

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

Form S-3

REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933



EMCORE Corporation

New Jersey

3,674

22-2746503

*(State or other jurisdiction of
incorporation or organization)*

*(Primary Standard Industrial
Classification Code Number)*

*(I.R.S. Employer
Identification Number)*

EMCORE Corporation
10420 Research Road, SE
Albuquerque, New Mexico 87123
(505-332-5000)

Agent For Service
Hong Q. Hou, Ph.D.
Chief Executive Officer
EMCORE Corporation
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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, 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, 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 definition of “large accelerated filer”, “accelerated filer”, and “smaller reporting company” in Rule 12b-2 of the Exchange Act. ☐ Large accelerated filer x **Accelerated filer** ☐ Non-accelerated filer ☐ Smaller reporting company

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered (1)	Amount to Be Registered	Proposed Maximum Offering Price Per Unit	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Offering:				
Common Stock, no par value per share	(1)	(2)	(2)	—
Preferred Stock	(1)	(2)	(2)	—
Debt Securities	(1)	(2)	(2)	—
Warrants	(1)	(2)	(2)	—
Units	(1)	(2)	(2)	—
Total Offering	(1)	(2)	\$50,000,000	\$5,730(3)

- (1) There are being registered hereunder such indeterminate number of shares of common stock and preferred stock, such indeterminate principal amount of debt securities, such indeterminate number of warrants to purchase common stock, preferred stock or debt securities, and such indeterminate number of units, as shall have an aggregate initial offering price not to exceed \$50,000,000. If any debt securities are issued at an original issue discount, then the offering price of such debt securities shall be in such greater principal amount as shall result in an aggregate initial offering price not to exceed \$50,000,000, less the aggregate dollar amount of all securities previously issued hereunder. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The proposed maximum initial 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. The securities registered also include such indeterminate number of shares of common stock and preferred stock and amount of debt securities as may be issued upon conversion of or exchange for preferred stock or debt securities that provide for conversion or exchange, upon exercise of warrants or pursuant to the anti-dilution provisions of any such securities. In addition, pursuant to Rule 416 under the Securities Act of 1933, as amended, the shares being registered hereunder include such indeterminate number of shares of common stock and preferred stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.
- (2) The proposed maximum aggregate offering price per class of security 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 of 1933, as amended.
- (3) Calculated pursuant to Rule 457(o) under the Securities Act of 1933, as amended, based on the proposed maximum aggregate offering price.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until this 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 will not sell the securities described in this document until the registration statement filed with the Securities and Exchange Commission is declared effective. This prospectus is not an offer to sell these securities, nor are we soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 10, 2012

PROSPECTUS



EMCORE Corporation

\$50,000,000

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

This prospectus provides you with a general description of debt and equity securities that EMCORE Corporation may offer and sell from time to time. Each time we sell securities we will provide a prospectus supplement that will contain specific information about the terms of that sale and may add to or update the information in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as any documents incorporated or deemed to be incorporated in this prospectus before you invest in any of our securities offered hereby. This prospectus may not be used to sell securities unless accompanied by a prospectus supplement.

EMCORE Corporation may offer and sell securities to or through one or more underwriters, dealers and/or agents on a continuous or delayed basis. For additional information on the methods of sale, you should refer to the section entitled "Plan of Distribution." If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and over-allotment options will be set forth in the prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on The NASDAQ Global Market under the symbol "EMKR." On August 8, 2012, the last reported sale price of our common stock on The NASDAQ Global Market was \$5.37. All applicable share, per share and related information in this prospectus have been adjusted retroactively for the 4:1 reverse stock split on shares of our common stock effected on February 15, 2012.

Investing in our common stock involves a high degree of risk. See "Risk Factors" on page 2. You should carefully review the risks and uncertainties described under the heading "Risk Factors" contained in the applicable prospectus supplement and under similar headings in the documents that are incorporated by reference in this prospectus.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is , 2012

You should rely only on the information contained or incorporated by reference in this prospectus. We have not authorized anyone to provide you with additional information or information different from that contained in this prospectus. This prospectus may be used only in states or jurisdictions where it is legal to sell these securities. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the securities and the distribution of this prospectus outside the United States. For investors outside of the United States, neither we, the selling stockholder nor any other person involved in the offering have done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. You should inform yourself and consult with your own legal advisors about how to observe any restrictions relating to this offering and the distribution of the prospectus as well as any legal, tax, business, financial and other related aspects of a purchase of such securities.

In this prospectus, the “Company”, “EMCORE”, “we”, “us”, and “our” refer to EMCORE Corporation and its subsidiaries. Our fiscal year ends on September 30 of each calendar year. For example, fiscal year 2011 refers to the year ended September 30, 2011. EMCORE is a registered trademark of EMCORE Corporation. This prospectus contains product names, trade names and trademarks of EMCORE and other organizations.

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About this Prospectus

This prospectus is part of a registration statement that we have filed with the Securities and Exchange Commission (the “SEC” or “Commission”) using a “shelf” registration process. Under this shelf process, we may sell:

- Common stock;
- Preferred stock;
- Debt securities;
- Warrants; and
- Units

We may sell those securities noted above either separately or in units, in one or more offerings. This prospectus provides you with a general description of those securities. We will offer our securities in amounts, at prices and on terms to be determined at the time we offer such securities. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. Before purchasing any securities, you should carefully read this prospectus and the applicable prospectus supplement and any applicable free writing prospectus together with the additional information described under the heading “Where You Can Find More Information.” Under no circumstances should the delivery to you of this prospectus or any offering or sales made pursuant to this prospectus create any implication that the information contained in this prospectus is correct as of any time after the date of this prospectus.

Forward Looking Statements

This prospectus and the documents we have filed with the SEC that are incorporated by reference contain “forward-looking statements” within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act. These forward-looking statements are largely based on our current expectations and projections about future events and financial trends affecting the financial condition of our business. Such forward-looking statements include, in particular, projections about our future results, statements about our plans, strategies, business prospects, changes and trends in our business and the markets in which we operate. These forward-looking statements may be identified by the use of terms and phrases such as “anticipates”, “believes”, “can”, “could”, “estimates”, “expects”, “forecasts”, “intends”, “may”, “plans”, “projects”, “targets”, “will”, and similar expressions or variations of these terms and similar phrases. Additionally, statements concerning future matters such as the development of new products, enhancements or technologies, sales levels, expense levels, and other statements regarding matters that are not historical are forward-looking statements. Management cautions that these forward-looking statements relate to future events or our future financial performance and are subject to business, economic, and other risks and uncertainties, both known and unknown, that may cause actual results, levels of activity, performance, or achievements of our business or our industry to be materially different from those expressed or implied by any forward-looking statements, including without limitation: (a) the impact on the Company, our customers and our suppliers from the effects of the floods in Thailand; (b) delays and other difficulties in commercializing new products; (c) the failure of new products (i) to perform as expected without material defects, (ii) to be manufactured at acceptable volumes, yields, and cost, (iii) to be qualified and accepted by our customers, and, (iv) to successfully compete with products offered by our competitors; (d) our ability to increase our liquidity; (e) uncertainties concerning the extent of our insurance recovery from damage to our contract manufacturer's facilities and the Company's and our contract manufacturer's equipment; (f) uncertainties concerning the availability and cost of commodity materials and specialized product components that we do not make internally; and (g) actions by competitors. Factors that could cause or contribute to differences in results and outcomes also include, but are not limited to, those discussed under the section entitled “Risk Factors” in this prospectus and in any applicable prospectus supplement or free writing prospectus and any documents incorporated by reference herein or therein, including, without limitation, the risks we discuss in greater detail in our most recent annual report on Form 10-K and in our most recent quarterly report on Form 10-Q, as well as any amendments thereto reflected in subsequent filings with the SEC. Readers should carefully review this prospectus, any applicable supplement to this prospectus and any related free writing prospectus, together with the information incorporated herein by reference completely and with the understanding that our actual future results may be materially different from what we expect. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition.

Neither management nor any other person assumes responsibility for the accuracy and completeness of any forward-looking statement. All forward-looking statements in this prospectus are made as of the date hereof, based on information available to us as of the date hereof, and subsequent facts or circumstances may contradict, obviate, undermine, or otherwise fail to support or substantiate such statements. We caution you not to rely on these statements without also considering the risks and uncertainties associated with these statements and our business. We assume no obligation to update any forward-looking statement to conform such statements to actual results or to changes in our expectations, except as required by applicable law or regulation. Thus, you should not assume that our silence over time means that actual events are bearing out as expressed or implied in such forward-looking statements. We qualify all of the forward-looking statements in the foregoing documents by these cautionary statements.

EMCORE Corporation

We are a provider of compound semiconductor-based components and subsystems for the broadband, fiber optic, satellite, and terrestrial solar power markets. We were established in 1984 as a New Jersey corporation. We have two reporting segments. Our Fiber Optics segment offers optical components, subsystems and systems for high-speed telecommunications, Cable Television (CATV) and Fiber-To-The-Premise (FTTP) networks, as well as products for satellite communications, video transport and specialty photonics technologies for defense and homeland security applications. Our Solar Photovoltaics business segment provides products for both space and terrestrial solar power applications. For space applications, we offer high-efficiency multi-junction solar cells, Covered Interconnect Cells (CICs) and complete satellite solar panels. For terrestrial applications, we offer a broad portfolio of Concentrator Photovoltaic (CPV) multi-junction solar cells and components, as well as commercial rooftop solar concentrator systems.

Our headquarters and principal executive offices are located at 10420 Research Road, SE, Albuquerque, New Mexico, 87123, and our main telephone number is (505) 332-5000. For specific information about our company, our products or the markets we serve, please visit our website at <http://www.emcore.com>. The information contained in or linked to our website is not part of this prospectus.

