupon the resignation or removal of the retiring Trustee shall become effective and such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee; but, on request of the Company or the successor Trustee, such retiring Trustee shall, upon payment of its charges, execute and deliver an instrument transferring to such successor Trustee all the rights, powers and trusts of the retiring Trustee, and shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder, subject nevertheless to its claim, if any, provided for in Section 606.

(b) In case of the appointment hereunder of a successor Trustee with respect to the Securities of one or more (but not all) series, the Company, the retiring Trustee and each successor Trustee with respect to the Securities of one or more series shall execute and deliver an indenture supplemental hereto, pursuant to Article Nine hereof, wherein each successor Trustee shall accept such appointment and which (1) shall contain such provisions as shall be necessary or desirable to transfer and confirm to, and to vest in, each successor Trustee all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates, (2) if the retiring Trustee is not retiring with respect to all Securities, shall contain such provisions as shall be deemed necessary or desirable to confirm that all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series as to which the retiring Trustee is not retiring shall continue to be vested in the retiring Trustee, and (3) shall add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, it being understood that nothing herein or in such supplemental indenture shall constitute such Trustees co-trustees of the same trust and that each such Trustee shall be trustee of a trust or trusts hereunder separate and apart from any trust or

trusts hereunder administered by any other such Trustee; and upon the execution and delivery of such supplemental indenture the resignation or removal of the retiring Trustee shall become effective to the extent provided therein and each such successor Trustee, without any further act, deed or conveyance, shall become vested with all the rights, powers, trusts and duties of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee relates; but, on request of the Company or any successor Trustee, such retiring Trustee shall duly assign, transfer and deliver to such successor Trustee all property and money held by such retiring Trustee hereunder with respect to the Securities of that or those series to which the appointment of such successor Trustee relates.

(c) Upon request of any such successor Trustee, the Company shall execute any and all instruments for more fully and certainly vesting in and confirming to such successor Trustee all such rights, powers and trusts referred to in paragraph (a) or (b) of this Section 609, as the case may be.

(d) No successor Trustee shall accept its appointment unless at the time of such acceptance such successor Trustee shall be qualified and eligible under this Article.

SECTION 610. Merger, Conversion, Consolidation or Succession to Business. Any corporation into which the Trustee may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which the Trustee shall be a party, or any corporation succeeding to all or substantially all of the corporate trust business of the Trustee, shall be the successor of the Trustee hereunder, provided such corporation shall be otherwise qualified and eligible under this Article, without the execution or filing of any paper or any further act on the part of any of the parties hereto. In case any Securities or coupons shall have been authenticated, but not delivered, by the Trustee then in office, any successor by merger, conversion or consolidation to such authenticating Trustee may adopt such authentication and deliver the Securities or coupons so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities or coupons. In case any Securities or coupons shall not have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities or coupons, in either its own name or that of its predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

SECTION 611. Appointment of Authenticating Agent. At any time when any of the Securities remain Outstanding, the Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon conversion or exchange, registration of transfer or partial redemption or repayment thereof, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Any such appointment shall be evidenced by an instrument in writing signed by a Responsible Officer of the Trustee, a copy of which instrument shall be promptly furnished to the Company. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication, such reference shall be deemed to include authentication and delivery on behalf of the Trustee by an Authenticating Agent and a certificate of authentication executed on behalf

of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a bank or trust company or corporation organized and doing business and in good standing under the laws of the United States of America or of any state or the District of Columbia, authorized under such laws to act as Authenticating Agent, having a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by Federal or state authorities. If such Authenticating Agent publishes reports of condition at least annually, pursuant to law or the requirements of the aforesaid supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Authenticating Agent shall be deemed to be its combined capital and surplus as set forth in its most recent report of condition so published. In case at any time an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, provided such corporation shall be otherwise eligible under this Section, without the execution or filing of any paper or further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent for any series of Securities may at any time resign by giving written notice of resignation to the Trustee for such series and to the Company. The Trustee for any series of Securities may at any time terminate the agency of an Authenticating Agent by giving written notice of termination to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, the Trustee for such series may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment to all Holders of Securities of the series with respect to which such Authenticating Agent will serve in the manner set forth in Section 106. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent herein. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Company agrees to pay to each Authenticating Agent from time to time reasonable compensation including reimbursement of its reasonable expenses for its services under this Section, subject to Section 606.

If an appointment with respect to one or more series is made pursuant to this Section, the Securities of such series may have endorsed thereon, in addition to or in lieu of the Trustee's certificate of authentication, an alternate certificate of authentication substantially in the following form:

This is one of the Securities of the series designated therein referred to in the within-mentioned Indenture.

_____,
as Trustee

Dated: _____

By: _____
as Authenticating Agent

Dated: _____

By: _____
as Authenticating Agent

SECTION 612. Certain Duties and Responsibilities of the Trustee.

(a) With respect to the Securities of any series, except during the continuance of an Event of Default with respect to the Securities of such series:

(1) the Trustee undertakes to perform such duties and only such duties as are specifically set forth in this Indenture, and no implied covenants or obligations shall be read into this Indenture against the Trustee; and

(2) in the absence of bad faith on its part, the Trustee may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon certificates or opinions furnished to the Trustee and conforming to the requirements of this Indenture; but in the case of any such certificates or opinions which by any provision hereof are specifically required to be furnished to the Trustee, the Trustee shall be under a duty to examine the same to determine whether or not they conform to the requirements of this Indenture, but shall not be under any duty to verify the contents or accuracy thereof.

(b) In case an Event of Default with respect to the Securities of any series has occurred and is continuing, the Trustee shall, with respect to Securities of such series, exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in their exercise, as a prudent man would exercise or use under the circumstances in the conduct of his own affairs.

(c) No provision of this Indenture shall be construed to relieve the Trustee from liability for its own negligent action, its own negligent failure to act, or its own willful misconduct, except that:

(1) this Subsection shall not be construed to limit the effect of Subsection (a) of this Section;

(2) the Trustee shall not be liable for any error of judgment made in good faith by a Responsible Officer, unless it shall be proved that the Trustee was negligent in ascertaining the pertinent facts;

(3) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Holders of a majority in

principal amount of the Outstanding Securities of any series relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture with respect to the Securities of such series; and

(4) no provision of this Indenture shall require the Trustee to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder, or in the exercise of any of its rights or powers, if it shall have reasonable grounds for believing that repayment of such funds or adequate indemnity against such risk or liability is not reasonably assured to it; and, the Trustee shall be under no obligation to exercise any of its rights and powers under this Indenture at the request of any Holder, unless such Holder shall have offered to the Trustee security and indemnity satisfactory to it against any loss, liability or expense.

(d) Whether or not therein expressly so provided, every provision of this Indenture relating to the conduct or affecting the liability of or affording protection to the Trustee shall be subject to the provisions of this Section 612.

(e) The Trustee shall not be liable for interest on any money or assets held by it except to the extent the Trustee may agree in writing with the Company. Assets held in trust by the Trustee need not be segregated from other assets except to the extent required by law.

ARTICLE SEVEN — HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

SECTION 701. Disclosure of Names and Addresses of Holders. Every Holder of Securities or coupons, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any Authenticating Agent nor any Paying Agent nor any Security Registrar shall be held accountable by reason of the disclosure of any information as to the names and addresses of the Holders of Securities in accordance with TIA Section 312, regardless of the source from which such information was derived, and that the Trustee shall not be held accountable by reason of mailing any material pursuant to a request made under TIA Section 312(b).

SECTION 702. Reports by Trustee. The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required by TIA Section 313 at the times and in the manner provided by the TIA, which shall initially be not less than every twelve months commencing on _____, 20_. A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each over-the-counter market or securities exchange, if any, upon which any Securities are quoted or listed, with the Commission and with the Company. The Company will notify the Trustee when any Securities are quoted or listed on any over-the-counter market or securities exchange or delisted therefrom.

SECTION 703. Reports by Company. The Company will:

(1) file with the Trustee, within 15 days after the Company is required to file the same with the Commission, copies of the annual reports and of the information, documents and other reports (or copies of such portions of any of the foregoing as the Commission may from time to time by rules and regulations prescribe) which the Company may be required to file with the Commission pursuant to Section 13 or Section 15(d) of the Exchange Act; or, if the Company is not required to file information, documents or reports pursuant to either of such Sections, then it will file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such of the supplementary and periodic information, documents and reports which may be required pursuant to Section 13 of the Exchange Act in respect of a security quoted or listed and registered on an over-the-counter market or national securities exchange as may be prescribed from time to time in such rules and regulations;

(2) file with the Trustee and the Commission, in accordance with rules and regulations prescribed from time to time by the Commission, such additional information, documents and reports with respect to compliance by the Company with the conditions and covenants of this Indenture as may be required from time to time by such rules and regulations;

(3) transmit by mail to the Holders of Securities, within 30 days after the filing thereof with the Trustee, in the manner and to the extent provided in TIA Section 313(c), such summaries of any information, documents and reports required to be filed by the Company pursuant to paragraphs (1) and (2) of this Section as may be required by rules and regulations prescribed from time to time by the Commission; and

(4) delivery of such reports, information and documents to the Trustee is for informational purposes only and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officers' Certificates).

SECTION 704. Company to Furnish Trustee Names and Addresses of Holders. The Company will furnish or cause to be furnished to the Trustee:

(a) semiannually, not later than 15 days after the Regular Record Date for interest for each series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Registered Securities of such series as of such Regular Record Date, or if there is no Regular Record Date for interest for such series of Securities, semiannually, upon such dates as are set forth in the Board Resolution or indenture supplemental hereto authorizing such series, and

(b) at such other times as the Trustee may request in writing, within 30 days after the receipt by the Company of any such request, a list of similar form and content as of a date not more than 15 days prior to the time such list is furnished,

provided, however, that, so long as the Trustee is the Security Registrar, no such list shall be required to be furnished.

ARTICLE EIGHT — CONSOLIDATION, MERGER, SALE, LEASE OR CONVEYANCE

SECTION 801. Consolidations and Mergers of Company and Sales, Leases and Conveyances Permitted Subject to Certain Conditions. The Company may consolidate with, or sell, lease or convey all or substantially all of its assets to, or merge with or into any other corporation, provided that in any such case, (1) either the Company shall be the continuing corporation, or the successor corporation shall be a corporation organized and existing under the laws of the United States or a State thereof and such successor corporation shall expressly assume the due and punctual payment of the principal of (and premium or Make-Whole Amount, if any) and any interest on all of the Securities, according to their tenor, and the due and punctual performance and observance of all of the covenants and conditions of this Indenture to be performed by the Company by supplemental indenture, complying with Article Nine hereof, satisfactory to the Trustee, executed and delivered to the Trustee by such corporation, (2) immediately after giving effect to such transaction and treating any indebtedness which becomes an obligation of the Company or any Subsidiary as a result thereof as having been incurred by the Company or such Subsidiary at the time of such transaction, no Event of Default, and no event which, after notice or the lapse of time, or both, would become an Event of Default, shall have occurred and be continuing and (3) the Company shall have delivered to the Trustee the Officer's Certificate and Opinion of Counsel required pursuant to Section 803 below.

SECTION 802. Rights and Duties of Successor Corporation. In case of any such consolidation, merger, sale, lease or conveyance and upon any such assumption by the successor corporation, such successor corporation shall succeed to and be substituted for the Company, with the same effect as if it had been named herein as the party of the first part, and the predecessor corporation, except in the event of a lease, shall be relieved of any further obligation under this Indenture and the Securities. Such successor corporation thereupon may cause to be signed, and may issue either in its own name or in the name of the Company, any or all of the Securities issuable hereunder which theretofore shall not have been signed by the Company and delivered to the Trustee; and, upon the order of such successor corporation, instead of the Company, and subject to all the terms, conditions and limitations in this Indenture prescribed, the Trustee shall authenticate and shall deliver any Securities which previously shall have been signed and delivered by the officers of the Company to the Trustee for authentication, and any Securities which such successor corporation thereafter shall cause to be signed and delivered to the Trustee for that purpose. All the Securities so issued shall in all respects have the same legal rank and benefit under this Indenture as the Securities theretofore or thereafter issued in accordance with the terms of this Indenture as though all of such Securities had been issued at the date of the execution hereof.

In case of any such consolidation, merger, sale, lease or conveyance, such changes in phraseology and form (but not in substance) may be made in the Securities thereafter to be issued as may be appropriate.

SECTION 803. Officers' Certificate and Opinion of Counsel. Any consolidation, merger, sale, lease or conveyance permitted under Section 801 is also subject to the condition that the Trustee receive an Officers' Certificate and an Opinion of Counsel to the effect that any such consolidation, merger, sale, lease or conveyance, and the assumption by any successor corporation, complies with the provisions of this Article and that all conditions precedent herein provided for relating to such transaction have been complied with.

ARTICLE NINE — SUPPLEMENTAL INDENTURES

SECTION 901. Supplemental Indentures Without Consent of Holders. Without the consent of any Holders of Securities or coupons, the Company, when authorized by or pursuant to a Board Resolution, and the Trustee, at any time and from time to time, may enter into one or more indentures supplemental hereto, in form satisfactory to the Trustee, for any of the following purposes:

(1) to evidence the succession of another Person to the Company and the assumption by any such successor of the covenants of the Company contained herein and in the Securities; or

(2) to add to the covenants of the Company for the benefit of the Holders of all or any series of Securities (and if such covenants are to be for the benefit of less than all series of Securities, stating that such covenants are expressly being included solely for the benefit of such series) or to surrender any right or power herein conferred upon the Company; or

(3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such Events of Default are to be for the benefit of less than all series of Securities, stating that such Events of Default are expressly being included solely for the benefit of such series); provided, however, that in respect of any such additional Events of Default such supplemental indenture may provide for a particular period of grace after default (which period may be shorter or longer than that allowed in the case of other defaults) or may provide for an immediate enforcement upon such default or may limit the remedies available to the Trustee upon such default or may limit the right of the Holders of a majority in aggregate principal amount of that or those series of Securities to which such additional Events of Default apply to waive such default; or

(4) to add to or change any of the provisions of this Indenture to provide that Bearer Securities may be registrable as to principal, to change or eliminate any restrictions on the payment of principal of or premium or Make-Whole Amount, if any, or interest on Bearer Securities, to permit Bearer Securities to be issued in exchange for Registered Securities, to permit Bearer Securities to be issued in exchange for Bearer Securities of other authorized denominations or to permit or facilitate the issuance of Securities in uncertificated form, provided that any such action shall not adversely affect

the interests of the Holders of Securities of any series or any related coupons in any material respect; or

(5) to change or eliminate any of the provisions of this Indenture, provided that any such change or elimination shall become effective only when there is no Security Outstanding of any series created prior to the execution of such supplemental indenture which is entitled to the benefit of such provision; or

(6) to secure the Securities; or

(7) to establish the form or terms of Securities of any series and any related coupons as permitted or contemplated by Sections 201 and 301; or

(8) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee; or

(9) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture which shall not be inconsistent with the provisions of this Indenture, provided such provisions shall not adversely affect the interests of the Holders of Securities of any series or any related coupons in any material respect; or

(10) to supplement any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the Defeasance and discharge of any series of Securities pursuant to Sections 401, 1402 and 1403; provided that any such action shall not adversely affect the interests of the Holders of Securities of such series and any related coupons or any other series of Securities in any material respect; or

(11) to make provisions with respect to Holders' rights of conversion with respect to any series of Securities pursuant to Article Seventeen.

SECTION 902. Supplemental Indentures with Consent of Holders. With the consent of the Holders of not less than a majority in principal amount of all Outstanding Securities affected by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by or pursuant to a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities and any related coupons under this Indenture; provided, however, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby:

(1) change the Stated Maturity of the principal of (or premium or Make-Whole Amount, if any, on) or any installment of principal of or interest on, any Security;

or reduce the principal amount thereof or the rate or amount of interest thereon, or any premium or Make-Whole Amount payable upon the redemption thereof, or reduce the amount of the principal of an Original Issue Discount Security that would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 502 or the amount thereof provable in bankruptcy pursuant to Section 504, or adversely affect any right of repayment at the option of the Holder of any Security, or change any Place of Payment where, or the currency or currencies, currency unit or units or composite currency or currencies in which, any Security or any premium or Make-Whole Amount or the interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption or repayment at the option of the Holder, on or after the Redemption Date or the Repayment Date, as the case may be), or (if Securities of such series are convertible) adversely affect the right of the Holder to convert any Security as provided in Article Seventeen, or modify the provisions of this Indenture with respect to the subordination of the Securities in a manner materially adverse to the Holders; or

(2) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver with respect to such series (or compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture, or reduce the requirements of Section 1504 for quorum or voting, or

(3) modify any of the provisions of this Section, Section 513 or Section 1009, except to increase the required percentage to effect such action or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby, provided, however, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to “the Trustee” and concomitant changes in this Section 902 and Section 1009, or the deletion of this proviso, in accordance with the requirements of Sections 609(b) and 901(11).