Risk Factors

Investing in our securities involves risks. You should carefully read and consider the risk factors and other disclosures relating to any investment in securities issued by EMCORE Corporation described in our Annual Report on Form 10-K for the fiscal year ended September 30, 2011, as updated by annual, quarterly and other reports and documents we file with the SEC after the date of this prospectus and that are incorporated by reference herein. Before making an investment decision, you should carefully consider those risks as well as other information we include or incorporate by reference in this prospectus and the applicable prospectus supplement. Each of the risk factors could adversely affect our business, operating results and financial condition, as well as adversely affect the value of an investment in our securities, and the occurrence of any of these risks might cause you to lose all or part of your investment. Moreover, the risks and uncertainties we have described are not the only ones facing our company. Additional risks and uncertainties not presently known to us or that we currently consider immaterial may also affect our business operations.

Use Of Proceeds

Unless otherwise specified in the applicable prospectus supplement, we will use the net proceeds from the sale of securities for one or more of the following:

- repayment of debt;
- acquisitions;
- capital expenditures;
- redemption or repurchase of any preferred stock or debt outstanding; and
- working capital and general corporate purposes.

Pending any specific application, we may initially invest funds in marketable short-term, interest-bearing securities.

Dilution

We will set forth in a prospectus supplement the following information regarding any material dilution of the equity interests of investors purchasing securities in an offering under this prospectus:

- the net tangible book value per share of our equity securities before and after the offering;
- the amount of the increase in such net tangible book value per share attributable to the cash payments made by purchasers in the offering; and
- the amount of the immediate dilution from the public offering price which will be absorbed by such purchasers.

Ratio of Earnings to Fixed Charges and Preferred Stock Dividends

The following table sets forth our ratio of earnings to fixed charges for the periods indicated. Fixed charges consist of interest expense and the portion of net rental expense deemed representative of interest. No shares of preferred stock were outstanding during the periods indicated and we did not pay preferred stock dividends during these periods. Consequently, the ratio of earnings to fixed charges is the same as the ratio of earnings to fixed charges and preferred stock dividends for the periods indicated.

(in thousands)	Nine Months Ended June 30,	Fiscal Year Ended September 30,				
	2012	2011	2010	2009	2008	2007
Ratio of earnings to fixed charges	*	*	*	*	*	*
Deficiency of earnings available to cover fixed charges	\$ 29,758	\$32,377	\$23,694	\$138,801	\$80,860	\$58,722

* Our earnings were insufficient to cover fixed charges for the period indicated. Additional information regarding the computation of the deficiency of earnings available to cover fixed charges is included in Exhibit 12.1.

Description of Common Stock

The following is a description of our common stock. It does not purport to be complete and is subject to, and qualified in its entirety by, the provisions of our Restated Certificate of Incorporation, as amended, and Amended By-Laws, forms of which have previously been filed and are incorporated by reference into this prospectus, and by the applicable provisions of New Jersey law. See “Anti-takeover Effects of Provisions of Our Restated Certificate of Incorporation and Amended By-laws” for more information regarding the provisions of our Restated Certificate of Incorporation and Amended By-laws that could affect an extraordinary corporate transaction.

General Matters

Our authorized capital stock consists of 50,000,000 shares of common stock, no par value and 5,882,352 shares of preferred stock, \$0.0001 par value. As of August 3, 2012, we had 24,060,945 shares of common stock issued and outstanding and no shares of preferred stock issued or outstanding.

Common Stock

Holders of common stock are entitled to one vote per share on matters to be voted upon by the shareholders of the Company. Subject to the preferences that may be applicable to any outstanding shares of preferred stock, the holders of common stock are entitled to receive ratably such dividends, if any, as may be declared by the Board of Directors out of funds legally available therefor. In the event of liquidation, dissolution or winding up of the Company, the holders of common stock are entitled to share ratably in all assets remaining after payment of liabilities, subject to the prior liquidation rights of any outstanding shares of preferred stock. The common stock has no preemptive, redemption, conversion or other subscription rights. The outstanding shares of common stock are, and the shares offered by the Company in the offering will be, when issued and paid for, fully paid and nonassessable. The rights, preferences and privileges of holders of common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock currently outstanding or which the Company may designate and issue in the future.

Transfer Agent and Registrar

The Transfer Agent and Registrar for our common stock is American Stock Transfer & Trust Company, New York, New York.

Listing

Our shares of common stock are quoted on the NASDAQ Global Market under the symbol “EMKR”.

Description of Preferred Stock

The Board of Directors has the authority, without action by the shareholders, to designate and issue preferred stock in one or more series and to designate the rights, preferences and privileges of each series, which may be greater than the rights of the common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock upon the rights of holders of the common stock until the Board of Directors determines the specific rights of the holders of this preferred stock. However, the effects might include, among other things:

- restricting dividends on the common stock;
- diluting the voting power of the common stock;
- impairing the liquidation rights of the common stock; or
- delaying or preventing a change in control of the company without further action by the shareholders.

No shares of preferred stock are outstanding. The summary above is qualified by provisions of applicable law. If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

- the title and stated value;
- the number of shares offered, the liquidation preference per share and the purchase price;
- the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such 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;

- the provisions for a sinking fund, if any;

- the provisions for redemption, if applicable;
- 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 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 exchange period;
- voting rights, if any, of the preferred stock;
- a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;
- the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of EMCORE;
- any material limitations on the 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 upon liquidation, dissolution or winding up of EMCORE; and
- any other specific terms, preferences, rights or limitations of, or restrictions on, the preferred stock.

Description of Debt Securities

The following description of the terms of the debt securities sets forth certain general terms and provisions of the debt securities to which any prospectus supplement may relate. The particular terms of the debt securities offered by any prospectus supplement and the extent, if any, to which these general provisions may apply to those debt securities will be described in the prospectus supplement relating to those debt securities. Accordingly, for a description of the terms of a particular issue of debt securities, reference must be made to both the prospectus supplement relating thereto and to the following description.

General

We may issue debt securities from time to time in one or more series. The debt securities will be general obligations of EMCORE Corporation. The debt securities may be fully and unconditionally guaranteed on a secured or unsecured senior or subordinated basis, jointly and severally, by guarantors, if any. In the event that any series of debt securities will be subordinated to other indebtedness that we have outstanding or may incur, the terms of the subordination will be set forth in the prospectus supplement relating to the subordinated debt securities. Debt securities will be issued under one or more indentures between us and one or more trustees named in the prospectus supplement, which we refer to as the trustee. The statements made in this prospectus relating to the indenture and the debt securities to be issued under the indenture are summaries of certain terms and provisions of the form of indenture that has been filed as Exhibit 4.2 to the registration statement of which this prospectus forms a part and are not complete. You should read the indenture for provisions that may be important to you.

The prospectus supplement relating to a particular series of debt securities will describe the terms of such debt securities being offered, including:

- the title;
- the maturity date;
- the interest rate, if any, and the method for calculating the interest rate;
- the interest payment dates and the record dates for the interest payments;
- any mandatory or optional redemption terms or prepayment, conversion, and sinking fund terms;
- the place where we will pay principal and interest;
- if other than denominations of \$1,000 or multiples of \$1,000 in excess thereof, the denominations the debt securities will be issued in;
- whether the debt securities will be issued in the form of global securities or certificates;
- additional provisions, if any, relating to defeasance;
- the currency or currencies, if other than the currency of the United States, in which principal and interest will be paid;
- any United States federal income tax consequences;
- the dates on which premium, if any, will be paid;
- our right, if any, to defer payment of interest and the maximum length of this deferral period;
- any listing on a securities exchange;
- limits on aggregate principal amount;
- terms of subordination of any subordinated debt securities;
- the initial public offering price; and
- other specific terms, including any additional events of default or covenants.

We may, from time to time, without notice to or the consent of registered holders of a particular series of debt securities, create and issue further securities ranking *pari passu* with that series of debt securities in all respects (or in all respects except for the payment of interest accruing prior to the issue date of such further debt securities or except for the first payment of interest following the issue date of such further debt securities) and so that such further debt securities shall be consolidated and form a single series with that particular series of debt securities and shall have the same terms as to status, redemption or otherwise as that series of debt securities.

We can issue an unlimited amount of debt securities under the indenture that may be in one or more series with the same or various maturities, at par, at a premium, or at a discount. The indenture does not limit our ability to issue convertible or subordinated debt securities. Any conversion or subordination provisions of a particular series of debt securities will be set forth in the officer's certificate or supplemental indenture related to that series of debt securities and will be described in the relevant prospectus supplement. Such terms may include provisions for conversions, either mandatory, at the option of the holder or at our option, in which case the number of shares of common stock, preferred stock or other securities to be received by the holders of debt securities would be calculated as of a time and in the manner stated in the prospectus supplement.

The debt securities will be issuable only in fully registered form without coupons or in the form of one or more global securities, as described below under “-Global Securities”. Unless the prospectus supplement specifies otherwise, debt securities denominated in U.S. dollars will be issued only in denominations of U.S.\$1,000 and any integral multiple of U.S.\$1,000 in excess thereof. The prospectus supplement relating to debt securities denominated in a foreign or composite currency will specify the authorized denominations.

If the amount of payments of principal and premium, if any, or any interest on debt securities of any series is determined with reference to any type of index or formula or changes in prices of particular securities or commodities, the federal income tax consequences, specific terms and other information with respect to these debt securities and this index or formula, securities or commodities will be described in the relevant prospectus supplement.

If the principal and premium, if any, or any interest on debt securities of any series are payable in a foreign or composite currency, the restrictions, elections, federal income tax consequences, specific terms and other information with respect to such debt securities and such currency will be described in the relevant prospectus supplement.

Payment of principal and premium, if any, on debt securities will be made in the designated currency against surrender of any debt securities at the Corporate Trust Office of the trustee in The City of New York. Unless otherwise indicated in the prospectus supplement, payment of any installment of interest on debt securities will be made to the person in whose name a relevant debt security is registered at the close of business on the regular record date for such interest. Unless otherwise indicated in the prospectus supplement, payments of such interest will be made at the Corporate Trust Office of the trustee in The City of New York or by a check in the designated currency mailed to the holder at such holder's registered address.

Debt securities may be issued as original issue discount securities to be offered and sold at a substantial discount below their stated principal amount. Federal income tax consequences and other special considerations applicable to any original issue discount securities will be described in the relevant prospectus supplement. “Original issue discount security” means any debt security that provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the maturity thereof upon the occurrence of an event of default and the continuation thereof.

Covenants

Consolidation, Merger and Sale of Assets

We will agree under the indenture that we will not consolidate with or merge into, or convey, transfer or lease all or substantially all of our properties and assets to, any Person (a “Successor Person”), and will not permit any Person to merge into us in a transaction in which we are not the surviving entity, unless:

- (i) the Successor Person (if not EMCORE) is a corporation, limited liability company, partnership or trust organized and validly existing under the laws of any domestic jurisdiction and assumes our obligations on any outstanding debt securities and under the indenture;
- (ii) immediately after giving effect to the transaction, and treating any indebtedness which becomes our obligation as a result of the transaction as having been incurred by us at the time of the transaction, no event of default and no event which, after notice or lapse of time or both, would become an event of default, shall have occurred and be continuing; and
- (iii) the trustee receives an officers' certificate and an opinion of counsel stating that such action complies with this covenant.

Events of Default

The indenture specifies that each of the following will constitute an event of default with respect to the debt securities of a particular series:

- (a) failure to pay principal of any debt security of that series at its maturity;
- (b) failure to pay any interest on any debt security of that series when due, continued for 30 days;
- (c) failure to deposit any sinking fund payment, when and as due by the terms of that series;
- (d) failure to perform any covenant of ours applicable to that series in the indenture, continued for 60 days after written notice of such failure is given by the trustee or the holders of at least 25% in principal amount of the outstanding debt securities of that series, as provided in the indenture;
- (e) certain events in bankruptcy, insolvency or reorganization; and
- (f) the occurrence of any other event of default with respect to debt securities of that series as provided in a supplemental indenture applicable to such series or a resolution of Board of Directors of the Company pursuant to which such series of debt securities is established.

If an event of default (other than an event of default described in items (e) or (f) above) shall occur and be continuing, either the trustee or the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series by notice as provided in the indenture may declare the principal amount of such series of the debt securities to be due and payable immediately. If an event of default described in clause (e) above shall occur, the principal amount of all the outstanding debt securities of that series will automatically, and without any action by the trustee or any holder, become immediately due and payable. After any such acceleration, but before a judgment or decree for payment of the money due, the holders of a majority in aggregate principal amount of the outstanding debt securities of a particular series may, under certain circumstances, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, have been cured or waived as provided in the indenture. For information as to waiver of defaults, see “-Modification and Waiver.”

Subject to the provisions of the indenture relating to the duties of the trustee in case an event of default shall occur and be continuing, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request or direction of any of the holders, unless such holders shall have offered to the trustee reasonable indemnity. Subject to such provisions for the indemnification of the trustee, the holders of a majority in aggregate principal amount of the outstanding debt securities of that series will 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 such series of the debt securities.

No holder of a debt security will have any right to institute any proceeding with respect to the indenture, or for the appointment of a receiver or a trustee, or for any other remedy thereunder, unless:

- (i) such holder has previously given to the trustee written notice of a continuing event of default with respect to such series of the debt securities;
- (ii) the holders of at least 25% in aggregate principal amount of the outstanding debt securities of that series have made written request, and such holder or holders have offered reasonable indemnity, to the trustee to institute such proceeding as trustee; and
- (iii) the trustee has failed to institute such proceeding, and has not received from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series a direction inconsistent with such request, within 60 days after such notice, request and offer. However, such limitations do not apply to a suit instituted by a holder of a debt security for the enforcement of payment of the principal of or interest on such debt security on or after the applicable due date specified in such debt security.

Modification and Waiver

Together with the trustee, we may modify the indenture without the consent of any holder for certain purposes, including evidencing the succession of another person to us and such person's assumption of our obligations under the indenture, adding to our covenants or events of default, establishing forms or terms of debt securities, curing ambiguities and other purposes which do not adversely affect the holders in any material respect.

Other modifications and amendments of the indenture may be made by us and the trustee with the consent of the holders of at least a majority in aggregate principal amount of each series of the outstanding debt securities that is affected by such modification or amendment, all holders of all such affected series voting together as one class.

No such modification or amendment may, without the consent of the holder of each outstanding debt security affected thereby:

- (a) change the stated maturity of the principal of, or any installment of interest on, or the redemption price of, any such debt security;
- (b) reduce the principal amount of or interest on, any such debt security;
- (c) change currency of payment of principal of or interest on, any such debt security;
- (d) impair the right to institute suit for the enforcement of any payment on any such debt security;
- (e) reduce the percentage in principal amount of outstanding debt securities of a particular series, the consent of whose holders is required for modification or amendment of the indenture, or for waiver of compliance with certain provisions of the indenture or waiver of certain defaults; or
- (f) modify such provisions with respect to modification and waiver.

The holders of at least a majority in principal amount of each series of the outstanding debt securities that is affected by such waiver, all holders of all such affected series voting together as one class, may waive our compliance with certain restrictive provisions of the indenture, and may waive any past default under the indenture, except a default in the payment of principal or interest and certain covenants and provisions of the indenture which cannot be amended without the consent of the holder of each outstanding debt security affected by such default.

Defeasance and Discharge; Covenant Defeasance

Unless the terms of a particular series provide otherwise, we may elect, at our option at any time, to have the indenture provisions relating to defeasance and discharge of indebtedness, or relating to defeasance of certain restrictive covenants in the indenture, applied to any series of the outstanding debt securities.

Defeasance and Discharge

The indenture provides that upon our exercise of our option to have the provisions relating to defeasance and discharge applied to a particular series of the debt securities, we will be discharged from all our obligations with respect to such series of the debt securities (except for certain obligations to exchange or register the transfer of debt securities, to replace stolen, lost or mutilated debt securities, to maintain paying agencies and to hold moneys for payment in trust) upon the deposit in trust for the benefit of the holders of the debt securities of such series of money or U.S. government obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient to pay the principal of and interest on the debt securities of such series at maturity in accordance with the terms of the indenture and such debt securities. Such defeasance or discharge may occur only if, among other things, we have delivered to the trustee an opinion of counsel to the effect that we have received from, or there has been published by, the United States Internal Revenue Service a ruling, or there has been a change in tax law, in either case to the effect that holders of the debt securities of such series will not recognize gain or loss for federal income tax purposes as a result of such deposit, defeasance and discharge and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit, defeasance and discharge were not to occur.

Defeasance of Certain Covenants

The indenture provides that, upon our exercise of our option to have the provisions relating to defeasance of certain restrictive covenants applied to a particular series of the debt securities, we may, with respect to such series, omit to comply with certain restrictive covenants, including those described under “-Consolidation, Merger and Sale of Assets,” and the occurrence of certain events of default, which are described above in clause (d) under “Events of Default,” will be deemed not to be or result in an event of default, in each case with respect to such series.

We, in order to exercise such option, will be required, among other things:

- (1) to deposit, in trust for the benefit of the holders of such series of the debt securities, money or U.S. government obligations, or both, which, through the payment of principal and interest in respect thereof in accordance with their terms, will provide money in an amount sufficient to pay the principal of and interest on such series of the debt securities at maturity in accordance with the terms of the indenture and such debt securities, and
- (2) to deliver to the trustee an opinion of counsel to the effect that holders of such series of the debt securities will not recognize gain or loss for federal income tax purposes as a result of such deposit and defeasance of certain obligations and will be subject to federal income tax on the same amount, in the same manner and at the same times as would have been the case if such deposit and defeasance were not to occur.

In the event we exercise this option and the debt securities are declared due and payable because of the occurrence of any event of default, the amount of money and U.S. government obligations so deposited in trust would be sufficient to pay amounts due on that series of the debt securities at maturity but may not be sufficient to pay amounts due on that series of the debt securities upon any acceleration resulting from such event of default. In such case, we would remain liable for such payments.

Regarding the Trustee

The indenture provides that, except during the continuance of an event of default, the trustee will perform only such duties as are specifically set forth in the indenture. During the existence of an event of default, the trustee will exercise such rights and powers vested in it under the indenture and use the same degree of care and skill in its exercise as a prudent person would exercise under the circumstances in the conduct of such person's own affairs.

The indenture and provisions of the Trust Indenture Act incorporated by reference therein contain limitations on the rights of the trustee, should it become a creditor of us, to obtain payment of claims in certain cases or to realize on certain property received by it in respect of any such claim as security or otherwise. The trustee is permitted to engage in other transactions with us or any affiliate of us; provided, however, that if it acquires any conflicting interest (as defined in the indenture or in the Trust Indenture Act), it must eliminate such conflict or resign.

The trustee for any debt securities will be set forth in the applicable prospectus supplement.

Form of Debt Securities

Each debt security will be represented either by a certificate issued in definitive form to a particular investor or by one or more global securities representing the entire issuance of securities. Certificated securities in definitive form and global securities will be issued in registered form.

Definitive securities name you or your nominee as the owner of the security, and in order to transfer or exchange these securities or to receive payments other than interest or other interim payments, you or your nominee must physically deliver the securities to the trustee, registrar, paying agent or other agent, as applicable.

Global securities name a depository or its nominee as the owner of the debt securities represented by these global securities. The depository maintains a computerized system that will reflect each investor's beneficial ownership of the securities through an account maintained by the investor with its broker/dealer, bank, trust company or other representative, as we explain more fully below.

Global Securities

We may issue the debt securities in whole or in part in the form of one or more fully registered global securities that will be deposited with a depositary or its nominee identified in the prospectus supplement relating to that series and registered in the name of that depositary or nominee. In those cases, one or more registered global securities will be issued in a denomination or aggregate denominations equal to the portion of the aggregate principal or face amount of the securities to be represented by registered global securities. Unless and until it is exchanged in whole for securities in definitive registered form, a registered global security may not be transferred except as a whole by and among the depositary for the registered global security, the nominees of the depositary or any successors of the depositary or those nominees.