It shall not be necessary for any Act of Holders under this Section 902 to approve the particular form of any proposed supplemental indenture, but it shall be sufficient if such Act shall approve the substance thereof.

A supplemental indenture which changes or eliminates any covenant or other provision of this Indenture which has expressly been included solely for the benefit of one or more particular series of Securities, or which modifies the rights of the Holders of Securities of such series with respect to such covenant or other provision, shall be deemed not to affect the rights under this Indenture of the Holders of Securities of any other series.

SECTION 903. Execution of Supplemental Indentures. In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modification thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 612) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by

this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

SECTION 904. Effect of Supplemental Indentures. Upon the execution of any supplemental indenture under this Article, this Indenture shall be modified in accordance therewith, and such supplemental indenture shall form a part of this Indenture for all purposes; and every Holder of Securities theretofore or thereafter authenticated and delivered hereunder and of any coupon appertaining thereto shall be bound thereby.

SECTION 905. Conformity with Trust Indenture Act. Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act as then in effect.

SECTION 906. Reference in Securities to Supplemental Indentures. Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall, if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series.

ARTICLE TEN — COVENANTS

SECTION 1001. Payment of Principal, Premium or Make-Whole Amount, if any; and Interest. The Company covenants and agrees for the benefit of the Holders of each series of Securities that it will duly and punctually pay the principal of (and premium or Make-Whole Amount, if any) and interest on the Securities of that series in accordance with the terms of such series of Securities, any coupons appertaining thereto and this Indenture. Unless otherwise specified as contemplated by Section 301 with respect to any series of Securities, any interest due on Bearer Securities on or before Maturity shall be payable only upon presentation and surrender of the several coupons for such interest installments as are evidenced thereby as they severally mature. Unless otherwise specified with respect to Securities of any series pursuant to Section 301, at the option of the Company (upon written notice to the Trustee), all payments of principal may be paid by check to the registered Holder of the Registered Security or other Person entitled thereto against surrender of such Security.

SECTION 1002. Maintenance of Office or Agency. If Securities of a series are issuable only as Registered Securities, the Company shall maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment or conversion, where Securities of that series may be surrendered for registration of transfer or conversion or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. If

Securities of a series are issuable as Bearer Securities, the Company will maintain: (A) in the Borough of Manhattan, The City of New York, an office or agency where any Registered Securities of that series may be presented or surrendered for payment or conversion, where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange, where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served and where Bearer Securities of that series and related coupons may be presented or surrendered for payment or conversion in the circumstances described in the following paragraph (and not otherwise); (B) subject to any laws or regulations applicable thereto, in a Place of Payment for that series which is located outside the United States, an office or agency where Securities of that series and related coupons may be presented and surrendered for payment; provided, however, that if the Securities of that series are listed on any stock exchange located outside the United States and such stock exchange shall so require, the Company will maintain a Paying Agent for the Securities of that series in any required city located outside the United States, as the case may be, so long as the Securities of that series are listed on such exchange; and (C) subject to any laws or regulations applicable thereto, in a Place of Payment for that series located outside the United States an office or agency where any Registered Securities of that series may be surrendered for registration of transfer, where Securities of that series may be surrendered for conversion or exchange and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of each such office or agency. If at any time the Company shall fail to maintain any such required office or agency or shall fail to furnish the Trustee with the address thereof, such presentations, surrenders, notices and demands may be made or served at the Corporate Trust Office of the Trustee, except that Bearer Securities of that series and the related coupons may be presented and surrendered for payment or conversion at the offices specified in the Security, in London, England, and the Company hereby appoints the same as its agent to receive such respective presentations, surrenders, notices and demands, and the Company hereby appoints the Trustee its agent to receive all such presentations, surrenders, notices and demands.

Unless otherwise specified with respect to any Securities pursuant to Section 301, no payment of principal, premium or Make-Whole Amount or interest on Bearer Securities shall be made at any office or agency of the Company in the United States or by check mailed to any address in the United States or by transfer to an account maintained with a bank located in the United States; provided, however, that, if the Securities of a series are payable in Dollars, payment of principal of and any premium or Make-Whole Amount and interest on any Bearer Security shall be made at the office of the Company's Paying Agent in the Borough of Manhattan, The City of New York, if (but only if) payment in Dollars of the full amount of such principal, premium or Make-Whole Amount, or interest, as the case may be, at all offices or agencies outside the United States maintained for the purpose by the Company in accordance with this Indenture, is illegal or effectively precluded by exchange controls or other similar restrictions.

The Company may from time to time designate one or more other offices or agencies (in or outside the Place of Payment) where the Securities of one or more series may be presented or surrendered for any or all of such purposes, and may from time to time rescind such designations; provided, however, that no such designation or rescission shall in any manner

relieve the Company of its obligation to maintain an office or agency in accordance with the requirements set forth above for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee of any such designation or rescission and of any change in the location of any such other office or agency. Unless otherwise specified with respect to any Securities pursuant to Section 301 with respect to a series of Securities, the Company hereby designates as a Place of Payment for each series of Securities, each of (i) the office or agency of the Company in the Borough of Manhattan, The City of New York, and (ii) the Corporate Trust Office of the Trustee (as Paying Agent); and the Company hereby initially appoints the Trustee at its Corporate Trust Office as Paying Agent in such city; and the Company hereby initially appoints as its agent to receive all such presentations, surrenders, notices and demands each of the Trustee, at its Corporate Trust Office.

Unless otherwise specified with respect to any Securities pursuant to Section 301, if and so long as the Securities of any series (i) are denominated in a Foreign Currency or (ii) may be payable in a Foreign Currency, or so long as it is required under any other provision of the Indenture, then the Company will maintain with respect to each such series of Securities, or as so required, at least one exchange rate agent (of which it shall give written notice to the Trustee).

SECTION 1003. Money for Securities Payments to Be Held in Trust. If the Company shall at any time act as its own Paying Agent with respect to any series of any Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any of the Securities of that series, segregate and hold in trust for the benefit of the Persons entitled thereto a sum in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided, and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities and any related coupons, it will, on or before each due date of the principal of (and premium or Make-Whole Amount, if any), or interest on any Securities of that series, deposit with a Paying Agent a sum (in the currency or currencies, currency unit or units or composite currency or currencies described in the preceding paragraph) sufficient to pay the principal (and premium or Make-Whole Amount, if any) or interest so becoming due, such sum to be held in trust for the benefit of the Persons entitled to such principal, premium or Make-Whole Amount, if any, or interest and (unless such Paying Agent is the Trustee) the Company will promptly notify the Trustee of its action or failure so to act.

The Company will cause each Paying Agent for any series of Securities other than the Trustee to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent will

(1) hold all sums held by it for the payment of principal of (and premium or Make-Whole Amount, if any) or interest on Securities in trust for the benefit of the

Persons entitled thereto until such sums shall be paid to such Persons or otherwise disposed of as herein provided;

(2) give the Trustee notice of any default by the Company (or any other obligor upon the Securities) in the making of any such payment of principal (and premium or Make-Whole Amount, if any) or interest on the Securities of that series; and

(3) at any time during the continuance of any such default upon the written request of the Trustee, forthwith pay to the Trustee all sums so held in trust by such Paying Agent.

The Company may at any time, for the purpose of obtaining the satisfaction and discharge of this Indenture or for any other purpose, pay, or by Company Order direct any Paying Agent to pay, to the Trustee all sums held in trust by the Company or such Paying Agent, such sums to be held by the Trustee upon the same trusts as those upon which such sums were held by the Company or such Paying Agent; and, upon such payment by any Paying Agent to the Trustee, such Paying Agent shall be released from all further liability with respect to such sums.

Except as otherwise provided in the Securities of any series, and subject to applicable laws, any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of (and premium or Make-Whole Amount, if any) or interest on any Security of any series and remaining unclaimed for two years after such principal (and premium or Make-Whole Amount, if any) or interest has become due and payable shall be paid to the Company upon Company Request or (if then held by the Company) shall be discharged from such trust; and the Holder of such Security shall thereafter, as an unsecured general creditor, look only to the Company for payment of such principal of (and premium or Make-Whole Amount, if any) or interest on any Security, without interest thereon, and all liability of the Trustee or such Paying Agent with respect to such trust money, and all liability of the Company as trustee thereof, shall thereupon cease; provided, however, that the Trustee or such Paying Agent, before being required to make any such repayment, may at the expense of the Company cause to be published once, in an Authorized Newspaper, notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid to the Company.

SECTION 1004. Existence. Subject to Article Eight, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its corporate existence, all material rights (by certificate of incorporation, by-laws and statute) and material franchises; provided, however, that the Company shall not be required to preserve any such right or franchise if the Board of Directors shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company.

SECTION 1005. Maintenance of Properties. The Company will cause all of its material properties used or useful in the conduct of its business or the business of any Subsidiary to be maintained and kept in good condition, repair and working order, normal wear and tear, casualty and condemnation excepted, and supplied with all necessary equipment and will cause to be made all necessary repairs, renewals, replacements, betterments and improvements thereof

(and the Company may take out of service for a period of time, any of its properties that have been condemned or suffered any loss due to casualty in order to make such repairs, betterments and improvements), all as in the judgment of the Company may be necessary so that the business carried on in connection therewith may be properly and advantageously conducted at all times; provided, however, that the Company and its Subsidiaries shall not be prevented from (i) removing permanently any property that has been condemned or suffered a loss due to casualty based on the Company's reasonable judgment that such removal is in the best interest of the Company, or (ii) selling or otherwise disposing of their properties for value in the ordinary course of business.

SECTION 1006. Insurance. The Company will cause each of its and its Subsidiaries' insurable properties to be insured against loss or damage in an amount deemed reasonable by the Board of Directors with insurers of recognized responsibility.

SECTION 1007. Payment of Taxes and Other Claims. The Company will pay or discharge or cause to be paid or discharged, before the same shall become delinquent, (1) all taxes, assessments and governmental charges levied or imposed upon it or any Subsidiary or upon the income, profits or property of the Company or any Subsidiary, and (2) all lawful claims for labor, materials and supplies which, if unpaid, might by law become a lien upon the property of the Company or any Subsidiary; provided, however, that the Company shall not be required to pay or discharge or cause to be paid or discharged any such tax, assessment, charge or claim whose amount, applicability or validity is being contested in good faith by appropriate proceedings.

SECTION 1008. Statement as to Compliance. The Company will deliver to the Trustee, within 120 days after the end of each fiscal year, a brief certificate from the principal executive officer, principal financial officer or principal accounting officer as to his or her knowledge of the Company's compliance with all conditions and covenants under this Indenture and, in the event of any noncompliance, specifying such noncompliance and the nature and status thereof. For purposes of this Section 1008, such compliance shall be determined without regard to any period of grace or requirement of notice under this Indenture.

SECTION 1009. Waiver of Certain Covenants. The Company may omit in any particular instance to comply with any term, provision or condition set forth in Sections 1004 to 1008, inclusive, if before or after the time for such compliance the Holders of at least a majority in principal amount of all outstanding Securities of such series, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such covenant or condition, but no such waiver shall extend to or affect such covenant or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

ARTICLE ELEVEN — REDEMPTION OF SECURITIES

SECTION 1101. Applicability of Article. Securities of any series which are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article.

SECTION 1102. Election to Redeem; Notice to Trustee. The election of the Company to redeem any Securities shall be evidenced by or pursuant to a Board Resolution. In case of any redemption at the election of the Company of less than all of the Securities of any series, the Company shall, at least 45 days prior to the giving of the notice of redemption in Section 1104 (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee of such Redemption Date and of the principal amount of Securities of such series to be redeemed. In the case of any redemption of Securities prior to the expiration of any restriction on such redemption provided in the terms of such Securities or elsewhere in this Indenture, the Company shall furnish the Trustee with an Officers' Certificate evidencing compliance with such restriction.

SECTION 1103. Selection by Trustee of Securities to Be Redeemed. If less than all the Securities of any series issued on the same day with the same terms are to be redeemed, the particular Securities to be redeemed shall be selected not more than 60 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series issued on such date with the same terms not previously called for redemption, by such method as the Trustee shall deem fair and appropriate and which may provide for the selection for redemption of portions (equal to the minimum authorized denomination for Securities of that series or any integral multiple thereof) of the principal amount of Securities of such series of a denomination larger than the minimum authorized denomination for Securities of that series.

The Trustee shall promptly notify the Company and the Security Registrar (if other than itself) in writing of the Securities selected for redemption and, in the case of any Securities selected for partial redemption, the principal amount thereof to be redeemed.

For all purposes of this Indenture, unless the context otherwise requires, all provisions relating to the redemption of Securities shall relate, in the case of any Security redeemed or to be redeemed only in part, to the portion of the principal amount of such Security which has been or is to be redeemed.

SECTION 1104. Notice of Redemption. Notice of redemption shall be given in the manner provided in Section 106, not less than 30 days nor more than 60 days prior to the Redemption Date, unless a shorter period is specified by the terms of such series established pursuant to Section 301, to each Holder of Securities to be redeemed, but failure to give such notice in the manner herein provided to the Holder of any Security designated for redemption as a whole or in part, or any defect in the notice to any such Holder, shall not affect the validity of the proceedings for the redemption of any other such Security or portion thereof.

Any notice that is mailed to the Holders of Registered Securities in the manner herein provided shall be conclusively presumed to have been duly given, whether or not the Holder receives the notice.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price, accrued interest to the Redemption Date payable as provided in Section 1106, if any,
- (3) if less than all Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amount) of the particular Security or Securities to be redeemed,
- (4) in case any Security is to be redeemed in part only, the notice which relates to such Security shall state that on and after the Redemption Date, upon surrender of such Security, the holder will receive, without a charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed,
- (5) that on the Redemption Date the Redemption Price and accrued interest to the Redemption Date payable as provided in Section 1106, if any, will become due and payable upon each such Security, or the portion thereof, to be redeemed and, if applicable, that interest thereon shall cease to accrue on and after said date,
- (6) the Place or Places of Payment where such Securities, together in the case of Bearer Securities with all coupons appertaining thereto, if any, maturing after the Redemption Date, are to be surrendered for payment of the Redemption Price and accrued interest, if any, or for conversion,
- (7) that the redemption is for a sinking fund, if such is the case,
- (8) that, unless otherwise specified in such notice, Bearer Securities of any series, if any, surrendered for redemption must be accompanied by all coupons maturing subsequent to the date fixed for redemption or the amount of any such missing coupon or coupons will be deducted from the Redemption Price, unless security or indemnity satisfactory to the Company, the Trustee for such series and any Paying Agent is furnished,
- (9) if Bearer Securities of any series are to be redeemed and any Registered Securities of such series are not to be redeemed, and if such Bearer Securities may be exchanged for Registered Securities not subject to redemption on this Redemption Date pursuant to Section 305 or otherwise, the last date, as determined by the Company, on which such exchanges may be made,
- (10) the CUSIP number of such Security, if any, and

(11) if applicable, that a Holder of Securities who desires to convert Securities for redemption must satisfy the requirements for conversion contained in such Securities, the then existing conversion price or rate, the place or places where such Securities may be surrendered for conversion, and the date and time when the option to convert shall expire.

Notice of redemption of Securities to be redeemed at the election of the Company shall be given by the Company or, at the Company's request, by the Trustee in the name and at the expense of the Company.

SECTION 1105. Deposit of Redemption Price. On or prior to any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, which it may not do in the case of a sinking fund payment under Article Twelve, segregate and hold in trust as provided in Section 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay on the Redemption Date the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof which are to be redeemed on that date.

If any Securities called for redemption are converted, any money deposited with the Trustee or with any Paying Agent or so segregated and held in trust for the redemption of such Security shall be paid to the Company upon Company Request or, if then held by the Company, shall be discharged from such trust.

SECTION 1106. Securities Payable on Redemption Date. Notice of redemption having been given as aforesaid, the Securities so to be redeemed shall, on the Redemption Date, become due and payable at the Redemption Price therein specified in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) (together with accrued interest, if any, to the Redemption Date), and from and after such date (unless the Company shall default in the payment of the Redemption Price and accrued interest) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be redeemed, except to the extent provided below, shall be void. Upon surrender of any such Security for redemption in accordance with said notice, together with all coupons, if any, appertaining thereto maturing after the Redemption Date, such Security shall be paid by the Company at the Redemption Price, together with accrued interest, if any, to the Redemption Date; provided, however, that installments of interest on Bearer Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of coupons for such interest; and provided further that except as otherwise provided with respect to Securities convertible into the Company's Common Stock or Preferred Stock, installments of interest on Registered Securities whose Stated Maturity is on or prior to the Redemption Date shall be payable to the Holders of

such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for redemption shall not be accompanied by all appurtenant coupons maturing after the Redemption Date, such Security may be paid after deducting from the Redemption Price an amount equal to the face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made from the Redemption Price, such Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal (and premium or Make-Whole Amount, if any) shall, until paid, bear interest from the Redemption Date at the rate borne by the Security.