If not described below, any specific terms of the depositary arrangement with respect to any securities to be represented by a registered global security will be described in the prospectus supplement relating to those securities. We anticipate that the following provisions will apply to all depositary arrangements.

Ownership of beneficial interests in a registered global security will be limited to persons, called participants, that have accounts with the depositary or persons that may hold interests through participants. Upon the issuance of a registered global security, the depositary will credit, on its book-entry registration and transfer system, the participants' accounts with the respective principal or face amounts of the securities beneficially owned by the participants. Any dealers, underwriters or agents participating in the distribution of the securities will designate the accounts to be credited. Ownership of beneficial interests in a registered global security will be shown on, and the transfer of ownership interests will be effected only through, records maintained by the depositary, with respect to interests of participants, and on the records of participants, with respect to interests of persons holding through participants. The laws of some states may require that some purchasers of securities take physical delivery of these securities in definitive form. These laws may impair your ability to own, transfer or pledge beneficial interests in registered global securities.

So long as the depositary, or its nominee, is the registered owner of a registered global security, that depositary or its nominee, as the case may be, will be considered the sole owner or holder of the securities represented by the registered global security for all purposes under the indenture. Except as described below, owners of beneficial interests in a registered global security will not be entitled to have the securities represented by the registered global security registered in their names, will not receive or be entitled to receive physical delivery of the securities in definitive form and will not be considered the owners or holders of the securities under the indenture. Accordingly, each person owning a beneficial interest in a registered global security must rely on the procedures of the depositary for that registered global security and, if that person is not a participant, on the procedures of the participant through which the person owns its interest, to exercise any rights of a holder under the indenture. We understand that under existing industry practices, if we request any action of holders or if an owner of a beneficial interest in a registered global security desires to give or take any action that a holder is entitled to give or take under the indenture, the depositary for the registered global security would authorize the participants holding the relevant beneficial interests to give or take that action, and the participants would authorize beneficial owners owning through them to give or take that action or would otherwise act upon the instructions of beneficial owners holding through them.

Principal, premium, if any, and interest payments on debt securities represented by a registered global security registered in the name of a depositary or its nominee will be made to the depositary or its nominee, as the case may be, as the registered owner of the registered global security. None of EMCORE, the trustee or any agent of EMCORE or agent of the trustee will have any responsibility or liability for any aspect of the records relating to payments made on account of beneficial ownership interests in the registered global security or for maintaining, supervising or reviewing any records relating to those beneficial ownership interests.

We expect that the depositary for any of the securities represented by a registered global security, upon receipt of any payment of principal, premium or interest to holders on that registered global security, will immediately credit participants' accounts in amounts proportionate to their respective beneficial interests in that registered global security as shown on the records of the depositary. We also expect that payments by participants to owners of beneficial interests in a registered global security held through participants will be governed by standing customer instructions and customary practices, as is now the case with the securities held for the accounts of customers in bearer form or registered in "street name," and will be the responsibility of those participants.

If the depositary for any of these securities represented by a registered global security is at any time unwilling or unable to continue as depositary or ceases to be a clearing agency registered under the Exchange Act and a successor depositary registered as a clearing agency under the Exchange Act is not appointed by us within 90 days, we will issue securities in definitive form in exchange for the registered global security that had been held by the depositary. In addition, we may at any time and in our sole discretion decide not to have any of the securities represented by one or more registered global securities. If we make that decision, we will issue securities in definitive form in exchange for all of the registered global security or securities representing those securities. Any securities issued in definitive form in exchange for a registered global security will be registered in the name or names that the depositary gives to the trustee or other relevant agent of ours or theirs. It is expected that the depositary's instructions will be based upon directions received by the depositary from participants with respect to ownership of beneficial interests in the registered global security that had been held by the depositary.

Description of Warrants

We may issue warrants to purchase shares of our common stock, preferred stock and/or debt securities in one or more series together with other securities or separately, as described in the applicable prospectus supplement. Below is a description of certain general terms and provisions of the warrants that we may offer. Particular terms of the warrants will be described in the warrant agreements and the prospectus supplement to the warrants.

The applicable prospectus supplement will contain, where applicable, the following terms of and other information relating to the warrants:

- the title of the warrants;
- the offering price of the warrants;
- the aggregate number of the warrants;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- the designation, amount and terms of the securities purchasable upon exercise of the warrants;
- if applicable, the exercise price for shares of our common stock and the number of shares of common stock to be received upon exercise of the warrants;
- if applicable, the exercise price for shares of our preferred stock, the number of shares of preferred stock to be received upon exercise, and a description of that series of our preferred stock;
- if applicable, the exercise price for our debt securities, the amount of debt securities to be received upon exercise, and a description of that series of debt securities;
- the date on which the right to exercise the warrants will begin and the date on which that right will expire or, if you may not continuously exercise the warrants throughout that period, the specific date or dates on which you may exercise the warrants;
- whether the warrants will be issued in fully registered form or bearer form, in definitive or global form or in any combination of these forms, although, in any case, the form of a warrant included in a unit will correspond to the form of the unit and of any security included in that unit;
- any applicable material U.S. federal income tax consequences;
- the identity of the warrant agent for the warrants and of any other depositaries, execution or paying agents, transfer agents, registrars or other agents;
- the proposed listing, if any, of the warrants or any securities purchasable upon exercise of the warrants on any securities exchange;

- if applicable, the date from and after which the warrants and the common stock, preferred stock and/or debt securities will be separately transferable;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- information with respect to book-entry procedures, if any;
- the anti-dilution provisions of the warrants, if any;
- any redemption or call provisions;
- whether the warrants are to be sold separately or with other securities as parts of units; and
- any additional terms of the warrants, including terms, procedures and limitations relating to the exchange and exercise of the warrants.

Transfer Agent and Registrar

The transfer agent and registrar for any warrants will be set forth in the applicable prospectus supplement.

Description of Units

We may issue units consisting of common stock, preferred stock, debt securities and/or warrants for the purchase of common stock, preferred stock and/or debt securities in one or more series. In this prospectus, we have summarized certain general features of the units. We urge you, however, to read the prospectus supplements related to the series of units being offered, as well as the unit agreements that contain the terms of the units. We will file as exhibits to an amendment to the registration statement of which this prospectus is a part, or will incorporate by reference from a current report on Form 8-K that we file with the SEC, as applicable, the form of unit agreement and any supplemental agreements that describe the terms of the series of units we are offering before the issuance of the related series of units.

We will evidence each series of units by unit certificates that we will issue under a separate agreement. We will enter into the unit agreements with a unit agent. Each unit agent will be a bank or trust company that we select. We will indicate the name and address of the unit agent in the applicable prospectus supplement relating to a particular series of units.

Plan of Distribution

Any of the securities being offered hereby and in any accompanying prospectus supplement may be sold in any one or more of the following ways from time to time:

- directly to purchasers;
- through agents;
- to or through underwriters;
- through dealers;
- directly to our shareholders; or
- through a combination of any such methods of sale.

The distribution of the securities may be effected from time to time in one or more transactions at a fixed price or prices, which may be changed, at market prices prevailing at the time of sale, at prices related to such prevailing market prices or at negotiated prices.

We may solicit offers to purchase directly. Offers to purchase securities also may be solicited by agents designated by us from time to time. Any such agent involved in the offer or sale of the securities in respect of which this prospectus is delivered will be named, and any commissions payable by us to such agent will be set forth, in the applicable prospectus supplement. Unless otherwise indicated in such prospectus supplement, any such agent will be acting on a reasonable best efforts basis for the period of its appointment. Any such agent may be deemed to be an underwriter, as that term is defined in the Securities Act, of the securities so offered and sold.

If securities are sold by means of an underwritten offering, we will execute an underwriting agreement with an underwriter or underwriters at the time an agreement for such sale is reached, and the names of the specific managing underwriter or underwriters, as well as any other underwriters, the respective amounts underwritten and the terms of the transaction, including commissions, discounts and any other compensation of the underwriters and dealers, if any, will be set forth in the applicable prospectus supplement which will be used by the underwriters to make resales of the securities in respect of which this prospectus is being delivered to the public. If underwriters are utilized in the sale of any securities in respect of which this prospectus is being delivered, such securities will be acquired by the underwriters for their own account and may be resold from time to time in one or more transactions, including negotiated transactions, at fixed public offering prices, at market prices prevailing at the time of sale or at varying prices determined by the underwriters at the time of sale. Securities may be offered to the public either through underwriting syndicates represented by managing underwriters or directly by one or more underwriters. If any underwriter or underwriters are utilized in the sale of securities, unless otherwise indicated in the applicable prospectus supplement, the underwriting agreement will provide that the obligations of the underwriters are subject to certain conditions precedent and that the underwriters with respect to a sale of such securities will be obligated to purchase all such securities if any are purchased.

We may grant to the underwriters options to purchase additional securities, to cover over-allotments, if any, at the public offering price (with additional underwriting commissions or discounts), as may be set forth in the prospectus supplement relating thereto. If we grant any over-allotment option, the terms of such over-allotment option will be set forth in the prospectus supplement for such securities.

If a dealer is used in the sale of the securities in respect of which this prospectus is delivered, we will sell such securities to the dealer, as principal. The dealer may then resell such securities to the public at varying prices to be determined by such dealer at the time of resale. Any such dealer may be deemed to be an underwriter, as such term is defined in the Securities Act, of the securities so offered and sold. The name of the dealer and the terms of the transaction will be set forth in the prospectus supplement relating thereto.

Offers to purchase securities may be solicited directly by us and the sale thereof may be made by us directly to institutional investors or others, who may be deemed to be underwriters within the meaning of the Securities Act with respect to any resale thereof. The terms of any such sales will be described in the prospectus supplement relating thereto.