SECTION 1107. Securities Redeemed in Part. Any Registered Security which is to be redeemed only in part (pursuant to the provisions of this Article or of Article Twelve) shall be surrendered at a Place of Payment therefor (with, if the Company or the Trustee so requires, due endorsement by, or a written instrument of transfer in form satisfactory to the Company and the Trustee duly executed by, the Holder thereof or his attorney duly authorized in writing) and the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security without service charge a new Security or Securities of the same series, of any authorized denomination as requested by such Holder in aggregate principal amount equal to and in exchange for the unredeemed portion of the principal of the Security so surrendered. If a Global Security is so surrendered, the Company shall execute and the Trustee shall authenticate and deliver to the depository, without service charge, a new Global Security in a denomination equal to and in exchange for the unredeemed portion of the principal of the Global Security so surrendered.

ARTICLE TWELVE — SINKING FUNDS

SECTION 1201. Applicability of Article. The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of a series except as otherwise specified as contemplated by Section 301 for Securities of such series.

The minimum amount of any sinking fund payment provided for by the terms of Securities of any series is herein referred to as a “mandatory sinking fund payment,” and any payment in excess of such minimum amount provided for by the terms of such Securities of any series is herein referred to as an “optional sinking fund payment.” If provided for by the terms of any Securities of any series, the cash amount of any mandatory sinking fund payment may be

subject to reduction as provided in Section 1202. Each sinking fund payment shall be applied to the redemption of Securities of any series as provided for by the terms of Securities of such series.

SECTION 1202. Satisfaction of Sinking Fund Payments with Securities. The Company may, in satisfaction of all or any part of any mandatory sinking fund payment with respect to the Securities of a series, (1) deliver Outstanding Securities of such series (other than any previously called for redemption) together in the case of any Bearer Securities of such series with all unmatured coupons appertaining thereto and (2) apply as a credit Securities of such series which have been redeemed either at the election of the Company pursuant to the terms of such Securities or through the application of permitted optional sinking fund payments pursuant to the terms of such Securities, as provided for by the terms of such Securities, or which have otherwise been acquired by the Company; provided that such Securities so delivered or applied as a credit have not been previously so credited. Such Securities shall be received and credited for such purpose by the Trustee at the applicable Redemption Price specified in such Securities for redemption through operation of the sinking fund and the amount of such mandatory sinking fund payment shall be reduced accordingly.

SECTION 1203. Redemption of Securities for Sinking Fund. Not less than 60 days prior to each sinking fund payment date for Securities of any series, the Company will deliver to the Trustee an Officers' Certificate specifying the amount of the next ensuing mandatory sinking fund payment for that series pursuant to the terms of that series, the portion thereof, if any, which is to be satisfied by payment of cash in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) and the portion thereof, if any, which is to be satisfied by delivering and crediting Securities of that series pursuant to Section 1202, and the optional amount, if any, to be added in cash to the next ensuing mandatory sinking fund payment, and will also deliver to the Trustee any Securities to be so delivered and credited. If such Officers' Certificate shall specify an optional amount to be added in cash to the next ensuing mandatory sinking fund payment, the Company shall thereupon be obligated to pay the amount therein specified. Not less than 30 days before each such sinking fund payment date the Trustee shall select the Securities to be redeemed upon such sinking fund payment date in the manner specified in Section 1103 and cause notice of the redemption thereof to be given in the name of and at the expense of the Company in the manner provided in Section 1104. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 1106 and 1107.

ARTICLE THIRTEEN — REPAYMENT AT THE OPTION OF HOLDERS

SECTION 1301. Applicability of Article. Repayment of Securities of any series before their Stated Maturity at the option of Holders thereof shall be made in accordance with the terms of such Securities, if any, and (except as otherwise specified by the terms of such series established pursuant to Section 301) in accordance with this Article.

SECTION 1302. Repayment of Securities. Securities of any series subject to repayment in whole or in part at the option of the Holders thereof will, unless otherwise provided in the terms of such Securities, be repaid at a price equal to the principal amount thereof, together with interest, if any, thereon accrued to the Repayment Date specified in or pursuant to the terms of such Securities. The Company covenants that on or prior to the Repayment Date it will deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 1003) an amount of money in the currency or currencies, currency unit or units or composite currency or currencies in which the Securities of such series are payable (except as otherwise specified pursuant to Section 301 for the Securities of such series) sufficient to pay the principal (or, if so provided by the terms of the Securities of any series, a percentage of the principal) of, and (except if the Repayment Date shall be an Interest Payment Date) accrued interest on, all the Securities or portions thereof, as the case may be, to be repaid on such date.

SECTION 1303. Exercise of Option. Securities of any series subject to repayment at the option of the Holders thereof will contain an "Option to Elect Repayment" form on the reverse of such Securities. In order for any Security to be repaid at the option of the Holder, the Trustee must receive at the Place of Payment therefor specified in the terms of such Security (or at such other place or places of which the Company shall from time to time notify the Holders of such Securities) not earlier than 60 days nor later than 30 days prior to the Repayment Date (1) the Security so providing for such repayment together with the "Option to Elect Repayment" form on the reverse thereof duly completed by the Holder (or by the Holder's attorney duly authorized in writing) or (2) a telegram, telex, facsimile transmission or a letter from a member of a national securities exchange, or the FINRA, or a commercial bank or trust company in the United States setting forth the name of the Holder of the Security, the principal amount of the Security, the principal amount of the Security to be repaid, the CUSIP number, if any, or a description of the tenor and terms of the Security, a statement that the option to elect repayment is being exercised thereby and a guarantee that the Security to be repaid, together with the duly completed form entitled "Option to Elect Repayment" on the reverse of the Security, will be received by the Trustee not later than the fifth Business Day after the date of such telegram, telex, facsimile transmission or letter; provided, however, that such telegram, telex, facsimile transmission or letter shall only be effective if such Security and form duly completed are received by the Trustee by such fifth Business Day. If less than the entire principal amount of such Security is to be repaid in accordance with the terms of such Security, the principal amount of such Security to be repaid, in increments of the minimum denomination for Securities of such series, and the denomination or denominations of the Security or Securities to be issued to the Holder for the portion of the principal amount of such Security surrendered that is not to be repaid, must be specified. The principal amount of any Security providing for repayment at the option of the Holder thereof may not be repaid in part if, following such repayment, the unpaid principal amount of such Security would be less than the minimum authorized denomination of Securities of the series of which such Security to be repaid is a part. Except as otherwise may be provided by the terms of any Security providing for repayment at the option of the Holder thereof, exercise of the repayment option by the Holder shall be irrevocable unless waived by the Company.

SECTION 1304. When Securities Presented for Repayment Become Due and Payable. If Securities of any series providing for repayment at the option of the Holders thereof shall have been surrendered as provided in this Article and as provided by or pursuant to the terms of such Securities, such Securities or the portions thereof, as the case may be, to be repaid shall become due and payable and shall be paid by the Company on the Repayment Date therein specified, and on and after such Repayment Date (unless the Company shall default in the payment of such Securities on such Repayment Date) such Securities shall, if the same were interest-bearing, cease to bear interest and the coupons for such interest appertaining to any Bearer Securities so to be repaid, except to the extent provided below, shall be void. Upon surrender of any such Security for repayment in accordance with such provisions, together with all coupons, if any, appertaining thereto maturing after the Repayment Date, the principal amount of such Security so to be repaid shall be paid by the Company, together with accrued interest, if any, to the Repayment Date; provided, however, that coupons whose Stated Maturity is on or prior to the Repayment Date shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified pursuant to Section 301, only upon presentation and surrender of such coupons; and provided further that, in the case of Registered Securities, installments of interest, if any, whose Stated Maturity is on or prior to the Repayment Date shall be payable (but without interest thereon, unless the Company shall default in the payment thereof) to the Holders of such Securities, or one or more Predecessor Securities, registered as such at the close of business on the relevant Record Dates according to their terms and the provisions of Section 307.

If any Bearer Security surrendered for repayment shall not be accompanied by all appurtenant coupons maturing after the Repayment Date, such Security may be paid after deducting from the amount payable therefor as provided in Section 1302 an amount equal to the face amount of all such missing coupons, or the surrender of such missing coupon or coupons may be waived by the Company and the Trustee if there be furnished to them such security or indemnity as they may require to save each of them and any Paying Agent harmless. If thereafter the Holder of such Security shall surrender to the Trustee or any Paying Agent any such missing coupon in respect of which a deduction shall have been made as provided in the preceding sentence, such Holder shall be entitled to receive the amount so deducted; provided, however, that interest represented by coupons shall be payable only at an office or agency located outside the United States (except as otherwise provided in Section 1002) and, unless otherwise specified as contemplated by Section 301, only upon presentation and surrender of those coupons.

If the principal amount of any Security surrendered for repayment shall not be so repaid upon surrender thereof, such principal amount (together with interest, if any, thereon accrued to such Repayment Date) shall, until paid, bear interest from the Repayment Date at the rate of interest or Yield to Maturity (in the case of Original Issue Discount Securities) set forth in such Security.

SECTION 1305. Securities Repaid in Part. Upon surrender of any Registered Security which is to be repaid in part only, the Company shall execute and the Trustee shall authenticate and deliver to the Holder of such Security, without service charge and at the expense of the Company, a new Registered Security or Securities of the same series, of any authorized

denomination specified by the Holder, in an aggregate principal amount equal to and in exchange for the portion of the principal of such Security so surrendered which is not to be repaid.

ARTICLE FOURTEEN — DEFEASANCE AND COVENANT DEFEASANCE

SECTION 1401. Applicability of Article; Company's Option to Effect Defeasance or Covenant Defeasance. If, pursuant to Section 301, provision is made for either or both of (a) Defeasance of the Securities of or within a series under Section 1402 or (b) Covenant Defeasance of the Securities of or within a series under Section 1403, then the provisions of such Section or Sections, as the case may be, together with the other provisions of this Article (with such modifications thereto as may be specified pursuant to Section 301 with respect to any Securities), shall be applicable to such Securities and any coupons appertaining thereto, and the Company may at its option by Board Resolution, at any time, with respect to such Securities and any coupons appertaining thereto, elect to have Section 1402 (if applicable) or Section 1403 (if applicable) be applied to such Outstanding Securities and any coupons appertaining thereto upon compliance with the conditions set forth below in this Article.

SECTION 1402. Defeasance and Discharge. Upon the Company's exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be deemed to have been discharged from its obligations with respect to such Outstanding Securities and any coupons appertaining thereto on the date the conditions set forth in Section 1404 are satisfied (hereinafter, "Defeasance"). For this purpose, such Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by such Outstanding Securities and any coupons appertaining thereto, which shall thereafter be deemed to be "Outstanding" only for the purposes of Section 1405 and the other Sections of this Indenture referred to in clauses (A) and (B) below, and to have satisfied all of its other obligations under such Securities and any coupons appertaining thereto and this Indenture insofar as such Securities and any coupons appertaining thereto are concerned (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), except for the following which shall survive until otherwise terminated or discharged hereunder: (A) the rights of Holders of such Outstanding Securities and any coupons appertaining thereto to receive, solely from the trust fund described in Section 1404 and as more fully set forth in such Section, payments in respect of the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto when such payments are due, (B) the Company's obligations with respect to such Securities under Sections 305, 306, 1002 and 1003, and the Company's obligations under Section 606 hereof (C) the rights, powers, trusts, duties and immunities of the Trustee hereunder and (D) this Article. Subject to compliance with this Article Fourteen, the Company may exercise its option under this Section notwithstanding the prior exercise of its option under Section 1403 with respect to such Securities and any coupons appertaining thereto.

SECTION 1403. Covenant Defeasance. Upon the Company's exercise of the above option applicable to this Section with respect to any Securities of or within a series, the Company shall be released from its obligations under Sections 1004 to 1009, inclusive, and, if specified pursuant to Section 301, its obligations under any other covenant contained herein or in any

indenture supplemental hereto, with respect to such Outstanding Securities and any coupons appertaining thereto on and after the date the conditions set forth in Section 1404 are satisfied (hereinafter, "Covenant Defeasance"), and such Securities and any coupons appertaining thereto shall thereafter be deemed to be not "Outstanding" for the purposes of any direction, waiver, consent or declaration or Act of Holders (and the consequences of any thereof) in connection with Sections 1004 to 1009, inclusive, or such other covenant, but shall continue to be deemed "Outstanding" for all other purposes hereunder. For this purpose, such Covenant Defeasance means that, with respect to such Outstanding Securities and any coupons appertaining thereto, the Company may omit to comply with and shall have no liability in respect of any term, condition or limitation set forth in any such Section or such other covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such Section or such other covenant or by reason of reference in any such Section or such other covenant to any other provision herein or in any other document and such omission to comply shall not constitute a default or an Event of Default under Section 501(4) or 501(8) or otherwise, as the case may be, but, except as specified above, the remainder of this Indenture and such Securities and any coupons appertaining thereto shall be unaffected thereby.

SECTION 1404. Conditions to Defeasance or Covenant Defeasance. The following shall be the conditions to application of Section 1402 or Section 1403 to any Outstanding Securities of or within a series and any coupons appertaining thereto:

(a) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee satisfying the requirements of Section 607 who shall agree to comply with the provisions of this Article Fourteen applicable to it) as trust funds in trust for the purpose of making the following payments, specifically pledged as security for, and dedicated solely to, the benefit of the Holders of such Securities and any coupons appertaining thereto, (1) an amount in such currency, currencies or currency unit in which such Securities and any coupons appertaining thereto are then specified as payable at Stated Maturity, or (2) Government Obligations applicable to such Securities and coupons appertaining thereto (determined on the basis of the currency, currencies or currency unit in which such Securities and coupons appertaining thereto are then specified as payable at Stated Maturity) which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than the due date of any payment of principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Securities and any coupons appertaining thereto, money in an amount, or (3) a combination thereof, in any case, in an amount, sufficient, without consideration of any reinvestment of such principal and interest, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, to pay and discharge, and which shall be applied by the Trustee (or other qualifying trustee) to pay and discharge, (i) the principal of (and premium or Make-Whole Amount, if any) and interest, if any, on such Outstanding Securities and any coupons appertaining thereto on the Stated Maturity of such principal or installment of principal or interest and (ii) any mandatory sinking fund payments or analogous payments applicable to such Outstanding Securities and any coupons appertaining thereto on the day on which such payments are due and payable in accordance with the terms of this Indenture and of such Securities and any coupons appertaining thereto.

(b) Such Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, this Indenture or any other material agreement or instrument to which the Company is a party or by which it is bound.

(c) No Event of Default or event which with notice or lapse of time or both would become an Event of Default with respect to such Securities and any coupons appertaining thereto shall have occurred and be continuing on the date of such deposit or, insofar as Sections 501(6) and 501(7) are concerned, at any time during the period ending on the 91st day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until the expiration of such period).

(d) In the case of an election under Section 1402, the Company shall have delivered to the Trustee an Opinion of Counsel stating that (i) the Company has received from, or there has been published by, the Internal Revenue Service a ruling, or (ii) since the date of execution of this Indenture, there has been a change in the applicable Federal income tax law, in either case to the effect that, and based thereon such opinion shall confirm that, the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Defeasance had not occurred.

(e) In the case of an election under Section 1403, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such Outstanding Securities and any coupons appertaining thereto will not recognize income, gain or loss for Federal income tax purposes as a result of such Covenant Defeasance and will be subject to Federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred.

(f) The Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent to the Defeasance under Section 1402 or the Covenant Defeasance under Section 1403 (as the case may be) have been complied with and an Opinion of Counsel to the effect that either (i) as a result of a deposit pursuant to subsection (a) above and the related exercise of the Company's option under Section 1402 or Section 1403 (as the case may be), registration is not required under the Investment Company Act of 1940, as amended, by the Company, with respect to the trust funds representing such deposit or by the Trustee for such trust funds or (ii) all necessary registrations under said Act have been effected.

(g) Notwithstanding any other provisions of this Section, such Defeasance or Covenant Defeasance shall be effected in compliance with any additional or substitute terms, conditions or limitations which may be imposed on the Company in connection therewith pursuant to Section 301.

(h) The payment of amounts payable to the Trustee pursuant to this Indenture shall be paid or provided for to the reasonable satisfaction of the Trustee.

SECTION 1405. Deposited Money and Government Obligations to Be Held in Trust; Other Miscellaneous Provisions. Subject to the provisions of the last paragraph of Section 1003, all money and Government Obligations (or other property as may be provided pursuant to Section 301) (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section 1405, the "Trustee") pursuant to Section 1404 in respect of any Outstanding Securities of any series and any coupons appertaining thereto shall be held in trust and applied by the Trustee, in accordance with the provisions of such Securities and any coupons appertaining thereto and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Holders of such Securities and any coupons appertaining thereto of all sums due and to become due thereon in respect of principal (and premium or Make-Whole Amount, if any) and interest, but such money need not be segregated from other funds except to the extent required by law.