We may offer our equity securities into an existing trading market on the terms described in the applicable prospectus supplement. Underwriters and dealers who may participate in any at-the-market offerings will be described in the prospectus supplement relating thereto.

Agents, underwriters and dealers may be entitled under relevant agreements with us to indemnification by us against certain liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which such agents, underwriters and dealers may be required to make in respect thereof.

Any underwriter may engage in stabilizing and syndicate covering transactions in accordance with Rule 104 under Regulation M. Rule 104 permits stabilizing bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. The underwriters may over-allot shares of the securities in connection with an offering of securities, thereby creating a short position in the underwriters' account. Syndicate covering transactions involve purchases of the securities in the open market after the distribution has been completed in order to cover syndicate short positions. Stabilizing and syndicate covering transactions may cause the price of the securities to be higher than it would otherwise be in the absence of such transactions. These transactions, if commenced, may be discontinued at any time.

We may elect to list any series of securities on an exchange but, unless otherwise specified in the applicable prospectus supplement, we shall not be obligated to do so. No assurance can be given as to the liquidity of the trading market for any of the securities.

Agents, underwriters and dealers may be customers of, engage in transactions with, or perform services for, us and our subsidiaries in the ordinary course of business.

The anticipated date of delivery of securities will be set forth in the applicable prospectus supplement relating to each offer.

Antitakeover Effects of Provisions of Our Restated Certificate of Incorporation and Amended By-Laws

Our Board of Directors is divided into three classes. As a result of this provision, at least two annual meetings of shareholders may be required for shareholders to change a majority of the Board of Directors. Our by-laws provide that the Board of Directors shall consist of not less than six nor more than twelve members, with the exact number to be determined by the vote of not less than 66 2/3 % of the Board of Directors from time to time. Directors are elected to serve staggered three-year terms and are not subject to removal except for cause by the vote of the holders of at least 80% of our capital stock. Unless otherwise required by law, vacancies on the Board of Directors, including vacancies resulting from an increase in the number of directors or the removal of directors, may only be filled by an affirmative vote of 66 2/3% of the directors then in office. The classification of directors, the ability of the Board of Directors to increase the number of directors, the inability of the shareholders to remove directors without cause or fill vacancies on the Board of Directors and the inability of holders of less than 80% of our capital stock to remove directors even with cause will make it more difficult to change the Board of Directors, and will promote the continuity of existing management.

These and other provisions also may have the effect of deterring, preventing or delaying changes in control or management. These provisions are intended to enhance the likelihood of continued stability in the composition of the Board of Directors and in the policies furnished by the Board of Directors and to discourage types of transactions that may involve an actual or threatened change of control. These provisions are designed to reduce our vulnerability to an unsolicited acquisition proposal. The provisions also are intended to discourage tactics that may be used in proxy fights. However, such provisions could have the effect of discouraging others from making tender offers for our shares and, as a consequence, they also may inhibit fluctuations in the market price of our shares that could result from actual or rumored takeover attempts. These provisions also may have the effect of preventing changes in our management.

New Jersey Shareholders Protection Act

The New Jersey Shareholders Protection Act, NJSA 14A:10A-1 et seq., which we refer to as New Jersey Act, prohibits certain New Jersey corporations, such as us, from entering into certain “business combinations” with an “interested shareholder” (any person who is the beneficial owner of 10% or more of such corporation's outstanding voting securities) for five years after such person became an interested shareholder, unless the business combination or the interested shareholder's acquisition of stock was approved by the corporation's Board of Directors prior to such interested shareholder's stock acquisition date. After the five-year waiting period has elapsed, a business combination between such corporation and an interested shareholder will be prohibited unless the business combination is approved by the holders of at least two-thirds of the voting stock not beneficially owned by the interested shareholder, or unless the business combination satisfies the New Jersey Act's fair price provision intended to provide that all shareholders (other than the interested shareholders) receive a fair price for their shares.

The New Jersey Act defines “business combination” to include the following transactions between a corporation or a subsidiary and an interested shareholder or such interested shareholder's affiliates: (1) the merger or consolidation of the corporation with the interested shareholder or any corporation that after the merger or consolidation would be an affiliate or associate of the interested shareholder; (2) any sale, lease, exchange, mortgage, pledge, transfer or other disposition to or with the interested shareholder, which has an aggregate market value equal to 10% or more of the aggregate market value of all of the assets or of the outstanding stock, or 10% or more of the income of the corporation or its subsidiaries; (3) the issuance or transfer to the interested shareholder of any stock of the corporation having an aggregate market value equal to or greater than 5% of the corporation's outstanding stock; (4) the adoption of a plan or proposal for the liquidation or dissolution of the corporation proposed by the interested shareholder; (5) any reclassification of securities proposed by the interested shareholder that has the effect, directly or indirectly, of increasing any class or series of stock that is owned by the interested shareholder; and (6) the receipt by the interested shareholder of any loans or other financial assistance from the corporation.

The New Jersey Act does not apply to certain business combinations, including those with persons who acquired 10% or more of the voting power of the corporation prior to the time the corporation was required to file periodic reports pursuant to the Exchange Act or prior to the time the corporation's securities began to trade on a national securities exchange.

Legal Matters

The validity of the shares of common stock and matters governed by New Jersey law will be passed upon by Dillon, Bitar & Luther, L.L.C. Certain other legal matters will be passed upon by Jenner & Block LLP.

Experts

The consolidated financial statements of EMCORE Corporation as of September 30, 2011 and 2010 and for each of the years in the two-year period ended September 30, 2011, and management's assessment of the effectiveness of internal control over financial reporting as of September 30, 2011 have been incorporated by reference herein and in the registration statement in reliance upon the reports of KPMG LLP, independent registered public accounting firm, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing.

The audit report on the effectiveness of internal control over financial reporting as of September 30, 2011, expresses an opinion that EMCORE Corporation did not maintain effective internal control over financial reporting as of September 30, 2011 because of the effect of material weaknesses on the achievement of the objectives of the control criteria and contains an explanatory paragraph that states material weaknesses related to certain inventory reserves transactions and certain inventory held by third parties have been identified and included in management's assessment.

The report of KPMG LLP dated December 29, 2011 on the consolidated financial statements refers to a change in the annual testing date for goodwill impairment.

The consolidated financial statements of EMCORE Corporation for the year ended September 30, 2009 incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended September 30, 2011, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report which is incorporated herein by reference. Such financial statements have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

Where You Can Find More Information

We are a reporting company and file annual, quarterly, and current reports, proxy statements and other information with the Securities and Exchange Commission. We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the securities we are offering under this prospectus. This prospectus does not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. You may read and copy the registration statement, as well as our reports, proxy statements and other information, we file at the Public Reference Room of the SEC located at 100 F Street, N.E., Washington, D.C. 20549. You may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains an Internet site at www.sec.gov that contains reports, proxy and information statements and other information regarding registrants that file electronically, including EMCORE. Except as expressly set forth under "Information Incorporated by Reference," we are not incorporating the contents of the SEC website into this prospectus. You may also find additional information about us, including the documents mentioned above, on our website at www.emcore.com. The information included or linked to this website is not a part of this prospectus.

Information Incorporated by Reference

The SEC allows us to incorporate by reference in this prospectus the information in documents we file with the SEC, which means that we can disclose important information to you by referring you to those documents. The information in this prospectus updates (and, to the extent of any conflict, supersedes) information incorporated by reference that we have filed with the SEC prior to the date of this prospectus. **You should read all of the information incorporated by reference because it is an important part of this prospectus.**

We incorporate by reference the documents listed below (SEC File No. 000-22175), excluding any portions of any Current Report on Form 8-K that are not deemed “filed” pursuant to the General Instructions of Form 8-K:

- Annual report on Form 10-K for the fiscal year ended September 30, 2011, filed with the SEC on December 29, 2011;
- The information specifically incorporated by reference into our Annual Report on Form 10-K for the fiscal year ended September 30, 2011 from our definitive proxy statement on Schedule 14A for our 2012 Annual Meeting of Shareholders filed with the SEC on January 27, 2012;
- Quarterly Reports on Form 10-Q for the quarters ended December 31, 2011, March 31, 2012, and June 30, 2012 filed with the SEC on February 14, 2012, May 3, 2012 (as amended by our 10-Q/A filed with the SEC on August 7, 2012), and August 8, 2012, respectively;
- Current Reports on Forms 8-K filed with the SEC on November 9, 2011, December 28, 2011, January 27, 2012, February 16, 2012, March 13, 2012, March 28, 2012, May 8, 2012, June 20, 2012, and August 9, 2012; and,
- The description of our common stock contained in our Registration Statement on Form 8-A filed with the SEC on February 26, 1997, including any amendments or reports filed for the purpose of updating such description.

We also incorporate by reference any future filings made with the SEC by us under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 (other than filings or portions of filings that are furnished under applicable SEC rules rather than filed), including those made after the date of filing of the initial registration statement of which this prospectus is a part and prior to its effectiveness, until we file a post-effective amendment that indicates the termination of the offering of the securities made by this prospectus. Information in such future filings updates and supplements the information provided in this prospectus. Any statements in any such future filings will automatically be deemed to modify and supersede any information in any document we previously filed with the SEC that is incorporated or deemed to be incorporated herein by reference to the extent that statements in the later filed document modify or replace such earlier statements.

We hereby undertake to provide without charge to each person, including any beneficial owner, to whom a copy of this prospectus is delivered, upon written or oral request of any such person, a copy of any and all of the reports or documents that have been incorporated by reference in this prospectus but not delivered with the prospectus, including exhibits which are specifically incorporated by reference into such documents. Requests for such copies should be directed to our Investor Relations department, at the following address or telephone number:

Attention: Investor Relations
EMCORE Corporation
10420 Research Road, SE
Albuquerque, New Mexico 87123
(505) 332-5000



PROSPECTUS

INFORMATION NOT REQUIRED IN PROSPECTUS

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the estimated costs and expenses of the sale and distribution of the securities being registered, all of which are being borne by the Registrant.

SEC registration fee	\$	5,730
Printing and engraving fees	\$	10,000
Legal fees and expenses	\$	20,000
Accounting fees and expenses	\$	20,000
Total	\$	<u>55,730</u>

Item 15. Indemnification of Directors and Officers

The Company's Restated Certificate of Incorporation, as amended, and Amended By-Laws include provisions (i) to reduce the personal liability of the Company's directors for monetary damage resulting from breaches of their fiduciary duty, except for breaches of the duty of loyalty to the Company or its shareholders, breaches due to acts or omissions not in good faith or involving a known violation of law, or breaches resulting in the receipt of an improper personal benefit, and (ii) to permit the Company to indemnify its directors and officers to the fullest extent permitted by New Jersey law. The Company has obtained directors' and officers' liability insurance that insures such persons against the costs of defense, settlement, or payment of a judgment under certain circumstances.

Subject to certain limitations, we are obligated to indemnify our current and former directors, officers and employees in connection with the investigation of our historical stock option granting practices, related government investigation and shareholder litigation. These obligations arise under the terms of our Restated Certificate of Incorporation, as amended, Amended By-Laws, applicable contracts, and New Jersey law. The obligation to indemnify generally means that we are required to pay or reimburse the individuals' reasonable legal expenses and possibly damages and other liabilities incurred in connection with these matters. We are currently paying or reimbursing legal expenses being incurred in connection with these matters by a number of our current and former directors, officers and employees. The maximum potential amount of future payments the Company could be required to make under these indemnification agreements is unlimited; however, the Company has a director and officer liability insurance policy that limits its exposure and enables it to recover a portion of any future amounts paid.

The indemnification provisions noted above may be sufficiently broad to permit indemnification of the registrant's officers and directors for liabilities arising under the Securities Act of 1933, as amended.

Item 16. Exhibits and Financial Statement Schedules

(a) Exhibits.

3.1	Restated Certificate of Incorporation, dated April 4, 2008 (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K filed on April 4, 2008).
3.2	Certificate of Amendment of Restated Certificate of Incorporation, dated February 15, 2012 (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K filed on February 16, 2012).
3.3	Amended By-Laws, as amended through August 6, 2012 (incorporated by reference to Exhibit 3.1 to Registrant's Current Report on Form 8-K filed on August 9, 2012).
4.1	Specimen certificate for shares of common stock (incorporated by reference to Exhibit 4.1 to Amendment No. 3 to the Registration Statement on Form S-1 (File No. 333-18565) filed with the Commission on February 24, 1997).
4.2	Form of Indenture.*
4.3	Form of Debt Security (included in Exhibit 4.2).*
4.4	Form of Warrant.**
4.5	Form of Warrant Agreement.**
4.6	Specimen Preferred Stock Certificate and Form of Certificate of Designation of Preferred Stock.**
5.1	Opinion of Dillon, Bitar & Luther, L.L.C.*
12.1	Statement of Computation of Ratios of Earnings to Fixed Charges.*
21.1	Subsidiaries of Registrant.*
23.1	Consent of KPMG LLP.*
23.2	Consent of Deloitte and Touche LLP.*
23.3	Consent of Dillon, Bitar & Luther, L.L.C. (contained in Exhibit 5.1).*
24.1	Power of Attorney (included on signature page).
25.1	Statement of Eligibility of Trustee for the Debt Securities.***

* Filed herewith.

** To be filed, if necessary, on an exhibit to a post-effective amendment to this registration statement or incorporated herein by reference to an exhibit to a Current Report on Form 8-K or other document to be filed under the Securities Exchange Act of 1933, as amended.

*** To be filed pursuant to Section 305(b)(2) of the Trust Indenture Act.

(b) Financial Statement Schedules. Not applicable.

Item 17. Undertakings

(a) 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 this 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 this 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 Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than a 20% 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 subparagraphs (i), (ii) and (iii) above shall not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in the periodic reports filed with or furnished to the SEC 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 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 the 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 purposes 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.

(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.

(b) The undersigned registrant hereby undertakes 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.

(c) 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 provisions described under Item 15 above, 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.

(d) The undersigned registrant hereby undertakes 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 in accordance with the rules and regulations prescribed by the Commission under section 305(b)(2) of the Trust Indenture Act.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant, EMCORE Corporation, certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Albuquerque, State of New Mexico, on the 10th day of August, 2012.

EMCORE CORPORATION

By: /s/ Hong Q. Hou

Hong Q. Hou, Ph.D.

Chief Executive Officer

(Principal Executive Officer)

POWER OF ATTORNEY

We, the undersigned directors and officers of EMCORE Corporation, do hereby constitute and appoint Hong Q. Hou, Ph.D. our true and lawful attorney and agent, to do any and all acts and things in our name and behalf in our capacities as directors and officers and to execute any and all instruments for us and in our names in the capacities indicated below, which said attorney and agent may deem necessary or advisable to enable said corporation to comply with the Securities Act of 1933, as amended, and any rules, regulations, and requirements of the Securities and Exchange Commission, in connection with this registration statement, including specifically, but without limitation, power and authority to sign for us or any of us in our names and in the capacities indicated below, any and all amendments (including post-effective amendments) to this registration statement, or any related registration statement that is to be effective upon filing pursuant to Rule 462(b) under the Securities Act of 1933, as amended; and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, and we do hereby ratify and confirm all that the said attorney and agent shall do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, 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/ Hong Q. Hou</u> Hong Q. Hou, Ph.D.	Chief Executive Officer and Director (Principal Executive Officer)	<u>August 10, 2012</u>
<u>/s/ Mark B. Weinswig</u> Mark B. Weinswig	Chief Financial Officer (Principal Financial and Accounting Officer)	<u>August 10, 2012</u>
<u>/s/ Thomas J. Russell</u> Thomas J. Russell, Ph.D.	Chairman Emeritus	<u>August 10, 2012</u>
<u>/s/ Reuben F. Richards</u> Reuben F. Richards, Jr.	Executive Chairman and Chairman of the Board	<u>August 10, 2012</u>
<u>/s/ Robert L. Bogomolny</u> Robert L. Bogomolny	Director	<u>August 10, 2012</u>
<u>/s/ John Gillen</u> John Gillen	Director	<u>August 10, 2012</u>
<u>/s/ Sherman McCorkle</u> Sherman McCorkle	Lead Independent Director	<u>August 10, 2012</u>
<u>/s/ Charles T. Scott</u> Charles T. Scott	Director	<u>August 10, 2012</u>
<u>/s/ James A. Tegnalia</u> James A. Tegnalia, Ph.D.	Director	<u>August 10, 2012</u>

EMCORE CORPORATION

as Issuer

AND

as Trustee

Indenture

Dated as of , 2012

Certain Sections of this Indenture relating to Sections 310 through 318 of the Trust Indenture Act of 1939:

	Trust Indenture Act Section	Indenture Section
§ 310	(a) (1)	
		6.09
	(a) (2)	
		6.09
	(a) (3)	
		Not Applicable
§ 311	(a) (4)	
		Not Applicable
	(b)	
		6.08
		6.1
§ 312	(a)	
		6.13
	(b)	
		6.13
	(a)	
		3.13
§ 313		7.01
		7.02 (a)
	(b)	
		7.02(b)
	(c)	
		Not Applicable
§ 314	(a)	
		7.03(a)
	(b) (1)	
		7.03(a)
	(b) (2)	
		7.03(a)
§ 315	(c) (1)	
		7.03(a)
	(d)	
		7.03(b)
	(a)	
		10.05
§ 316	(b)	
		Not Applicable
	(c) (1)	
		1.02
	(c) (2)	
		1.02
§ 317	(c) (3)	
		Not Applicable

	(d)	
		Not Applicable
	(e)	
		1.02
	(f)	
		Not Applicable
§ 315	(a)	
		6.01
	(b)	
		6.02
	(c)	
		6.01
	(d)	
		6.01
	(e)	
		5.14
§ 316	(a) (1) (A)	
		5.12
	(a) (1) (B)	
		5.13
	(a) (2)	
		Not Applicable
	(b)	
		5.08
	(c)	
		1.04(c)
§ 317	(a) (1)	
		5.03
	(a) (2)	
		5.04
	(b)	
		10.03
§ 318	(a)	
		1.07

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

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INDENTURE, dated as of , 2012, between EMCORE Corporation, a corporation duly organized and existing under the laws of the State of New Jersey, as Issuer (herein called the “Company”), having its principal office at 10420 Research Road, SE, Albuquerque, New Mexico 87123, and _____, a _____ duly organized under the laws of the State of _____, as Trustee (herein called the “Trustee”).

RECITALS OF THE COMPANY

The Company has duly authorized the execution and delivery of this Indenture to provide for the issuance from time to time of its debentures, notes or other evidences of indebtedness (herein called the “Securities”), to be issued in one or more series as provided in this Indenture.

All things necessary to make this Indenture a valid 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 purchases of the Securities by the Holders thereof, it is mutually agreed, for the equal and proportionate benefit of all Holders of the Securities or of series thereof, as follows:

Article 1.

DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

SECTION 1.01 Definitions. For all purposes of this Indenture, except as otherwise expressly provided or unless the context otherwise requires:

- (i) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;
- (ii) all other terms used herein which are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein;
- (iii) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with GAAP; and
- (iv) 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 1.04.

“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.

“Board of Directors” means, with respect to any Person, either the board of directors of such Person or any duly authorized committee of that board.

“Board Resolution” means, with respect to any Person, a copy of a resolution certified by the Secretary or an Assistant Secretary of such Person to have been duly adopted by the Board of Directors, or alternatively, in the case of the Company, by any committee of the Board of Directors or a committee of other officers or representatives of the Company pursuant to authority duly delegated to it by the Board of Directors of the Company, and to be in full force and effect on the date of such certification, and delivered to the Trustee.