Unless otherwise specified with respect to any Security pursuant to Section 301, if, after a deposit referred to in Section 1404(a) has been made, (a) the Holder of a Security in respect of which such deposit was made is entitled to, and does, elect pursuant to Section 301 or the terms of such Security to receive payment in a currency or currency unit other than that in which the deposit pursuant to Section 1404(a) has been made in respect of such Security, or (b) a Conversion Event occurs in respect of the currency or currency unit in which the deposit pursuant to Section 1404(a) has been made, the indebtedness represented by such Security and any coupons appertaining thereto shall be deemed to have been, and will be, fully discharged and satisfied through the payment of the principal of (and premium or Make-Whole Amount, if any), and interest, if any, on such Security as the same becomes due out of the proceeds yielded by converting (from time to time as specified below in the case of any such election) the amount or other property deposited in respect of such Security into the currency or currency unit in which such Security becomes payable as a result of such election or Conversion Event based on the applicable market exchange rate for such currency or currency unit in effect on the second Business Day prior to each payment date, except, with respect to a Conversion Event, for such currency or currency unit in effect (as nearly as feasible) at the time of the Conversion Event.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the Government Obligations deposited pursuant to Section 1404 or the principal and interest received in respect thereof other than any such tax, fee or other charge which by law is for the account of the Holders of such Outstanding Securities and any coupons appertaining thereto.

Anything in this Article to the contrary notwithstanding, subject to Section 606, the Trustee shall deliver or pay to the Company from time to time upon Company Request any money or Government Obligations (or other property and any proceeds therefrom) held by it as provided in Section 1404 which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee, are in excess of the amount thereof which would then be required to be deposited to effect a Defeasance or Covenant Defeasance, as applicable, in accordance with this Article.

ARTICLE FIFTEEN — MEETINGS OF HOLDERS OF SECURITIES

SECTION 1501. Purposes for Which Meetings May Be Called. A meeting of Holders of Securities of any series may be called at any time and from time to time pursuant to this Article to make, give or take any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be made, given or taken by Holders of Securities of such series.

SECTION 1502. Call, Notice and Place of Meetings.

(a) The Trustee may at any time call a meeting of Holders of Securities of any series for any purpose specified in Section 1501, to be held at such time and at such place as the Trustee shall determine. Notice of every meeting of Holders of Securities of any series, setting forth the time and the place of such meeting and in general terms the action proposed to be taken at such meeting, shall be given, in the manner provided in Section 106, not less than 20 nor more than 180 days prior to the date fixed for the meeting.

(b) In case at any time the Company, pursuant to a Board Resolution, or the Holders of at least 25% in principal amount of the Outstanding Securities of any series shall have requested the Trustee to call a meeting of the Holders of Securities of such series for any purpose specified in Section 1501, by written request setting forth in reasonable detail the action proposed to be taken at the meeting, and the Trustee shall not have made the first publication of the notice of such meeting within 20 days after receipt of such request or shall not thereafter proceed to cause the meeting to be held as provided herein, then the Company or the Holders of Securities of such series in the amount above specified, as the case may be, may determine the time and the place for such meeting and may call such meeting for such purposes by giving notice thereof as provided in subsection (a) of this Section.

SECTION 1503. Persons Entitled to Vote at Meetings. To be entitled to vote at any meeting of Holders of Securities of any series, a Person shall be (1) a Holder of one or more Outstanding Securities of such series, or (2) a Person appointed by an instrument in writing as proxy for a Holder or Holders of one or more Outstanding Securities of such series by such Holder or Holders. The only Persons who shall be entitled to be present or to speak at any meeting of Holders of Securities of any series shall be the Persons entitled to vote at such meeting and their counsel, any representatives of the Trustee and its counsel and any representatives of the Company and its counsel.

SECTION 1504. Quorum; Action. The Persons entitled to vote a majority in principal amount of the Outstanding Securities of a series shall constitute a quorum for a meeting of Holders of Securities of such series; provided, however, that if any action is to be taken at such meeting with respect to a consent or waiver which this Indenture expressly provides may be given by the Holders of not less than a specified percentage in principal amount of the Outstanding Securities of a series, the Persons entitled to vote such specified percentage in principal amount of the Outstanding Securities of such series shall constitute a quorum. In the absence of a quorum within 30 minutes after the time appointed for any such meeting, the

meeting shall, if convened at the request of Holders of Securities of such series, be dissolved. In any other case the meeting may be adjourned for a period of not less than 10 days as determined by the chairman of the meeting prior to the adjournment of such meeting. In the absence of a quorum at the reconvening of any such adjourned meeting, such adjourned meeting may be further adjourned for a period of not less than 10 days; at the reconvening of any meeting adjourned or further adjourned for lack of a quorum, the Persons entitled to vote 25% in aggregate principal amount of the then Outstanding Securities shall constitute a quorum for the taking of any action set forth in the notice of the original meeting. Notice of the reconvening of any adjourned meeting shall be given as provided in Section 1502(a), except that such notice need be given only once not less than five days prior to the date on which the meeting is scheduled to be reconvened.

Except as limited by the proviso to Section 902, any resolution presented to a meeting or adjourned meeting duly reconvened at which a quorum is present as aforesaid may be adopted by the affirmative vote of the Persons entitled to vote a majority in aggregate principal amount of the Outstanding Securities represented at such meeting; provided, however, that, except as limited by the proviso to Section 902, any resolution with respect to any request, demand, authorization, direction, notice, consent, waiver or other action which this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage, which is less than a majority, in principal amount of the Outstanding Securities of a series may be adopted at a meeting or an adjourned meeting duly reconvened and at which a quorum is present as aforesaid by the affirmative vote of the Holders of such specified percentage in principal amount of the Outstanding Securities of that series.

Any resolution passed or decision taken at any meeting of Holders of Securities of any series duly held in accordance with this Section shall be binding on all the Holders of Securities of such series and the related coupons, whether or not present or represented at the meeting.

Notwithstanding the foregoing provisions of this Section 1504, if any action is to be taken at a meeting of Holders of Securities of any series with respect to any request, demand, authorization, direction, notice, consent, waiver or other action that this Indenture expressly provides may be made, given or taken by the Holders of a specified percentage in principal amount of all Outstanding Securities affected thereby, or of the Holders of such series and one or more additional series:

(i) there shall be no minimum quorum requirement for such meeting; and

(ii) the principal amount of the Outstanding Securities of such series that vote in favor of such request, demand, authorization, direction, notice, consent, waiver or other action shall be taken into account in determining whether such request, demand, authorization, direction, notice, consent, waiver or other action has been made, given or taken under this Indenture.

SECTION 1505. Determination of Voting Rights; Conduct and Adjournment of Meetings.

(a) Notwithstanding any provisions of this Indenture, the Trustee may make such reasonable regulations as it may deem advisable for any meeting of Holders of Securities of a series in regard to proof of the holding of Securities of such series and of the appointment of proxies and in regard to the appointment and duties of inspectors of votes, the submission and examination of proxies, certificates and other evidence of the right to vote, and such other matters concerning the conduct of the meeting as it shall deem appropriate. Except as otherwise permitted or required by any such regulations, the holding of Securities shall be proved in the manner specified in Section 104 and the appointment of any proxy shall be proved in the manner specified in Section 104 or by having the signature of the Person executing the proxy witnessed or guaranteed by any trust company, bank or banker authorized by Section 104 to certify to the holding of Bearer Securities. Such regulations may provide that written instruments appointing proxies, regular on their face, may be presumed valid and genuine without the proof specified in Section 104 or other proof.

(b) The Trustee shall, by an instrument in writing appoint a temporary chairman of the meeting, unless the meeting shall have been called by the Company or by Holders of Securities as provided in Section 1502(b), in which case the Company or the Holders of Securities of the series calling the meeting, as the case may be, shall in like manner appoint a temporary chairman. A permanent chairman and a permanent secretary of the meeting shall be elected by vote of the Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting.

(c) At any meeting each Holder of a Security of such series or proxy shall be entitled to one vote for each \$1,000 principal amount of the Outstanding Securities of such series held or represented by him; provided, however, that no vote shall be cast or counted at any meeting in respect of any Security challenged as not Outstanding and ruled by the chairman of the meeting to be not Outstanding. The chairman of the meeting shall have no right to vote, except as a Holder of a Security of such series or proxy.

(d) Any meeting of Holders of Securities of any series duly called pursuant to Section 1502 at which a quorum is present may be adjourned from time to time by Persons entitled to vote a majority in principal amount of the Outstanding Securities of such series represented at the meeting, and the meeting may be held as so adjourned without further notice.

SECTION 1506. Counting Votes and Recording Action of Meetings. The vote upon any resolution submitted to any meeting of Holders of Securities of any series shall be by written ballots on which shall be subscribed the signatures of the Holders of Securities of such series or of their representatives by proxy and the principal amounts and serial numbers of the Outstanding Securities of such series held or represented by them. The permanent chairman of the meeting shall appoint two inspectors of votes who shall count all votes cast at the meeting for or against any resolution and who shall make and file with the secretary of the meeting their verified written reports in duplicate of all votes cast at the meeting. A record, at least in duplicate, of the proceedings of each meeting of Holders of Securities of any Series shall be prepared by the secretary of the meeting and there shall be attached to said record the original reports of the inspectors of votes on any vote by ballot taken thereat and affidavits by one or more persons having knowledge of the fact, setting forth a copy of the notice of the meeting and

showing that said notice was given as provided in Section 1502 and, if applicable, Section 1504. Each copy shall be signed and verified by the affidavits of the permanent chairman and secretary of the meeting and one such copy shall be delivered to the Company and another to the Trustee to be preserved by the Trustee, the latter to have attached thereto the ballots voted at the meeting. Any record so signed and verified shall be conclusive evidence of the matters therein stated.

ARTICLE SIXTEEN — SUBORDINATION OF SECURITIES

SECTION 1601. Agreement to Subordinate. Notwithstanding anything in this Indenture to the contrary (other than Article Four of this Indenture), the Company covenants and agrees, and each Holder of a Security, by his acceptance thereof, likewise covenants and agrees, that, to the extent and in the manner hereinafter set forth in this Article, the Indebtedness represented by the Securities and the payment of any Obligations with respect to each and all of the Securities are hereby expressly made subordinate and subject in right of payment to the prior payment in full of all Senior Indebtedness.

SECTION 1602. Payment Over of Proceeds upon Dissolution, Etc. In the event of (a) any insolvency or bankruptcy case or Proceeding, or any receivership, liquidation, reorganization or other similar case or Proceeding in connection therewith, relative to the Company or to its creditors, as such, or to its assets, or (b) any liquidation, dissolution or other winding up of the Company, whether voluntary or involuntary and whether or not involving insolvency or bankruptcy, or (c) any assignment for the benefit of creditors or any other marshaling of assets and liabilities of the Company, then and in any such event specified in (a), (b) or (c) above (each such event, if any, herein sometimes referred to as a "Proceeding")

(1) the holders of Senior Indebtedness shall first be entitled to receive payment in full of all Obligations due or to become due on or in respect of all Senior Indebtedness, or provision shall be made for such payment in cash or cash equivalents or otherwise in a manner satisfactory to the holders of Senior Indebtedness, before the Holders of the Securities are entitled to receive any payment or distribution on account of principal of or premium, if any, or interest on or other Obligations in respect of the Securities or on account of any purchase, redemption or other acquisition of Securities by the Company or any Subsidiary (individually and collectively, a "Securities Payment"), and

(2) any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities (other than Capital Stock or securities of the Company as reorganized or readjusted, or securities of the Company or any other corporation provided for by a plan of reorganization or readjustment, the payment of which is subordinate, at least to the extent provided in this Article Sixteen with respect to the Securities, to the payment in full, without diminution or modification by such plan, of all Senior Indebtedness), to which the Holders would be entitled except for the provisions of this Article Sixteen, shall be paid by the liquidating trustee or agent or other person making such a payment or distribution, directly to the holders of Senior Indebtedness) (or their representative(s) or trustee(s) acting on their behalf), ratably according to the

aggregate amounts remaining unpaid on account of the principal of or interest on and other amounts due on the Senior Indebtedness held or represented by each, to the extent necessary to make payment in full of all Senior Indebtedness remaining unpaid, after giving effect to any concurrent payment or distribution to the holders of such Senior Indebtedness.

In the event that, notwithstanding the foregoing provisions of this Section 1602, the Trustee or the Holder of any Security shall have received any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities (other than Capital Stock or securities of the Company as reorganized or readjusted, or securities of the Company or any other corporation provided for by a plan of reorganization or readjustment, the payment of which is subordinate, at least to the extent provided in this Article with respect to the Securities, to the payment in full, without diminution or modification by such plan, of Senior Indebtedness), before all Senior Indebtedness is paid in full or payment thereof provided for in cash or cash equivalents or otherwise in a manner satisfactory to the holders of Senior Indebtedness, such payment or distribution shall be held in trust for the benefit of, and be paid over to, the holders of the Senior Indebtedness remaining unpaid (or their representative(s) or trustee(s) acting on their behalf), ratably as aforesaid, for application to the payment of such Senior Indebtedness until such Senior Indebtedness shall have been paid in full, after giving effect to any concurrent payment or distribution to the holders of such Senior Indebtedness.

The consolidation of the Company with, or the merger of the Company into, another Person or the liquidation or dissolution of the Company following the conveyance or transfer of all or substantially all of its properties and assets as an entirety to another Person upon the terms and conditions set forth in Article Eight shall not be deemed a Proceeding for the purposes of this Section 1602 if the Person formed by such consolidation or into which the Company is merged or the Person which acquires by conveyance or transfer such properties and assets as an entirety, as the case may be, shall, as a part of such consolidation, merger, conveyance or transfer, comply with the conditions set forth in Article Eight.

SECTION 1603. No Payment When Senior Indebtedness in Default. Anything in this Indenture to the contrary notwithstanding, no payment on account of principal of or redemption of, interest on or other amounts due on the Securities, and no redemption, purchase, or other acquisition of the Securities, shall be made by or on behalf of the Company (i) unless full payment of amounts then due for principal and interest and of all other obligations then due on all Senior Indebtedness has been made or duly provided for pursuant to the terms of the instrument governing such Senior Indebtedness, (ii) if, at the time of such payment, redemption, purchase or other acquisition, or immediately after giving effect thereto, there shall exist under any Senior Indebtedness, or any agreement pursuant to which any Senior Indebtedness is issued, any default, which default shall not have been cured or waived and which default shall have resulted in the full amount of such Senior Indebtedness being declared due and payable or (iii) if, at the time of such payment, redemption, purchase or other acquisition, the Trustee shall have received written notice from the holder or holders of any Senior Indebtedness or their representative or representatives (a "Payment Blockage Notice") that there exists under such Senior Indebtedness, or any agreement pursuant to which such Senior Indebtedness is issued, any default, which default shall not have been cured or waived, permitting the holders thereof to

declare the full amount of such Senior Indebtedness due and payable, but only for the period (the "Payment Blockage Period") commencing on the date of receipt of the Payment Blockage Notice and ending (unless earlier terminated by notice given to the Trustee by the Holders of such Senior Indebtedness) on the earlier of (A) the date on which such event of default shall have been cured or waived or (B) 180 days from the receipt of the Payment Blockage Notice. Upon termination of a Payment Blockage Period, payments on account of principal of or interest on the Securities and redemptions, purchases or other acquisitions may be made by or on behalf of the Company. Notwithstanding anything herein to the contrary, (A) only one Payment Blockage Notice may be given during any period of 360 consecutive days with respect to the same event of default and any other events of default on the same issue of Senior Indebtedness existing and known to the person giving such notice at the time of such notice and (B) no new Payment Blockage Period may be commenced by the holder or holders of the same issue of Senior Indebtedness or their representative or representatives during any period of 360 consecutive days unless all events of default which were the object of the immediately preceding Payment Blockage Notice, and any other event of default on the same issue of Senior Indebtedness existing and known to the person giving such notice at the time of such notice, have been cured or waived.

In the event that, notwithstanding the provisions of this Section 1603, payments are made by or on behalf of the Company in contravention of the provisions of this Section 1603, such payments shall be held by the Trustee, any Paying Agent or the Holders, as applicable, in trust for the benefit of, and shall be paid over to and delivered to, the holders of Senior Indebtedness or their representative or the trustee under the indenture or other agreement (if any), pursuant to which any instruments evidencing any Senior Indebtedness may have been issued, as their respective interests may appear, for application to the payment of all Senior Indebtedness remaining unpaid to the extent necessary to pay all Senior Indebtedness in full in accordance with the terms of such Senior Indebtedness, after giving effect to any concurrent payment or distribution to or for the holders of Senior Indebtedness.

The provisions of this Section shall not apply to any payment with respect to which Section 1602 would be applicable.