“Business Day”, when used with respect to any Place of Payment, means each Monday, Tuesday, Wednesday, Thursday and Friday which is not a day on which banking institutions in that Place of Payment or the Corporate Trust Office are authorized or obligated by law to close.

“Capital Stock” means any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock, including, without limitation, with respect to partnerships, partnership interests (whether general or limited) and any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, such partnership.

“Commission” means the Securities and Exchange Commission, as from time to time constituted, created under the Exchange Act, or, if at any time after the 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 at such time.

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

“Company Request” or “Company Order” means a written request or order signed in the name of the Company by both (i) any of its Chairman of the Board, its Chief Executive Officer, its Chief Financial Officer, its Chief Legal Officer or any Vice President, and (ii) any of its Treasurer, its Secretary, any Assistant Secretary or any Vice President (other than a Vice President signing pursuant to clause (i) above, and delivered to the Trustee.

“Comparable Treasury Issue” means the United States Treasury security selected by an Independent Investment Banker as having a maturity comparable to the remaining term of the Securities that would be utilized, at the time of selection and in accordance with customary financial practice, in pricing new issues of corporate debt securities of comparable maturity to the remaining term of the Securities. “Independent Investment Banker” means one of the Reference Treasury Dealers appointed by the Company.

“Comparable Treasury Price” means, with respect to any Redemption Date, as determined by the Company (i) the average of the Reference Treasury Dealer Quotations for such Redemption Date, after excluding the highest and lowest such Reference Treasury Dealer Quotations, or (ii) if the Company obtains fewer than four such Reference Treasury Dealer Quotations, the average of all such quotations.

“Consolidated Net Tangible Assets” means the total assets which under United States Generally Accepted Accounting Principles (“GAAP”) would be included on the most recent audited annual consolidated balance sheet of the Company, after deducting therefrom, without duplication, the sum of (i) all current liabilities and (ii) all goodwill, trade names, trademarks, patents, unamortized debt discount and related expense and other like intangibles, which in each case under GAAP would be included on such consolidated balance sheet.

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

“corporation” means a corporation, association, company, joint-stock company or business trust.

“Default” means any event that is or with the passage of time or the giving of notice or both would become an Event of Default.

“Defaulted Interest” has the meaning specified in Section 3.07.

“Defeasance” has the meaning specified in Section 12.02.

“Depository” means The Depository Trust Company until a successor Depository shall have become such pursuant

to the applicable provisions of this Indenture, and thereafter “Depository” shall mean such successor Depository.

“Dollars” and “\$” means the currency of The United States of America.

“ECU” means the European Currency Unit as determined by the Commission of the European Union.

“Equity Interests” means Capital Stock and all warrants, options or other rights to acquire Capital Stock (but excluding any debt security that is convertible into, or exchangeable for, Capital Stock).

“Event of Default” has the meaning specified in Section 5.01.

“Exchange Act” means the U.S. Securities Exchange Act of 1934, as amended.

“Foreign Currency” means any currency or currency unit issued by a government other than the government of The United States of America.

“GAAP” means generally accepted accounting principles set forth in the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants and statements and pronouncements of the Financial Accounting Standards Board or in such other statements by such other entity as have been approved by a significant segment of the accounting profession, in each case, as in effect in the United States on the date hereof.

“Global Security” means a Security in global form registered in the Security Register in the name of a Depository or a nominee thereof.

“Holder” means a Person in whose name a Security is registered in the Security Register.

“Indebtedness” means, with respect to any Person, any indebtedness of such Person, whether or not contingent, in respect of (i) borrowed money evidenced by bonds, notes, debentures or similar instruments, (ii) indebtedness secured by a mortgage, pledge, lien, charge, encumbrance of any security interest existing on property owned by such Person, (iii) the reimbursement obligations, contingent or otherwise, in connection with any letters of credit actually issued or amounts representing the balance that constitutes an accrued expense or trade payable or (iv) any lease of property by such Person as lessee which is reflected in such Person’s consolidated balance sheet as a capitalized lease in accordance with GAAP, in the case of items of Indebtedness under (i) through (iii) above to the extent that any such items (other than letters of credit) would appear as a liability on such Person’s consolidated balance sheet in accordance with GAAP, and also includes, to the extent not otherwise included, any obligation by such Person to be liable for, or to pay, as obligor, guarantor or otherwise (other than for purposes of collection in the ordinary course of business), Indebtedness of another Person.

“Indenture” means this instrument as originally executed or as it may from time to time be supplemented or amended by one or more indentures supplemental hereto entered into pursuant to the applicable provisions hereof, including, the terms of a particular series of Securities established pursuant to the applicable provisions hereof, and for all purposes of this instrument and any such supplemental indenture or terms of a particular series, the provisions of the Trust Indenture Act that are deemed to be a part of and govern this instrument and any such supplemental indenture, respectively.

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

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

“Investments” means, with respect to any Person, all investments by such Person in other Persons (including Affiliates) in the forms of loans, advances or capital contributions, purchases or other acquisitions for consideration

of Indebtedness, Equity Interests or other securities and all other items that are or would be classified as investments on a balance sheet prepared in accordance with GAAP.

“Investment Company Act” means the Investment Company Act of 1940 and any statute successor thereto, in each case as amended from time to time.

“Issue Date” means, with respect to any series of Securities, the date such series of Securities is originally issued under this Indenture.

“Lien” means, with respect to any asset, any mortgage, lien, pledge, charge, security interest or encumbrance of any kind in respect of such asset, whether or not filed, recorded or otherwise perfected under applicable law (including any conditional sale or other title retention agreement, any lease in the nature thereof, any option or other agreement to sell or give a security interest in and any filing of or agreement to give any financing statement under the Uniform Commercial Code (or equivalent statutes) of any jurisdiction).

“Maturity”, when used with respect to any Security, means the date on which the principal of such Security becomes due and payable as therein or herein provided, whether at the Stated Maturity, on a Redemption Date or by declaration of acceleration or otherwise.

“Officers’ Certificate” means a certificate signed by both (i) any of the Chairman of the Board, a Vice Chairman of the Board, the Chief Executive Officer, the Chief Financial Officer, the Chief Legal Officer or any Vice President, and (ii) any of the Treasurer, the Secretary, any Assistant Secretary, or any Vice President (other than a Vice President signing pursuant to clause (i) above), of the Company, and delivered to the Trustee.

“Opinion of Counsel” means a written opinion of counsel, who may be external or in-house counsel for the Company, and who shall be acceptable to the Trustee.

“Original Issue Discount Security” means any Security which provides for an amount less than the principal amount thereof to be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.02.

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

- (i) Securities theretofore cancelled by the Trustee or delivered to the Trustee for cancellation;
- (ii) Securities, or portions thereof, for whose payment or redemption 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; *provided* that if such Securities are to be redeemed prior to the maturity thereof, notice of such redemption shall have been given to the Holders as herein provided, or provision satisfactory to a Responsible Officer of the Trustee shall have been made for giving such notice; and
- (iii) Securities which have been paid 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 protected 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, (i) the principal amount of an Original Issue Discount Security which shall be deemed to be Outstanding shall be the amount of the principal thereof which would be due and payable as of such date upon acceleration of the Maturity thereof to such date pursuant to Section 5.02, (ii) the principal amount of a Security denominated in one or more foreign currencies or currency units which shall be deemed to be Outstanding shall be the U.S. dollar equivalent, determined as of such date in the manner provided as contemplated by Section 3.01, of the principal amount of such

Security and (iii) 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 relying upon any such request, demand, authorization, direction, notice, consent or waiver, only Securities which a Responsible Officer of the Trustee knows to be so owned shall be so disregarded. Securities so owned 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.

"Paying Agent" means any Person authorized by the Company to pay the principal of, interest on or Redemption Price of any Securities on behalf of the Company. The Trustee shall initially be the Paying Agent.

"Permitted Liens" means any of the following: (a) Liens on any Principal Property acquired by the Company or a Subsidiary after the date of this Indenture to secure or provide for the payment or financing of all or any part of the purchase price thereof or construction of fixed improvements thereon (prior to, at the time of or within 180 days after the latest of the acquisition, completion of construction or commencement of commercial operation thereof); (b) Liens on any shares of stock or Principal Property acquired by the Company or a Subsidiary after the date of this Indenture existing at the time of such acquisition; (c) Liens on any shares of stock or Principal Property of a corporation which is merged into or consolidated with the Company or a Subsidiary or substantially all of the assets of which are acquired by the Company or a Subsidiary; (d) Liens securing Indebtedness of a Subsidiary owing to the Company or another Subsidiary; (e) Liens existing at the date of the Indenture; (f) Liens on any Principal Property being constructed or improved securing loans to finance such construction or improvements; (g) Liens in favor of governmental bodies of the United States or any State thereof or any other country or political subdivision thereof to secure partial, progress or advance payments pursuant to any contract or statute, or to secure any Indebtedness incurred or guaranteed for the purpose of financing all or any part of the cost of acquiring, constructing or improving the property subject to such Liens; (h) Liens securing taxes, assessments or governmental charges or levies not yet delinquent, or already delinquent but the validity of which is being contested in good faith; (i) Liens arising by reason of deposits necessary to qualify the Company or any Subsidiary to conduct business, maintain self-insurance, or obtain the benefit of, or comply with, any law; (j) Liens arising out of judgments or awards against the Company or any Subsidiary with respect to which the Company or such Subsidiary shall in good faith be prosecuting an appeal or proceedings for review; provided that the Company or such Subsidiary shall have secured, within 60 days after the creation thereof, an effective stay of execution pending such appeal or review; and (k) extensions, renewals or replacement of Liens referred to in the foregoing clauses provided that the Indebtedness secured is not increased nor the Lien extended to any additional assets.

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

"Physical Securities" has the meaning specified in Section 2.01.