SECTION 1604. Reliance by Senior Indebtedness on Subordination Provisions. Each Holder of any Security by his acceptance thereof acknowledges and agrees that the foregoing subordination provisions are, and are intended to be, an inducement and a consideration for each holder of any Senior Indebtedness, whether such Senior Indebtedness was created or acquired before or after the issuance of the Securities, to acquire and continue to hold, or to continue to hold, such Senior Indebtedness, and such holder of Senior Indebtedness shall be deemed conclusively to have relied on such subordination provisions in acquiring and continuing to hold or in continuing to hold such Senior Indebtedness.

SECTION 1605. Subrogation to Rights of Holders of Senior Indebtedness. Subject to the payment in full of all Obligations due or to become due on or in respect of Senior Indebtedness, or the provision for such payment in cash or cash equivalents or otherwise in a manner satisfactory to the holders of Senior Indebtedness, the Holders of the Securities shall be subrogated to the extent of the payments or distributions made to the holders of such Senior

Indebtedness pursuant to the provisions of this Article Sixteen to the rights of the holders of such Senior Indebtedness to receive payments and distributions of cash, property and securities applicable to the Senior Indebtedness until the principal of and premium, if any, and interest on the Securities shall be paid in full. For purposes of such subrogation, no payments or distributions to the holders of the Senior Indebtedness of any cash, property or securities to which the Holders of the Securities or the Trustee would be entitled except for the provisions of this Article Sixteen, and no payments over pursuant to the provisions of this Article Sixteen to the holders of Senior Indebtedness by Holders of the Securities or the Trustee, shall, as among the Company, its creditors other than holders of Senior Indebtedness and the Holders of the Securities, be deemed to be a payment or distribution by the Company to or on account of the Senior Indebtedness.

SECTION 1606. Provisions Solely to Define Relative Rights. The provisions of this Article Sixteen are and are intended solely for the purpose of defining the relative rights of the Holders of the Securities on the one hand and the holders of Senior Indebtedness on the other hand. Nothing contained in this Article or elsewhere in this Indenture or in the Securities is intended to or shall (a) impair, as among the Company, its creditors other than holders of Senior Indebtedness and the Holders of the Securities, the obligation of the Company, which is absolute and unconditional (and which, subject to the rights under this Article Sixteen of the holders of Senior Indebtedness, is intended to rank equally with all other general obligations of the Company), to pay to the Holders of the Securities the principal of and premium, if any, and interest on the Securities as and when the same shall become due and payable in accordance with their terms; or (b) affect the relative rights against the Company of the Holders of the Securities and creditors of the Company other than the holders of Senior Indebtedness; or (c) prevent the Trustee or the Holder of any Security from exercising all remedies otherwise permitted by applicable law upon default under this Indenture, subject to the rights, if any, under this Article of the holders of Senior Indebtedness to receive cash, property and securities otherwise payable or deliverable to the Trustee or such Holder.

SECTION 1607. Trustee to Effectuate Subordination. Each Holder of a Security by his acceptance thereof authorizes and directs the Trustee on his behalf to take such action as may be necessary or appropriate to effectuate, as between the Holders of the Securities and the holders of Senior Indebtedness, the subordination provided in this Article Sixteen and appoints the Trustee his attorney-in-fact for any and all such purposes, including, in the event of any dissolution, winding up or liquidation or reorganization under any applicable bankruptcy law of the Company (whether in bankruptcy, insolvency or receivership Proceedings or otherwise), the timely filing of a claim for the unpaid balance of such Holder's Securities in the form required in such Proceedings and the causing of such claim to be approved. If the Trustee does not file a claim or proof of debt in the form required in such Proceedings prior to 30 days before the expiration of the time to file such claims or proofs, then the holders of Senior Indebtedness, jointly, or their representatives shall have the right to file an appropriate claim for and on behalf of the Holders and to demand, sue for, collect, receive and receipt for the payments and distributions in respect of the Securities which are required to be paid or delivered to the holders of Senior Indebtedness as provided in this Article Sixteen and to take all such other action in the name of the Holders or otherwise, as such holder of Senior Indebtedness or representative

thereof may determine to be necessary or appropriate for the enforcement of the provisions of this Article Sixteen.

SECTION 1608. No Waiver of Subordination Provisions. No right of any present or future holder of any Senior Indebtedness to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act on the part of the Company or by any act or failure to act, in good faith, by any such holder or any representative or trustee therefor, or by any non-compliance by the Company with the terms, provisions and covenants of this Indenture, regardless of any knowledge thereof any such holder may have or be otherwise charged with.

Without in any way limiting the generality of the foregoing paragraph, the holders of Senior Indebtedness may, at any time from time to time, without the consent of or notice to the Trustee or the Holders of the Securities, without incurring responsibility to the Holders of the Securities and without impairing or releasing the subordination provided in this Article Sixteen or the obligations hereunder of the Holders of the Securities to the holders of Senior Indebtedness, do any one or more of the following: (i) change the manner, place or terms of payment or extend the time of payment of, or renew or alter, Senior Indebtedness, or otherwise amend or supplement in any manner Senior Indebtedness or any instrument evidencing the same or any agreement under which Senior Indebtedness is outstanding; (ii) sell, exchange, release or otherwise deal with any property pledged, mortgaged or otherwise securing Senior Indebtedness; (iii) release any Person liable in any manner for the collection of Senior Indebtedness and settle or compromise Senior Indebtedness (which, to the extent so settled and compromised, shall be deemed to have been paid in full for all purposes hereof); (iv) apply any amounts received to any liability of the Company owing to holders of Senior Indebtedness; and (v) exercise or refrain from exercising any rights against the Company and any other Person.

SECTION 1609. Notice to Trustee. The Company shall give prompt written notice to the Trustee of any default or event of default with respect to any Senior Indebtedness or of any fact known to the Company which would prohibit the making of any payment to or by the Trustee in respect of the Securities pursuant to the provisions of this Article Sixteen. Notwithstanding the provisions of this Article Sixteen or any other provision of this Indenture, the Trustee shall not be charged with knowledge of the existence of any facts which would prohibit the making of any payment to or by the Trustee in respect of the Securities, unless and until the Trustee shall have received written notice thereof from the Company or a holder of Senior Indebtedness or from any representative or trustee acting on their behalf; and, prior to the receipt of any such written notice, the Trustee, subject to the provisions of Section 612, shall be entitled in all respects to assume that no such facts exist; provided, however, that if the Trustee shall not have received the notice provided for in this Section at least three Business Days prior to the date upon which by the terms hereof any money may become payable for any purpose (including, without limitation, the payment of the principal of and premium, if any, or interest on any Security), then, anything herein contained to the contrary notwithstanding, the Trustee shall have full power and authority to receive such money and to apply the same to the purpose for which such money was received and shall not be affected by any notice to the contrary which may be received by it within three Business Days prior to such date. Nothing contained in this Article Sixteen or any other Article of this Indenture or in any of the Securities shall prevent (a)

the Company, at any time except during the pendency of any Proceeding, or under the conditions described in Section 1603, from making payments at any time in respect of the Securities, or (b) the application by the Trustee of any money deposited with it hereunder to the payment of or on account of the Securities, or the retention thereof by any Holder, if the Trustee did not have notice, as provided in this Section 1609, that such payment would have been prohibited by the provisions of this Article Sixteen.

Subject to the provisions of Section 612, the Trustee shall be entitled to rely on the delivery to it of a written notice by a Person representing himself to be a holder of Senior Indebtedness (or a representative or trustee therefor) to establish that such notice has been given by a holder of Senior Indebtedness (or a trustee therefor). In the event that the Trustee determines in good faith that further evidence is required with respect to the right of any Person as a holder of Senior Indebtedness to participate in any payment or distribution pursuant to this Article Sixteen, the Trustee may request such Person to furnish evidence to the reasonable satisfaction of the Trustee as to the amount of Senior Indebtedness held by such Person, the extent to which such Person is entitled to participate in such payment or distribution and any other facts pertinent to the rights of such Person under this Article Sixteen, and if such evidence is not furnished, the Trustee may defer any payment to such Person pending judicial determination as to the right of such Person to receive such payment.

SECTION 1610. Reliance on Judicial Order or Certificate of Liquidating Agent. Upon any payment or distribution of assets of the Company referred to in this Article Sixteen, the Trustee, subject to the provisions of Section 612, and the Holders of the Securities shall be entitled to rely upon any order or decree entered by any court of competent jurisdiction in which any Proceeding is pending, or a certificate of the trustee in bankruptcy, receiver, liquidating trustee, custodian, assignee for the benefit of creditors, agent or other Person making such payment or distribution, delivered to the Trustee or to the Holders of Securities, for the purpose of ascertaining the Persons entitled to participate in such payment or distribution, the holders of the Senior Indebtedness and other indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article.

SECTION 1611. Trustee Not Fiduciary for Holders of Senior Indebtedness. The Trustee shall not be deemed to owe any fiduciary duty to the holders of Senior Indebtedness. Nothing contained in this Article Sixteen or elsewhere in this Indenture, or in any of the Securities, shall prevent the application by the Trustee of any moneys which were deposited with it hereunder, prior to its receipt of written notice of facts which would prohibit such application, for the purpose of the payment of or on account of the principal of or interest on, the Securities unless, prior to the date on which such application is made by the Trustee, the Trustee shall be charged with notice under Section 1609 hereof of the facts which would prohibit the making of such application.

SECTION 1612. Rights of Trustee as Holder of Senior Indebtedness; Preservation of Trustee's Rights. The Trustee in its individual capacity shall be entitled to all the rights set forth in this Article Sixteen with respect to any Senior Indebtedness which may at any time be held by it, to the same extent as any other holder of Senior Indebtedness, and nothing in this

Indenture shall deprive the Trustee of any of its rights as such holder. Nothing in this Article shall apply to claims of, or payments to, the Trustee under or pursuant to Section 606.

SECTION 1613. Article Applicable to Paying Agents. In case at any time any Paying Agent other than the Trustee shall have been appointed by the Company and be then acting hereunder, the term "Trustee" as used in this Article Sixteen shall in such case (unless the context otherwise requires) be construed as extending to and including such Paying Agent within its meaning as fully for all intents and purposes as if such Paying Agent were named in this Article in addition to or in place of the Trustee; provided, however, that Section 1612 shall not apply to the Company or any Affiliate of the Company if it or such Affiliate acts as Paying Agent.

ARTICLE SEVENTEEN — CONVERSION OF SECURITIES

SECTION 1701. Applicability of Article; Conversion Privilege and Conversion Price. Securities of any series which are convertible shall be convertible in accordance with their terms and (except as otherwise specified as contemplated by Section 301 for Securities of any series) in accordance with this Article Seventeen. Subject to and upon compliance with the provisions of this Article Seventeen, at any time during the period specified in the Securities, at the option of the Holder thereof, any Security or any portion of the principal amount thereof which is \$1,000 or an integral multiple of \$1,000 may be converted at the principal amount thereof, or of such portion thereof, into fully paid and nonassessable shares (calculated as to each conversion to the nearest 1/100 of a share) of Common Stock of the Company, at the Conversion Price, determined as hereinafter provided, in effect at the time of conversion. In case a Security or portion thereof is called for redemption, such conversion right in respect of the Security or portion so called shall expire at the close of business on the Business Day immediately preceding the Redemption Date, unless the Company defaults in making the payment due upon redemption, in which case such conversion right shall terminate on the date such default is cured.

The price at which shares of Common Stock shall be delivered upon conversion (herein called the "Conversion Price") of Securities of any series shall be specified in such Securities. The Conversion Price shall be adjusted in certain instances as provided in Section 1704.

In case the Company shall, by dividend or otherwise, declare or make a distribution on its Common Stock referred to in paragraph (4) of Section 1704, the Holder of each Security, upon the conversion thereof pursuant to this Article Seventeen subsequent to the close of business on the date fixed for the determination of stockholders entitled to receive such distribution and prior to the effectiveness of the Conversion Price adjustment in respect of such distribution pursuant to paragraph (4) of Section 1704, shall be entitled to receive for each share of Common Stock into which such Security is converted, the portion of the evidence of indebtedness, shares of Capital Stock or assets so distributed applicable to one share of Common Stock; provided, however, that, at the election of the Company (whose election shall be evidenced by a Board Resolution filed with the Trustee) with respect to all Holders so converting, the Company may, in lieu of distributing to such Holder any portion of such distribution not consisting of cash or securities of the Company, pay such Holder an amount in cash equal to the fair market value thereof (as

determined in good faith by the Board of Directors, whose determination shall be conclusive and described in a Board Resolution filed with the Trustee). If any conversion of a Security entitled to the benefits described in the immediately preceding sentence occurs prior to the payment date for a distribution to holders of Common Stock which the Holder of the Security so converted is entitled to receive in accordance with the immediately preceding sentence, the Company may elect (such election to be evidenced by a Board Resolution filed with the Trustee) to distribute to such Holder a due bill for the evidences of indebtedness, shares of Capital Stock or assets to which such Holder is so entitled, provided that such due bill (i) meets any applicable requirements of the principal over-the-counter market or national securities exchange or other market on which the Common Stock is then traded, and (ii) requires payment or delivery of such evidences of indebtedness or assets no later than the date of payment or delivery thereof to holders of Common Stock receiving such distribution.

SECTION 1702. Exercise of Conversion Privilege. In order to exercise the conversion privilege, the Holder of any Security to be converted shall surrender such Security, duly endorsed or assigned to the Company or in blank, at any office or agency maintained by the Company pursuant to Section 1002, accompanied by written notice to the Company at such office or agency that the Holder elects to convert such Security or, if less than the entire principal amount thereof is to be converted, the portion thereof to be converted and shall comply with any additional requirements set forth in such Security. Securities surrendered for conversion during the period from the close of business on any Regular Record Date next preceding any Interest Payment Date to the opening of business on such Interest Payment Date shall (except for Securities the Maturity of which is prior to such Interest Payment Date) be accompanied by payment in funds acceptable to the Company of an amount equal to the interest payable on such Interest Payment Date on the principal amount of Securities being surrendered for conversion and such interest shall be paid on such Interest Payment Date as provided in Section 307. Except as provided in the preceding sentence, no payment or adjustment shall be made upon any conversion on account of any interest accrued on the Securities surrendered for conversion or on account of any dividends on the Common Stock issued upon conversion.

The Company's delivery to the Holder of the fixed number of shares of the Common Stock of the Company (and any cash in lieu of any fractional share of Common Stock) into which the Security is convertible shall be deemed to satisfy the Company's obligation to pay the principal amount of the Security and all accrued interest and original issue discount that has not previously been paid. The shares of Common Stock of the Company so delivered shall be treated as issued first in payment of accrued interest and original issue discount and then in payment of principal. Thus, accrued interest and original issue discount shall be treated as paid, rather than canceled, extinguished or forfeited.

Securities shall be deemed to have been converted immediately prior to the close of business on the day of surrender of such Securities for conversion in accordance with the foregoing provisions, and at such time the rights of the Holders of such Securities as Holders shall cease, and the Person or Persons entitled to receive the Common Stock issuable upon conversion shall be treated for all purposes as the record holder or holders of such Common Stock at such time. As promptly as practicable on or after the conversion date, the Company shall issue and shall deliver at such office or agency a certificate or certificates for the number of

full shares of Common Stock issuable upon conversion, together with payment in lieu of any fraction of a share, as provided in Section 1703.

In the case of any Security which is converted in part only, as promptly as practicable on or after the conversion date the Company shall execute and the Trustee shall authenticate and make available for delivery to the Holder thereof (or the Depository in the case of a Global Security), at the expense of the Company, a new Security or Securities, of authorized denominations in aggregate principal amount equal to the unconverted portion of the principal amount of such Security.

SECTION 1703. Fractions of Shares. No fractional shares of Common Stock shall be issued upon conversion of Securities. If more than one Security shall be surrendered for conversion at one time by the same Holder, the number of full shares of Common Stock which shall be issuable upon conversion thereof shall be computed on the basis of the aggregate principal amount of the Securities (or specified portions thereof) so surrendered. Instead of any fractional share of Common Stock which would otherwise be issuable upon conversion of any Security or Securities (or specified portions thereof), the Company shall pay a cash adjustment (rounded to the nearest cent) in respect of such fraction in an amount equal to the same fraction of the Closing Price per share of the Common Stock on the day of conversion (or, if such day is not a Trading Day, on the Trading Day immediately preceding such day).

SECTION 1704. Adjustment of Conversion Price. The Conversion Price shall be subject to adjustment from time to time as follows:

(1) If the Company pays or makes a dividend or other distribution (a) on its Common Stock exclusively in Common Stock or (b) on any other class of Capital Stock of the Company, which dividend or distribution includes Common Stock of the Company, the Conversion Price in effect at the opening of business on the day following the date fixed for the determination of stockholders entitled to receive such dividend or other distribution (the "Dividend Record Date") shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Dividend Record Date and the denominator shall be the sum of such number of shares and the total number of shares constituting such dividend or other distribution. Such reduction shall become effective immediately after the opening of business on the day following the date fixed for such determination. For the purposes of this paragraph (1), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock. The Company shall not pay any dividend or make any distribution on shares of Common Stock held in the treasury of the Company.

(2) Subject to paragraph (6) of this Section, if the Company pays or makes a dividend or other distribution on its Common Stock consisting exclusively of Short Term Rights (as defined below), or otherwise issues Short Term Rights to all holders of its Common Stock, the Conversion Price in effect at the opening of business on the day

following the record date for the determination of holders of Common Stock entitled to receive such Short Term Rights (the "Rights Record Date") shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of shares of Common Stock of the Company which the aggregate of the offering price of the total number of shares of Common Stock so offered for subscription or purchase would purchase at such current market price and the denominator shall be the number of shares of Common Stock of the Company outstanding at the close of business on the Rights Record Date plus the number of shares of Common Stock so offered for subscription or purchase. Such reduction shall become effective immediately after the opening of business on the day following the Rights Record Date. For the purposes of this paragraph (2), the number of shares of Common Stock of the Company at any time outstanding shall not include shares held in the treasury of the Company, but shall include shares issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock of the Company. The Company shall not issue any rights, options or warrants in respect of shares of its Common Stock held in the treasury of the Company. When used in this Section 1704, the term "Short Term Rights" shall mean rights, warrants or options entitling the holders thereof (for a period commencing no earlier than the Rights Record Date and expiring not more than 45 days after the Rights Record Date) to subscribe for or purchase shares of Common Stock of the Company at a price per share less than the current market price per share (determined as provided in paragraph (7) of this Section 1704) of the Common Stock of the Company on the Rights Record Date.

(3) In case outstanding shares of Common Stock of the Company shall be subdivided into a greater number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such subdivision becomes effective shall be proportionately reduced, and, conversely, in case outstanding shares of Common Stock of the Company shall be combined into a smaller number of shares of Common Stock, the Conversion Price in effect at the opening of business on the day following the day upon which such combination becomes effective shall be proportionately increased, such reduction or increase, as the case may be, to become effective immediately after the opening of business on the day following the day upon which such subdivision or combination becomes effective.

(4) Subject to the last sentence of this paragraph (4) of this Section, if the Company, by dividend or otherwise, (a) distributes to all holders of its Common Stock evidences of its indebtedness, shares of any class of Capital Stock of the Company or other assets (other than cash dividends out of current or retained earnings), or (b) distributes to substantially all holders of Common Stock rights or warrants to subscribe for securities (other than Short Term Rights to which paragraph (2) of this Section 1704 applies), the Conversion Price shall be reduced by multiplying such Conversion Price by a fraction of which the numerator shall be the current market price per share (determined as provided in paragraph (7) of this Section 1704) of the Common Stock of the Company on the Reference Date (as defined below) less the fair market value (as determined in good faith by the Board of Directors, whose determination shall be conclusive and described in a Board Resolution filed with the Trustee), on the

Reference Date, of the portion of the evidences of indebtedness and other assets so distributed or of such subscription rights or warrants applicable to one share of Common Stock (collectively, the “Market Value of the Distribution”) and the denominator shall be such current market price per share of the Common Stock of the Company. Such reduction shall become effective immediately prior to the opening of business on the day (the “Reference Date”) following the later of (a) the date fixed for the payment of such distribution and (b) the date 20 days after notice relating to such distribution is required to be given pursuant to Section 1706(a). If the Board of Directors determines the fair market value of any distribution for purposes of this paragraph (4) by reference to the actual or when issued trading market for any securities comprising such distribution, it must in doing so consider the prices in such market over the same period used in computing the current market price per share pursuant to paragraph (7) of this Section 1704. In the event that, with respect to any distribution to which this paragraph (4) of Section 1704 would otherwise apply, the Market Value of the Distribution is greater than the current market price per share of the Common Stock (such distribution being referred to herein as an “Unadjusted Distribution”), then the adjustment provided by this paragraph (4) shall not be made and in lieu thereof the provisions of Section 1711 shall apply with respect to such Unadjusted Distribution.

(5) The Company may, but shall not be required to, make such reductions in the Conversion Price, in addition to those required by paragraphs (1), (2), (3), and (4) of this Section 1704, as it considers to be advisable in order that any event treated for federal income tax purposes as a dividend of stock or stock rights shall not be taxable to the recipients. In addition, the Company, from time to time, may decrease the Conversion Price by any amount and for any reason, temporarily or otherwise, including situations where the Board of Directors determines such decrease to be fair and appropriate with respect to transactions in which holders of Common Stock have the right to participate.

(6) Rights or warrants issued or distributed by the Company to all holders of its Common Stock entitling the holders thereof to subscribe for or purchase shares of Common Stock or Preferred Stock, which rights or warrants (i) are deemed to be transferred with such shares of Common Stock, (ii) are not exercisable and (iii) are also issued or distributed in respect of future issuances of Common Stock, in each case in clauses (i) through (iii) until the occurrence of a specified event or events (“Trigger Events”), shall for purposes of this Section 1704 not be deemed issued or distributed until the occurrence of the earliest Trigger Event. Each share of Common Stock issued upon conversion of Securities pursuant to this Article Seventeen shall be entitled to receive the appropriate number of Common Stock purchase rights (the “Rights”), if any, and the certificates representing the Common Stock issued upon conversion shall bear such legends, if any. Notwithstanding anything to the contrary in this Article Seventeen, there shall not be any adjustment to the Conversion Price as a result of (i) the distribution of separate certificates representing the Rights; (ii) the occurrence of certain events entitling holders of Rights to receive, upon exercise thereof, Common Stock or other securities of the Company or other securities of another corporation; or (iii) the exercise of such Rights. No adjustment in the Conversion Price need be made for rights to purchase or the

sale of Common Stock pursuant to a Company plan providing for reinvestment of dividends or interest.

(7) For the purpose of any computation under paragraph (2), (4) or (5) of this Section 1704, the “current market price” per share of Common Stock of the Company on any date shall be deemed to be the average of the daily Closing Prices for the 15 consecutive Trading Days selected by the Company commencing not more than 30 Trading Days before, and ending not later than, the date in question.

(8) No adjustment in the Conversion Price shall be required unless such adjustment would require an increase or decrease of at least 1% in the Conversion Price; provided, however, that any adjustments which by reason of this paragraph (8) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Article Seventeen shall be made to the nearest cent or to the nearest one-hundredth of a share of Common Stock, as the case may be.

(9) Anything herein to the contrary notwithstanding, in the event the Company shall declare any dividend or distribution requiring an adjustment in the Conversion Price hereunder and shall, thereafter and before the payment of such dividend or distribution to stockholders, legally abandon its plan to pay such dividend or distribution, the Conversion Price then in effect hereunder, if changed to reflect such dividend or distribution, shall upon the legal abandonment of such plan be changed to the Conversion Price which would have been in effect at the time of such abandonment (after giving effect to all other adjustments not so legally abandoned pursuant to the provisions of this Article Seventeen) had such dividend or distribution never been declared.

(10) Notwithstanding any other provision of this Section 1704, no adjustment to the Conversion Price shall reduce the Conversion Price below the then par value per share of the Common Stock of the Company, and any such purported adjustment shall instead reduce the Conversion Price to such par value. Notwithstanding the foregoing sentence, the Company hereby covenants that it will from time to time take all such action as may be required to assure that the par value per share of the Common Stock is at all times equal to or less than the Conversion Price.

(11) In the event that this Article Seventeen requires adjustments to the Conversion Price under more than one of paragraphs (1), (2), (3) or (4) of this Section 1704, and the record or effective dates for the transaction giving rise to such adjustments shall occur on the same date, then such adjustments shall be made by applying (to the extent they are applicable), first, the provisions of paragraph (3) of this Section 1704, second, the provisions of paragraph (1) of this Section 1704, third, the provisions of paragraph (4) of this Section 1704 and, fourth, the provisions of paragraph (2) of this Section 1704. Anything herein to the contrary notwithstanding, no single event shall require or result in duplicative adjustments in the Conversion Price pursuant to this Section 1704. After an adjustment to the Conversion Price under this Article Seventeen, any subsequent event requiring an adjustment under this Article Seventeen shall cause an adjustment to the Conversion Price as so adjusted. If, after an adjustment, a Holder of a Security upon conversion of such Security receives shares of two or more classes of

Capital Stock of the Company, the Conversion Price shall thereafter be subject to adjustment upon the occurrence of an action taken with respect to any such class of Capital Stock as is contemplated by this Article Seventeen with respect to the Common Stock in this Article Seventeen.

SECTION 1705. Notice of Adjustments of Conversion Price. Whenever the Conversion Price is adjusted as herein provided:

(1) the Company shall compute the adjusted Conversion Price in accordance with Section 1704 or Section 1711 and shall prepare an Officer's Certificate setting forth the adjusted Conversion Price and showing in reasonable detail the facts upon which such adjustment is based, and such certificate shall forthwith be filed (with a copy to the Trustee) at each office or agency maintained for the purpose of conversion of any Securities pursuant to Section 1002; and

(2) a notice stating that the Conversion Price has been adjusted and setting forth the adjusted Conversion Price shall forthwith be required, and as soon as practicable after it is required, such notice shall be mailed by the Company to all Holders at their last addresses as they shall appear in the Security Register.

SECTION 1706. Notice of Certain Corporate Action. In case:

(1) the Company shall take any action that would require a Conversion Price adjustment pursuant to Section 1704 or Section 1711; or

(2) there shall occur any reclassification of the Common Stock of the Company (other than a subdivision or combination of its outstanding shares of Common Stock), or any consolidation or merger to which the Company is a party, or the sale, transfer or lease of all or substantially all of the assets of the Company and for which approval of any stockholders of the Company is required; or

(3) there shall occur the voluntary or involuntary dissolution, liquidation or winding up of the Company, then the Company shall cause to be filed at each office or agency maintained for the purpose of conversion of Securities pursuant to Section 1002, and shall cause to be mailed to all Holders at their last addresses as they shall appear in the Security Register, at least 10 days prior to the applicable record, effective or expiration date hereinafter specified, a notice stating (x) the date on which a record is to be taken for the purpose of any dividend, distribution or granting of rights, warrants or options, or, if a record is not to be taken, the date as of which the holders of Common Stock of record to be entitled to such dividend, distribution, rights, options or warrants are to be determined, or (y) the date on which such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up is expected to become effective, and, if applicable, the date as of which it is expected that holders of Common Stock of record shall be entitled to exchange their shares of Common Stock for securities, cash or other property deliverable upon such reclassification, consolidation, merger, sale, transfer, dissolution, liquidation or winding up.

SECTION 1707. Company to Reserve Common Stock. The Company shall at all times reserve and keep available, free from preemptive rights, out of its authorized but unissued Common Stock, for the purpose of effecting the conversion of Securities, a number of shares of Common Stock for the conversion of all outstanding Securities of any series which is convertible into Common Stock.

SECTION 1708. Taxes on Conversion. The Company will pay any and all taxes that may be payable in respect of the issue or delivery of shares of Common Stock on conversion of Securities pursuant hereto. The Company shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issue and delivery of shares of Common Stock in a name other than that of the Holder of the Security or Securities to be converted, and no such issue or delivery shall be made unless and until the Person requesting such issue has paid to the Company the amount of any such tax, or has established to the satisfaction of the Company that such tax has been paid.

SECTION 1709. Covenants as to Common Stock. The Company covenants that all shares of Common Stock which may be issued upon conversion of Securities will upon issue be duly and validly issued, fully paid and nonassessable, free of preemptive or any similar rights, and, except as provided in Section 1708, the Company will pay all taxes, liens and charges with respect to the issue thereof.

The Company will endeavor promptly to comply with all Federal and state securities laws regulating the offer and delivery of shares of Common Stock upon conversion of Securities, if any, and will list or cause to have quoted such shares of Common Stock on each national securities exchange or in the over-the-counter market or such other market on which the Common Stock is then listed or quoted.

SECTION 1710. Cancellation of Converted Securities. All Securities delivered for conversion shall be delivered to the Trustee to be cancelled by or at the direction of the Trustee, which shall dispose of the same as provided in Section 309.

SECTION 1711. Provisions in Case of Consolidation, Merger or Sale of Assets; Special Distributions. If any of the following shall occur, namely: (i) any reclassification or change of outstanding shares of Common Stock issuable upon conversion of Securities (other than a change in par value, or from par value to no par value, or from no par value to par value, or as a result of a subdivision or combination), (ii) any consolidation or merger to which the Company is a party other than a merger in which the Company is the continuing corporation and which does not result in any reclassification of, or change (other than a change in name, or par value, or from par value to no par value, or from no par value to par value or as a result of a subdivision or combination) in, outstanding shares of Common Stock or (iii) any sale or conveyance of all or substantially all of the property or business of the Company as an entirety, then the Person formed by such consolidation or resulting from such merger or which acquires such properties or assets, as the case may be, shall as a condition precedent to such transaction execute and deliver to the Trustee a supplemental indenture providing that the Holder of each Security then outstanding shall have the right thereafter, during the period such Security shall be

convertible as specified in Section 1701, to convert such Security only into the kind and amount of securities, cash and other property receivable, if any, upon such consolidation, merger, sale, transfer or lease by a holder of the number of shares of Common Stock of the Company into which such Security might have been converted immediately prior to such consolidation, merger, sale, transfer or lease; provided that the kind and amount of securities, cash and other property so receivable shall be determined on the basis of the following assumptions. The holder of Common Stock referred to in the foregoing sentence:

(1) is not (a) a Person with which the Company consolidated, (b) a Person into which the Company merged or which merged into the Company, or (c) a Person to which such sale, transfer or lease was made (any Person described in the foregoing clauses (a), (b), or (c), hereinafter referred to as a "Constituent Person"), or (d) an Affiliate of a Constituent Person; and

(2) failed to exercise his rights of election, if any, as to the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale, transfer or lease (provided that if the kind or amount of securities, cash and other property receivable upon such consolidation, merger, sale transfer or lease is not the same for each share of Common Stock of the Company in respect of which such rights of election shall not have been exercised, then for the purpose of this Section 1711 the kind and amount of securities, cash and other property receivable upon such consolidation, merger, sale, transfer or lease shall be deemed to be the kind and amount so receivable per share by a plurality of such shares of Common Stock).

Such supplemental indenture shall provide for adjustments which, for events subsequent to the effective date of such supplemental indenture, shall be as nearly equivalent as may be practicable to the adjustments provided for in this Article Seventeen. If, in the case of any such consolidation, merger, sale transfer or lease the stock or other securities and property (including cash) receivable thereupon by a holder of Common Stock includes shares of stock or other securities and property of a corporation other than the successor or purchasing corporation, as the case may be, in such consolidation, merger, sale, transfer or lease then such supplemental indenture shall also be executed by such other corporation and shall contain such additional provisions to protect the interests of the Holders of the Securities as the Board of Directors of the Company shall reasonably consider necessary by reason of the foregoing. The above provisions of this Section 1711 shall similarly apply to successive consolidations, mergers, sales, transfers or leases.

In the event the Company shall execute a supplemental indenture pursuant to this Section 1711, the Company shall promptly file with the Trustee an Officers' Certificate briefly stating the reasons therefor, the kind or amount of shares of stock or securities or property (including cash) receivable by Holders of the Securities upon the conversion of their Securities after any such reclassification, change, consolidation, merger, sale, transfer or lease and any adjustment to be made with respect thereto.

If the Company makes a distribution to all holders of its Common Stock that constitutes an Unadjusted Distribution pursuant to the last sentence of paragraph (4) of Section 1704, then, from and after the record date for determining the holders of Common Stock entitled to receive

such distribution (the “Distribution Record Date”), a Holder of a Security who converts such Security in accordance with the provisions of this Indenture shall, upon conversion, be entitled to receive, in addition to the shares of Common Stock into which the Security is convertible, the kind and amount of evidences of indebtedness, shares of Capital Stock, or other assets or subscription rights or warrants, as the case may be, comprising the distribution that such Holder would have received if such Holder had converted the Security immediately prior to the Distribution Record Date.

SECTION 1712. Trustee Adjustment Disclaimer; Company Determination Final. The Trustee has no duty to determine when an adjustment under this Article Seventeen should be made, how it should be made or what it should be. The Trustee has no duty to determine whether a supplemental indenture under Section 1711 need be entered into or whether any provisions of any supplemental indenture are correct. The Trustee shall not be accountable for and makes no representation as to the validity or value of any securities or assets issued upon conversion of Securities. The Trustee shall not be responsible for the Company’s failure to comply with this Article Seventeen. Any determination that the Company or the Board of Directors must make pursuant to this Article Seventeen is conclusive, absent manifest error.

SECTION 1713. When No Adjustment Required. Except as expressly set forth in Section 1704, no adjustment in the Conversion Price shall be made because the Company issues, in exchange for cash, property or services, shares of its Common Stock, or any securities convertible into or exchangeable for shares of its Common Stock, or securities (including warrants, rights and options) carrying the right to subscribe for or purchase shares of its Common Stock or such convertible or exchangeable securities.

(1) Notwithstanding anything herein to the contrary, no adjustment in the Conversion Price shall be made pursuant to Section 1704 in respect of any dividend or distribution if the Holders may participate therein (on a basis to be determined in good faith by the Board of Directors) and receive the same consideration they would have received if they had converted the Securities immediately prior to the record date with respect to such dividend or distribution.

SECTION 1714. Equivalent Adjustments. In the event that, as a result of an adjustment made pursuant to Section 1704 above, the holder of any Security thereafter surrendered for conversion shall become entitled to receive any shares of Capital Stock of the Company other than shares of its Common Stock, thereafter the Conversion Price of such other shares so receivable upon conversion of any Securities shall be subject to adjustment from time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to Common Stock contained in this Article Seventeen.

SIGNATURES

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed all as of the day and year first above written.

AASTROM BIOSCIENCES, INC.

By: _____
Name:
Title:

_____,
as Trustee

By: _____
Name:
Title:

EXHIBIT A

FORM OF REDEEMABLE OR NON-REDEEMABLE SUBORDINATED SECURITY

[Face of Security]

[If the Holder of this Security (as indicated below) is The Depository Trust Company (“DTC”) or a nominee of DTC, this Security is a Global Security and the following two legends apply:

Unless this Security is presented by an authorized representative of The Depository Trust Company a New York corporation (“DTC”) to the Company or its agent for registration of transfer, conversion, exchange or payment, and such Security issued is registered in the name of Cede & Co., or in such other name as requested by an authorized representative of DTC (and any payment is made to Cede & Co. or to such other entity as is requested by an authorized representative of DTC), ANY TRANSFER, PLEDGE OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL, inasmuch as the registered owner hereof, Cede & Co., has an interest herein.

Unless and until this Security is exchanged in whole or in part for Securities in certificated form, this Security may not be transferred except as a whole by DTC to a nominee thereof or by a nominee thereof to DTC or another nominee of DTC or by DTC or any such nominee to a successor of DTC or a nominee of such successor.]

[If this Security is an Original Issue Discount Security, insert — FOR PURPOSES OF SECTION 1273 and 1275 OF THE UNITED STATES INTERNAL REVENUE CODE, THE AMOUNT OF ORIGINAL ISSUE DISCOUNT ON THIS SECURITY IS ___% OF ITS PRINCIPAL AMOUNT, THE ISSUE DATE IS _____, 20__, AND THE YIELD TO MATURITY IS ___%. THE METHOD USED TO DETERMINE THE AMOUNT OF ORIGINAL ISSUE DISCOUNT APPLICABLE TO THE SHORT ACCRUAL PERIOD OF _____, 20__ TO _____, 20__, IS ___% OF THE PRINCIPAL AMOUNT OF THIS SECURITY.]

AASTROM BIOSCIENCES, INC.

[Designation of Series]

No. _____

\$ _____

CUSIP No. _____

AASTROM BIOSCIENCES, INC., a Michigan corporation (herein referred to as the “Company,” which term includes any successor corporation under the Indenture referred to on the reverse hereof), for value received, hereby promises to pay to _____ or registered assigns the principal sum of _____ Dollars on _____ (the “Stated Maturity Date”) [or insert date fixed for earlier redemption (the “Redemption Date,” and together with the Stated Maturity Date with respect to principal repayable on such date, the “Maturity Date.”)]

[If the Security is to bear interest prior to Maturity, insert — and to pay interest thereon from _____ or from the most recent Interest Payment Date to which interest has been paid or

duly provided for, semi-annually on _____ and _____ in each year (each, an “Interest Payment Date”), commencing _____, at the rate of ___% per annum, until the principal hereof is paid or duly provided for. The interest so payable, and punctually paid or duly provided for, on any Interest Payment Date will, as provided in such Indenture, be paid to the Holder in whose name this Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest, which shall be the _____ or _____ (whether or not a Business Day), as the case may be, next preceding such Interest Payment Date [at the office or agency of the Company maintained for such purpose; provided, however, that such interest may be paid, at the Company’s option, by mailing a check to such Holder at its registered address or by transfer of funds to an account maintained by such Holder within the United States]. Any such interest not so punctually paid or duly provided for shall forthwith cease to be payable to the Holder on such Regular Record Date, and may be paid to the Holder in whose name this Security (or one or more Predecessor Securities) is registered at the close of business on a Special Record Date for the payment of such Defaulted Interest to be fixed by the Trustee, notice whereof shall be given to Holders of Securities of this series not less than 10 days prior to such Special Record Date, or may be paid at any time in any other lawful manner not inconsistent with the requirements of any over-the-counter market or securities exchange on which the Securities of this series may be quoted or listed, and upon such notice as may be required by such market or exchange, all as more fully provided in the Indenture. Interest will be computed on the basis of a 360-day year of twelve 30-day months.]

[If the Security is not to bear interest prior to Maturity, insert — The principal of this Security shall not bear interest except in the case of a default in payment of principal upon acceleration, upon redemption or at the [Stated] Maturity Date and in such case the overdue principal of this Security shall bear interest at the rate of ___% per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such default in payment to the date payment of such principal has been made or duly provided for. Interest on any overdue principal shall be payable on demand. Any such interest on any overdue principal that is not so paid on demand shall bear interest at the rate of ___% per annum (to the extent that the payment of such interest shall be legally enforceable), which shall accrue from the date of such demand for payment to the date payment of such interest has been made or duly provided for, and such interest shall also be payable on demand.]

The principal of this Security payable on the Stated Maturity Date [or the principal of, premium or Make-Whole Amount, if any, and, if the Redemption Date is not an Interest Payment Date, interest on this Security payable on the Redemption Date] will be paid against presentation of this Security at the office or agency of the Company maintained for that purpose in _____, in such coin or currency of the United States of America as at the time of payment is legal tender for the payment of public and private debts.

Interest payable on this Security on any Interest Payment Date and on the [Stated] Maturity Date [or Redemption Date, as the case may be,] will include interest accrued from and including the next preceding Interest Payment Date in respect of which interest has been paid or duly provided for (or from and including _____, if no interest has been paid on this Security) to but excluding such Interest Payment Date or the [Stated] Maturity Date [or Redemption Date, as the case may be.] If any Interest Payment Date or the [Stated] Maturity Date or [Redemption Date] falls on a day that is not a Business Day, as defined below, principal, premium or Make-Whole

Amount, if any, and/or interest payable with respect to such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be,] will be paid on the next succeeding Business Day with the same force and effect as if it were paid on the date such payment was due, and no interest shall accrue on the amount so payable for the period from and after such Interest Payment Date or [Stated] Maturity Date [or Redemption Date, as the case may be.] “Business Day” means any day, other than a Saturday or Sunday, that is neither a legal holiday nor a day on which banking institutions in The City of New York are required or authorized by law, regulation or executive order to close.

[If this Security is a Global Security, insert — All payments of principal, premium or Make-Whole Amount, if any, and interest in respect of this Security will be made by the Company in immediately available funds.]

Reference is hereby made to the further provisions of this Security set forth on the reverse hereof, which further provisions shall for all purposes have the same effect as if set forth at this place.

Unless the Certificate of Authentication hereon has been executed by the Trustee by manual signature of one of its authorized signatories, this Security shall not be entitled to any benefit under the Indenture, or be valid or obligatory for any purpose.

IN WITNESS WHEREOF, the Company has caused this instrument to be duly executed under its facsimile corporate seal.

Dated: _____

AASTROM BIOSCIENCES, INC.

By: _____
Name:
Title:

Attest:

Secretary

[Reverse of Security]

AASTROM BIOSCIENCES, INC.

This Security is one of a duly authorized issue of securities of the Company (herein called the "Securities"), issued and to be issued in one or more series under an

Indenture, dated as of _____, 20__ (herein called the "Indenture") between the Company and _____, as Trustee (herein called the "Trustee," which term includes any successor trustee under the Indenture with respect to the series of which this Security is a part), to which Indenture and all indentures supplemental thereto reference is hereby made for a statement of the respective rights, limitations of rights, duties and immunities thereunder of the Company, the Trustee and the Holders of the Securities, and of the terms upon which the Securities are, and are to be, authenticated and delivered. This Security is one of the duly authorized series of Securities designated on the face hereof (collectively, the "Securities"), [if applicable, insert — and the aggregate principal amount of the Securities to be issued under such series is limited to \$_____ (except for Securities authenticated and delivered upon transfer of, or in exchange for, or in lieu of other Securities).] All terms used in this Security which are defined in the Indenture shall have the meanings assigned to them in the Indenture.

If an Event of Default, as defined in the Indenture, shall occur and be continuing, the principal of the Securities of this series may be declared due and payable in the manner and with the effect provided in the Indenture.

[If applicable, insert — The Securities may not be redeemed prior to the Stated Maturity Date.]

[If applicable, insert — The Securities are subject to redemption [(1) (If applicable, insert — on _____ in any year commencing with the year _____ and ending with the year _____ through operation of the sinking fund for this series at a Redemption Price equal to 100% of the principal amount, and (2)] [If applicable, insert — at any time [on or after _____], as a whole or in part, at the election of the Company, at the following Redemption Prices (expressed as percentages of the principal amount):

If redeemed on or before _____, ___% and if redeemed during the 12-month period beginning _____ of the years indicated at the Redemption Prices indicated below.

Year _____	Redemption Price _____	Year _____	Redemption Price _____
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and thereafter at a Redemption Price equal to ___% of the principal amount, together in the case of any such redemption [If applicable, insert — (whether through operation of the sinking fund or otherwise)] with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the

close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — The Securities are subject to redemption (1) on _____ in any year commencing with the year _____ and ending with the year _____ through operation of the sinking fund for this series at the Redemption Prices for redemption through operation of the sinking fund (expressed as percentages of the principal amount) set forth in the table below, and (2) at any time [on or after _____], as a whole or in part, at the election of the Company, at the Redemption Prices for redemption otherwise than through operation of the sinking fund (expressed as percentages of the principal amount) set forth in the table below: If redeemed during the 12-month period beginning _____ of the years indicated,

Year	Redemption Price for Redemption Through Operation of the Sinking Fund	Redemption Price for Redemption Otherwise Than Through Operation of the Sinking Fund
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and thereafter at a Redemption Price equal to ___% of the principal amount, together in the case of any such redemption (whether through operation of the sinking fund or otherwise) with accrued interest to the Redemption Date; provided, however, that installments of interest on this Security whose Stated Maturity is on or prior to such Redemption Date will be payable to the Holder of this Security, or one or more Predecessor Securities, of record at the close of business on the relevant Record Dates referred to on the face hereof, all as provided in the Indenture.]

[If applicable, insert — Notwithstanding the foregoing, the Company may not, prior to _____, redeem any Securities as contemplated by [Clause (2) of] the preceding paragraph as a part of, or in anticipation of, any refunding operation by the application, directly or indirectly, of moneys borrowed having an interest cost to the Company (calculated in accordance with generally accepted financial practice) of less than ___% per annum.]

[If applicable, insert — The sinking fund for the Securities provides for the redemption on _____ in each year, beginning with the year _____ and ending with the year _____, of [not less than] \$_____ [“(mandatory sinking fund)”] and not more than \$_____ aggregate principal amount of the Securities. [The Securities acquired or redeemed by the Company otherwise than through [mandatory] sinking fund payments may be credited against subsequent [mandatory] sinking fund payments otherwise required to be made in the [describe order] order in which they become due.]]

Notice of redemption will be given by mail to Holders of Securities, not less than 30 nor more than 60 days prior to the Redemption Date, all as provided in the Indenture.

In the event of redemption of this Security in part only, a new Security or Securities for the unredeemed portion hereof shall be issued in the name of the Holder hereof upon the cancellation hereof.

[If applicable, insert conversion provisions set forth in any Board Resolution or indenture supplemental to the Indenture.]

The Indenture permits, with certain exceptions as therein provided, the amendment thereof and the modification of the rights and obligations of the Company and the rights of the Holders of the Securities under the Indenture at any time by the Company and the Trustee with the consent of the Holders of not less than a majority of the aggregate principal amount of all Securities issued under the Indenture at the time Outstanding and affected thereby. The Indenture also contains provisions permitting the Holders of not less than a majority of the aggregate principal amount of the Outstanding Securities, on behalf of the Holders of all such Securities, to waive compliance by the Company with certain provisions of the Indenture. Furthermore, provisions in the Indenture permit the Holders of not less than a majority of the aggregate principal amount, in certain instances, of the Outstanding Securities of any series to waive, on behalf of all of the Holders of Securities of such series, certain past defaults under the Indenture and their consequences. Any such consent or waiver by the Holder of this Security shall be conclusive and binding upon such Holder and upon all future Holders of this Security and other Securities issued upon the registration of transfer hereof or conversion or in exchange hereof or in lieu hereof, whether or not notation of such consent or waiver is made upon this Security.

No reference herein to the Indenture and no provision of this Security or of the Indenture shall alter or impair the obligation of the Company, which is absolute and unconditional, to pay the principal of (and premium or Make-Whole Amount, if any) and interest on this Security at the times, places and rate, and in the coin or currency, herein prescribed.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, the transfer of this Security is registrable in the Security Register of the Company upon surrender of this Security for registration of transfer at the office or agency of the Company in any place where the principal of (and premium or Make-Whole Amount, if any) and interest on this Security are payable, duly endorsed by, or accompanied by a written instrument of transfer in form satisfactory to the Company and the Security Registrar duly executed by, the Holder hereof or by his attorney duly authorized in writing, and thereupon one or more new Securities, of authorized denominations and for the same aggregate principal amount, will be issued to the designated transferee or transferees.

As provided in the Indenture and subject to certain limitations therein [and herein] set forth, this Security is exchangeable for a like aggregate principal amount of Securities of different authorized denominations but otherwise having the same terms and conditions, as requested by the Holder hereof surrendering the same.

This Security is subordinated to the prior payment in full in cash of Senior Indebtedness to the extent set forth in Article Sixteen of the Indenture.

The Securities of this series are issuable only in registered form [without coupons] in denominations of \$_____ and any integral multiple thereof.

No service charge shall be made for any such registration of transfer or conversion or exchange, but the Company may require payment of a sum sufficient to cover any tax or other governmental charge payable in connection therewith,

Prior to due presentment of this Security for registration of transfer, the Company, the Trustee and any agent of the Company or the Trustee may treat the Person in whose name this Security is registered as the owner hereof for all purposes, whether or not this Security be overdue, and neither the Company, the Trustee nor any such agent shall be affected by notice to the contrary.

No recourse shall be had for the payment of the principal of or premium or Make-Whole Amount, if any, or the interest on this Security, or for any claim based hereon, or otherwise in respect hereof, or based on or in respect of the Indenture or any indenture supplemental thereto, against any past, present or future stockholder, employee, officer or director, as such, of the Company or of any successor, either directly or through the Company or any successor, whether by virtue of any constitution, statute or rule of law or by the enforcement of any assessment or penalty or otherwise, all such liability being, by the acceptance hereof and as part of the consideration for the issue hereof, expressly waived and released.

The Indenture and the Securities shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed entirely in such State.

EXHIBIT B
FORMS OF CERTIFICATION

EXHIBIT B-1

FORM OF CERTIFICATE TO BE GIVEN BY PERSON ENTITLED TO RECEIVE BEARER
SECURITY OR TO OBTAIN INTEREST PAYABLE PRIOR TO THE EXCHANGE DATE

CERTIFICATE

[Insert title or sufficient description of Securities to be delivered]

This is to certify that, as of the date hereof, and except as set forth below, the above-captioned Securities held by you for our account (i) are owned by person(s) that are not citizens or residents of the United States, domestic partnerships, domestic corporations or any estate or trust the income of which is subject to United States Federal income taxation regardless of its source ("United States person(s)"), (ii) are owned by United States person(s) that are (a) foreign branches of United States financial institutions (financial institutions, as defined in United States Treasury Regulations Section 2.165-12(c)(1)(v) are herein referred to as "financial institutions") purchasing for their own account or for resale, or (b) United States person(s) who acquired the Securities through foreign branches of United States financial institutions and who hold the Securities through such United States financial institutions on the date hereof (and in either case (a) or (b), each such United States financial institution hereby agrees, on its own behalf or through its agent, that you may advise Aastrom Biosciences, Inc. or its agent that such financial institution will comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the United States Internal Revenue Code of 1986, as amended, and the regulations thereunder), or (iii) are owned by United States or foreign financial institution(s) for purposes of resale during the restricted period (as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), and, in addition, if the owner is a United States or foreign financial institution described in clause (iii) above (whether or not also described in clause (i) or (ii)), this is to further certify that such financial institution has not acquired the Securities for purposes of resale directly or indirectly to a United States person or to a person within the United States or its possessions.

As used herein, "United States" means the United States of America (including the States and the District of Columbia); and its "possessions" include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands.

We undertake to advise you promptly by tested telex or by telecopy on or prior to the date on which you intend to submit your certification relating to the above-captioned Securities held by you for our account in accordance with your operating procedures if any applicable statement herein is not correct on such date, and in the absence of any such notification it may be assumed that this certification applies as of such date.

This certificate excepts and does not relate to [U.S.\$] of such interest in the above-captioned Securities in respect of which we are not able to certify and as to which we

understand an exchange for an interest in a permanent Global Security or an exchange for and delivery of definitive Securities (or, if relevant, collection of any interest) cannot be made until we do so certify.

We understand that this certificate may be required in connection with certain tax legislation in the United States. If administrative or legal proceedings are commenced or threatened in connection with which this certificate is or would be relevant, we irrevocably authorize you to produce this certificate or a copy thereof to any interested party in such proceedings.

Dated: _____

[To be dated no earlier than the 15th day prior to (i) the Exchange Date or (ii) the relevant Interest Payment Date occurring prior to the Exchange Date, as applicable]

[Name of Person Making Certification]

(Authorized Signature)

Name:

Title:

EXHIBIT B-2

FORM OF CERTIFICATE TO BE GIVEN BY EUROCLEAR AND CLEARSTREAM S.A. IN
CONNECTION WITH THE EXCHANGE OF A PORTION OF A TEMPORARY GLOBAL
SECURITY OR TO OBTAIN INTEREST PAYABLE PRIOR TO THE EXCHANGE DATE

CERTIFICATE

[Insert title or sufficient description of Securities to be delivered]

This is to certify that, based solely on written certifications that we have received in writing, by tested telex or by electronic transmission from each of the persons appearing in our records as persons entitled to a portion of the principal amount set forth below (our "Member Organizations") substantially in the form attached hereto, as of the date hereof, [U.S.\$] principal amount of the above-captioned Securities (i) is owned by person(s) that are not citizens or residents of the United States, domestic partnerships, domestic corporations or any estate or trust the income of which is subject to United States Federal income taxation regardless of its source ("United States person(s)"), (ii) is owned by United States person(s) that are (a) foreign branches of United States financial institutions (financial institutions, as defined in U.S. Treasury Regulations Section 1.165-12(c)(1)(v) are herein referred to as "financial institutions") purchasing for their own account or for resale, or (b) United States person(s) who acquired the Securities through foreign branches of United States financial institutions and who hold the Securities through such United States financial institutions on the date hereof (and in either case (a) or (b), each such financial institution has agreed, on its own behalf or through its agent, that we may advise Aastrom Biosciences, Inc. or its agent that such financial institution will comply with the requirements of Section 165(j)(3)(A), (B) or (C) of the Internal Revenue Code of 1986, as amended, and the regulations thereunder), or (iii) is owned by United States or foreign financial institution(s) for purposes of resale during the restricted period (as defined in United States Treasury Regulations Section 1.163-5(c)(2)(i)(D)(7)), and, to the further effect, that financial institutions described in clause (iii) above (whether or not also described in clause (i) or (ii)) have certified that they have not acquired the Securities for purposes of resale directly or indirectly to a United States person or to a person within the United States or its possessions.

As used herein, "United States" means the United States of America (including the States and the District of Columbia); and its "Possessions" include Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, Wake Island and the Northern Mariana Islands.

We further certify that (i) we are not making available herewith for exchange (or, if relevant, collection of any interest) any portion of the temporary Global Security representing the above-captioned Securities excepted in the above-referenced certificates of Member Organizations and (ii) as of the date hereof we have not received any notification from any of our Member Organizations to the effect that the statements made by such Member Organizations with respect to any portion of the part submitted herewith for exchange (or, if relevant, collection of any interest) are no longer true and cannot be relied upon as of the date hereof.

We understand that this certification is required in connection with certain tax legislation in the United States. If administrative or legal proceedings are commenced or threatened in

connection with which this certificate is or would be relevant, we irrevocably authorize you to produce this certificate or a copy thereof to any interested party in such proceedings.

Dated: _____

[To be dated no earlier than the Exchange Date or the relevant Interest Payment Date occurring prior to the Exchange Date, as applicable]

[_____, as Operator of the Euroclear System] [Clearstream Banking Luxembourg]

By: _____

Name:

Title:

B-4



Dykema Gossett PLLC
2723 South State Street
Suite 400
Ann Arbor, Michigan 48104
WWW.DYKEMA.COM
Tel: (734) 214-7660
Fax: (734) 214-7696

November 12, 2010

Aastrom Biosciences, Inc.
24 Frank Lloyd Wright Dr.
Ann Arbor, Michigan 48106

Re: Aastrom Biosciences, Inc. Registration Statement on Form S-3

Ladies and Gentlemen:

We have acted as special counsel to Aastrom Biosciences, Inc., a Michigan corporation (the "Company"), in connection with the filing with the Securities and Exchange Commission (the "Commission") of a registration statement (the "Registration Statement") of the Company on Form S-3 under the Securities Act of 1933, as amended (the "Act"). The Registration Statement relates to the Company's:

- (i) common stock, without par value per share (the "Common Stock");
- (ii) preferred stock, without par value per share (the "Preferred Stock");
- (iii) senior debt securities (the "Senior Debt Securities") to be issued under the senior indenture (the "Senior Indenture");
- (iv) subordinated debt securities (the "Subordinated Debt Securities" and, together with the Senior Debt Securities, the "Debt Securities") to be issued under the subordinated indenture (the "Subordinated Indenture" and, together with the Senior Indenture, the "Indentures");
- (iv) warrants representing rights to purchase Common Stock, Preferred Stock or Debt Securities (the "Warrants"); and
- (v) units representing an interest in two or more securities, which may be or may not be separable from one another (the "Units")

(collectively, the Common Stock, the Preferred Stock, the Debt Securities, the Warrants and the Units are referred to herein as the "Securities"); all of which may be issued from time to time on

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a delayed or continuous basis pursuant to Rule 415 under the Act at an aggregate initial offering price not to exceed \$75,000,000.

We have been advised by the Company that:

- A. The rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation privileges of each series of Preferred Stock will be set forth in a certificate of designation to be approved by the Company's Board of Directors, or in an amendment to the Company's Restated Articles of Incorporation to be approved by the Company's Board of Directors and shareholders, and that one or both of these documents will be filed either as an exhibit to an amendment to the Registration Statement to be filed after the date of this opinion or as an exhibit to a Current Report on Form 8-K to be filed after the Registration Statement has become effective;
- B. The Senior Debt Securities may be issued pursuant to the Senior Indenture between the Company and a trustee to be named in such Indenture, which Indenture will be filed either as an exhibit to an amendment to the Registration Statement to be filed after the date of this opinion or as an exhibit to a Current Report on Form 8-K to be filed after the Registration Statement has become effective;
- C. The Subordinated Debt Securities may be issued pursuant to the Subordinated Indenture between the Company and a trustee to be named in such Indenture, which Indenture will be filed either as an exhibit to an amendment to the Registration Statement to be filed after the date of this opinion or as an exhibit to a Current Report on Form 8-K to be filed after the Registration Statement has become effective;
- D. The particular terms of any Debt Securities will be set forth in a supplement to the prospectus forming a part of the Registration Statement;
- E. Warrants may be issued pursuant to a warrant agreement to be entered into between the Company and a bank as warrant agent (the "Warrant Agreement"). The Warrant Agreement will be filed either as an exhibit to an amendment to the Registration Statement to be filed after the date of this opinion or as an exhibit to a Current Report on Form 8-K to be filed after the Registration Statement has become effective and the particular terms of any series of Warrants will be set

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forth in a supplement to the prospectus forming a part of the Registration Statement; and

- F. Units may issued pursuant to a unit agreement between the Company and a bank or other financial institution as unit agent (the "Unit Agreement"). The Unit Agreement will be filed either as an exhibit to an amendment to the Registration Statement to be filed after the date of this opinion or as an exhibit to a Current Report on Form 8-K to be filed after the Registration Statement has become effective and the particular terms of the Units will be set forth in a supplement to the prospectus forming a part of the Registration Statement.

In rendering the opinions set forth below, we have assumed that (i) all information contained in all documents reviewed by us is true and correct; (ii) all signatures on all documents examined by us are genuine; (iii) all documents submitted to us as originals are authentic and all documents submitted to us as copies conform to the originals of those documents; (iv) each natural person signing any document reviewed by us had the legal capacity to do so; (v) the Registration Statement, and any amendments thereto (including post-effective amendments) will have become effective and comply with all applicable laws; (vi) a prospectus supplement will have been prepared and filed with the Commission describing the Securities offered thereby; (vii) all Securities will be issued and sold in compliance with applicable federal and state securities laws and in the manner stated in the Registration Statement and the applicable prospectus supplement; (viii) a definitive purchase, underwriting or similar agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; (ix) the Company has reserved from its authorized but unissued and unreserved shares of stock, as applicable, a number sufficient to issue all Securities; (x) the certificates representing the Securities will be duly executed and delivered; and (xi) if the holders of the Debt Securities are granted rights to inspect corporate books and records and to vote in the election of directors or any matters on which shareholders of the Company may vote, the Company's Restated Articles of Incorporation will have been amended so that such rights are set forth in the Company's Restated Articles of Incorporation and such amendment to the Restated Articles of Incorporation will grant to the Company's Board of Directors the power to confer such voting or inspection rights and the Company's Board of Directors will have conferred such rights.

We have examined the Registration Statement, including the exhibits thereto, and such other documents, corporate records, and instruments and have examined such laws and regulations as we have deemed necessary for purposes of rendering the opinions set forth herein. Based upon such examination and subject to the further provisions hereof, we are of the following opinion:

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1. The Common Stock will be validly issued, fully paid and nonassessable, **provided that** (i) the Company's Board of Directors or a properly authorized committee thereof has specifically authorized the issuance of such Common Stock in exchange for a consideration that the Board of Directors or such committee determines as adequate (any such specific authorization of Securities being "Authorizing Resolutions"), (ii) the terms of the offer and sale of the Common Stock have been duly established in conformity with the Company's Restated Articles of Incorporation and By-laws and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding on the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (iii) the Company has received the consideration provided for in the applicable Authorizing Resolutions, and (iv) certificates evidencing the shares of Common Stock have been duly executed by the duly authorized officers of the Company in accordance with the Bylaws and applicable law.

2. The Preferred Stock will be validly issued, fully paid and nonassessable, **provided that** (i) such Preferred Stock is specifically authorized for issuance by Authorizing Resolutions, (ii) the rights, preferences, privileges and restrictions of the Preferred Stock have been established in conformity with applicable law, (iii) an appropriate certificate of designation approved by the Company's Board of Directors, or an amendment to the Company's Restated Articles of Incorporation approved by the Company's Board of Directors and shareholders, has been filed with the Department of Energy, Labor and Economic Growth of the State of Michigan, (iv) the terms of the offer, issuance and sale of shares of such class or series of Preferred Stock have been duly established in conformity with the Company's Restated Articles of Incorporation and By-laws and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (v) the Company has received the consideration provided for in the applicable Authorizing Resolutions, and (vi) certificates evidencing the shares of Preferred Stock have been duly executed by the duly authorized officers of the Company in accordance with applicable law.

3. The Debt Securities, when issued and sold in accordance with the applicable Indenture and any applicable purchase or agency agreement will constitute valid and legally binding obligations of the Company, **provided that** (i) such Debt Securities, the sale thereof and the related Indenture and all supplemental indentures are specifically authorized for issuance by Authorizing Resolutions, (ii) the applicable Indenture conforms with applicable law and is enforceable in accordance with its terms, (iii) the terms of the Debt Securities and of their issue and sale have been duly established in conformity with the applicable Indenture and any supplemental indenture, the Company's Restated Articles of Incorporation and Authorizing Resolutions and do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or

restriction imposed by any court or governmental body having jurisdiction over the Company, (iv) the applicable Indenture and any supplemental indenture in respect of such Debt Securities has been duly authorized, executed and delivered by each party thereto and such Debt Securities have been duly executed and authenticated in accordance with the applicable Indenture and offered, issued and sold as contemplated in the Registration Statement, (v) the Debt Securities have been duly delivered to the purchasers thereof, in consideration for which the Company has received the consideration provided for in the applicable Authorizing Resolutions and (vi) a Form T-1 has been filed with the Commission with respect to the trustee executing any Indenture or any supplemental indenture to such Indenture.

4. The Warrants will constitute valid and legally binding obligations of the Company, **provided that** (i) such Warrants are specifically authorized for issuance by Authorizing Resolutions which include the terms upon which the Warrants are to be issued, their form and content and the consideration for which shares are to be issued upon exercise of the Warrants, (ii) the Warrant Agreement relating to the Warrants has been duly authorized, executed and delivered and is enforceable in accordance with its terms, (iii) the terms of the offer, issuance and sale of such Warrants have been duly established in conformity with the Warrant Agreement, (iv) the Warrant Agreement and the offer, issuance and sale of the Warrants do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (v) such Warrants have been duly executed and countersigned in accordance with the Warrant Agreement and offered, issued and sold as contemplated in the Registration Statement, the applicable Authorizing Resolutions and the Warrant Agreement, and (vi) the Company has received the consideration provided for in the applicable Authorizing Resolutions.

5. The Units when sold will constitute valid and legally binding obligations of the Company, **provided that** (i) such Units are specifically authorized for issuance by Authorizing Resolutions which include the terms upon which the Units are to be issued, their form and content, (ii) the Unit Agreement relating to the Units has been duly authorized, executed and delivered and is enforceable in accordance with its terms, (iii) the terms of the offer, issuance and sale of such Units have been duly established in conformity with the Unit Agreement, (iv) the Unit Agreement and the offer, issuance and sale of the Units do not violate any applicable law or result in a default under or breach of any agreement or instrument binding upon the Company and comply with any requirement or restriction imposed by any court or governmental body having jurisdiction over the Company, (v) such Units have been duly executed and countersigned in accordance with the Unit Agreement and offered, issued and sold as contemplated in the Registration Statement, the applicable Authorizing Resolutions and the Unit Agreement, and (vi) the Company has received the consideration provided for in the applicable Authorizing Resolutions.



The foregoing opinions are qualified to the extent that the enforceability of any document, instrument or Securities may be limited by or subject to bankruptcy, insolvency, fraudulent transfer or conveyance, reorganization, moratorium or other similar laws relating to or affecting creditors' rights generally, and general equitable or public policy principles.

We express no opinions concerning (i) the validity or enforceability of any provisions contained in Indentures that purport to waive or not give effect to rights to notices, defenses, subrogation or other rights or benefits that cannot be effectively waived under applicable law; (ii) the validity or enforceability of any provisions contained in the Warrant Agreement that purport to waive or not give effect to rights to notices, defenses, subrogation or other rights or benefits that cannot be effectively waived under applicable law; (iii) the validity or enforceability of any provisions contained in the Unit Agreement that purport to waive or not give effect to rights to notices, defenses, subrogation or other rights or benefits that cannot be effectively waived under applicable law or (iv) any securities into which the Preferred Stock, Debt Securities and the Warrants may be convertible or exercisable.

We have relied as to certain matters on information obtained from public officials and officers of the Company.

It is understood that this opinion is to be used only in connection with the offer and sale of Common Stock, Preferred Stock, Debt Securities, Warrants and Units while the Registration Statement is in effect.

Please note that we are opining only as to the matters expressly set forth herein, and no opinion should be inferred as to any other matters. This opinion is based upon currently existing statutes, rules, regulations and judicial decisions, and we disclaim any obligation to update this opinion or otherwise advise you of any change in any of these sources of law or subsequent legal or factual developments which might affect any matters or opinions set forth herein.

You have informed us that you intend to issue Securities from time to time on a delayed or continuous basis, and this opinion is limited to the laws as in effect on the date hereof. We understand that prior to issuing any Securities pursuant to the Registration Statement (i) you will advise us in writing of the terms thereof and (ii) you will afford us an opportunity to (x) review the operative documents pursuant to which such Securities are to be issued or sold and (y) file such supplement or amendment to this opinion (if any) as we may reasonably consider necessary or appropriate.

The foregoing opinions are limited to the laws of the state of Michigan and the federal laws of the United States. We express no opinion and make no representation with respect to the law of any other jurisdiction.



Astrom Biosciences, Inc.
November 12, 2010
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We hereby consent to the reference to our firm under the caption "Legal Matters" in the Registration Statement and to the filing of this opinion as an exhibit to the Registration Statement. Such consent does not constitute a consent under Section 7 of the Act, because we have not certified any part of such Registration Statement and do not otherwise come within the categories of persons whose consent is required under Section 7 of the Act or the rules and regulations of the Commission promulgated thereunder.

Very truly yours,

/s/ **DYKEMA GOSSETT PLLC**

California | Illinois | Michigan | Texas | Washington D.C.

Consent of Independent Registered Public Accounting Firm

We hereby consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated September 7, 2010 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in Aastrom Biosciences, Inc.'s Annual Report on Form 10-K for the year ended June 30, 2010. We also consent to the reference to us under the heading "Experts" in such Registration Statement.

/s/ PRICEWATERHOUSECOOPERS LLP
PRICEWATERHOUSECOOPERS LLP
Detroit, Michigan
November 12, 2010