"Place of Payment", when used with respect to the Securities of any series, means the place or places where the principal of and any premium or interest on the Securities of that series are payable specified as required by Section 3.01.

"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 3.06 in exchange for or in lieu of a mutilated, destroyed, lost or stolen Security shall be deemed to evidence the same debt as the mutilated, destroyed, lost or stolen Security.

"Principal Property" means any manufacturing plant, testing or research and development facility, distribution facility, processing plant or warehouse (including, without limitation, land, fixtures and equipment), owned or leased by the Company or any domestic Subsidiary (including any of the foregoing acquired or leased after the date of this Indenture) and located within the United States of America, its territories and possessions, unless the Board of Directors of the Company determines in good faith that such plant or facility is not of material importance to the

total business conducted by the Company and its consolidated Subsidiaries.

“Redemption Date” when used with respect to any Security to be redeemed, means any date which is a Business Day fixed for such redemption by the Company pursuant to Section 11.04 of this Indenture.

“Redemption Price” when used with respect to any Security to be redeemed, means the price at which it is to be redeemed pursuant to this Indenture.

“Reference Treasury Dealer Quotations” means, with respect to each Reference Treasury Dealer and any Redemption Date, the average, as determined by the Company, of the bid and asked prices for the Comparable Treasury Issue (expressed in each case as a percentage of its principal amount) quoted in writing to the Company by such Reference Treasury Dealer, at 5:00 p.m., New York City time, on the third Business Day preceding such Redemption Date.

“Reference Treasury Dealers” means any four nationally recognized investment banking firms, and their successors, selected by the Company that are each also a primary U.S. Government securities dealer (a “Primary Treasury Dealer”); *provided, however*, that if any Reference Treasury Dealer shall cease to be a primary U.S. Government securities dealer, the Company shall substitute another nationally recognized investment banking firm that is a Primary Treasury Dealer.

“Remaining Scheduled Payments” means, with respect to each Security to be redeemed, the remaining scheduled payments of principal thereof and interest thereon that would be due after the related Redemption Date but for that redemption; *provided, however*, that if such Redemption Date is not an Interest Payment Date with respect to such Security, the amount of the next succeeding scheduled interest payment thereon shall be reduced by the amount of interest accrued thereon to such Redemption Date.

“Regular Record Date” for the interest payable on any Interest Payment Date with respect to any Security, means such date or dates specified in the Security (whether or not a Business Day), as the case may be, immediately preceding the relevant Interest Payment Date relating to such Security.

“Responsible Officer” means any officer of the Trustee within the Corporate Trust Office of the Trustee with direct responsibility for the administration of this Indenture and also, with respect to a particular matter, any other officer of the Trustee to whom such matter is referred because of such officer’s knowledge and familiarity with the particular subject.

“Securities” has the meaning specified in the first paragraph of the Recitals of the Company.

“Securities Act” means the U.S. Securities Act of 1933, as amended, and the rules and regulations of the Commission promulgated thereunder.

“Security Register” and “Security Registrar” have the respective meanings specified in Section 3.05.

“Significant Subsidiary” means any direct or indirect Subsidiary of the Company that generates 5% (five percent) or more of the Company’s revenue or income or that holds 5% (five percent) or more of the Company’s assets.

“Special Record Date” for the payment of Defaulted Interest means a date fixed by the Trustee pursuant to Section 3.07.

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

“Subsidiary” means a corporation more than 50% of the outstanding voting stock of which is owned, directly or indirectly, by the Company or by one or more other Subsidiaries, or by the Company and one or more other

Subsidiaries. For the purposes of this definition, “voting stock” means stock which ordinarily has voting power for the election of directors, whether at all times or only so long as no senior class of stock has such voting power by reason of any contingency.

“Treasury Rate” means, with respect to any Redemption Date, the rate per annum equal to the semiannual equivalent yield to maturity (computed as of the second Business Day immediately preceding that Redemption Date) of the Comparable Treasury Issue, assuming a price for the Comparable Treasury Issue (expressed as a percentage of its principal amount) equal to the Comparable Treasury Price for that Redemption Date.

“Trust Indenture Act” means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed; *provided, however*, that in the event the Trust Indenture Act of 1939 is amended after such date, “Trust Indenture Act” means, to the extent required by any such amendment, the Trust Indenture Act of 1939 as so amended.

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

“U.S. Government Obligation” has the meaning specified in Section 12.04.

“Vice President,” when used with respect to the Company, means any vice president, whether or not designated by a number or a word or words added before or after the title “vice president”.

SECTION 1.02 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 such certificates and opinions as may be required under the Trust Indenture Act. Each such certificate or opinion shall be given in the form of an Officers’ Certificate, if to be given by an officer of the Company, or an Opinion of Counsel, if to be given by counsel, stating that in the opinion of the signers or such counsel, as the case may be, all conditions precedent, if any, provided for in this Indenture and the requirements of the Trust Indenture Act relating to the proposed action have been complied with.

Every certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture shall include

- (i) a statement that each individual signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;
- (ii) 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;
- (iii) a statement that, in the opinion of each such individual, such individual has made such examination or investigation as is necessary to enable such individual to express an informed opinion as to whether or not such covenant or condition has been complied with; and
- (iv) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

SECTION 1.03 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 a certificate or opinion of, or representations by, counsel, unless such officer knows, or in the exercise of reasonable care should know, that the certificate or opinion or representations with respect to the matters upon which his certificate or opinion is based are erroneous. Any such certificate or Opinion of Counsel 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 with respect 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 1.04 Acts of Holders; Record Dates. (a) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company. If any Securities are denominated in a currency other than that of the United States, then for the purposes of determining whether the Holders of the requisite principal amount of Securities have taken any action with respect to the Securities of more than one series as herein described, the principal amount of such Securities shall be deemed to be that amount of United States dollars that could be obtained for such principal amount on the basis of the spot rate of exchange into United States dollars for the currency in which such Securities are denominated (as evidenced to the Trustee by an Officers' Certificate) as of the date the taking of such action by the Holders of such requisite principal amount is evidenced to the Trustee as provided in the immediately preceding sentence. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of the Holders signing such instrument or instruments. Proof of execution of any such instrument or of a writing appointing any such agent shall be sufficient for any purpose of this Indenture and (subject to Section 6.01) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section.

(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 manner which the Trustee deems sufficient.

(c) The Company may fix any day as the record date for the purpose of determining the Holders entitled to give or take any request, demand, authorization, direction, notice, consent, waiver or other action, or to vote on any action, authorized or permitted to be given or taken by Holders. If not set by the Company prior to the first solicitation of a Holder made by any Person in respect of any such action, or, in the case of any such vote, prior to such vote, the record date for any such action or vote shall be the 30th day (or, if later, the date of the most recent list of Holders required to be provided pursuant to Section 7.01) prior to such first solicitation or vote, as the case may be. With regard to any record date, only the Holders on such date (or their duly designated proxies) shall be entitled to give or take, or vote on, the relevant action.

(d) The ownership of Securities shall be proved by the Security Register.

(e) 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 in exchange therefor or in lieu thereof in respect of anything done, omitted or suffered to be done by the Trustee or the Company in reliance thereon, whether or not notation of such action is made upon such Security.

SECTION 1.05 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,

(i) 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 _____, with a copy to _____, or

(ii) 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 instrument or at any other address previously furnished in writing to the Trustee by the Company, Attention: Office of the Chief Legal Officer.

SECTION 1.06 Notice to Holders; Waiver. Where this Indenture provides for notice to Holders of any event, such notice shall be sufficiently given (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, to each 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 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. If a notice or communication is mailed or published in the manner provided for above, within the time prescribed, it is duly given, whether or not the Holder receives it.

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.

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

SECTION 1.07 Conflict with Trust Indenture Act. If any provision hereof limits, qualifies or conflicts with a provision of the Trust Indenture Act that is required under such Act to be a part of and govern this Indenture, the latter 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.

SECTION 1.08 Effect of Headings and Table of Contents. The Article and Section headings herein and the Table of Contents are for convenience only and shall not affect the construction hereof.

SECTION 1.09 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 1.10 No Recourse Against Others.

A director, officer, employee or stockholder, as such, of the Company shall not have any liability for any obligations of the Company under the Securities or the Indenture or for any claim based on, in respect of or by reason of such obligations or their creation. Each Securityholder by accepting a Security waives and releases all such liability. The waiver and release are part of the consideration for the issue of the Securities.

SECTION 1.11 Separability Clause. In case any provision in this Indenture or in the Securities shall be invalid, illegal or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.

SECTION 1.12 Benefits of Indenture. Nothing in this Indenture or in the Securities, express or implied, shall give to any Person, other than the parties hereto and their respective successors hereunder and the Holders of Securities, any benefit or any legal or equitable right, remedy or claim under this Indenture.

SECTION 1.13 Governing Laws. THE INTERNAL LAW OF THE STATE OF NEW YORK WILL GOVERN AND BE USED TO CONSTRUE THIS INDENTURE, THE SECURITIES AND ANY GUARANTEES OF THE SECURITIES WITHOUT GIVING EFFECT TO APPLICABLE PRINCIPLES OF CONFLICTS OF LAW TO THE EXTENT THAT THE APPLICATION OF THE LAWS OF ANOTHER JURISDICTION WOULD BE REQUIRED THEREBY.

SECTION 1.14 Legal Holidays. In any case where any Interest Payment Date or Stated Maturity of any Security shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or of the Securities) payment of interest or principal need not be made at such Place of Payment on such date, but 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 or at the Stated Maturity, *provided* that no interest shall accrue with respect to such payment for the period from and after such Interest Payment Date or Stated Maturity or, as the case may be.

SECTION 1.15 Patriot Act. The parties hereto acknowledge that in accordance with Section 326 of the USA Patriot Act, _____, like all financial institutions and in order to help fight the funding of terrorism and money-laundering, are required to obtain, verify, and record information that identifies each person or legal entity that establishes a relationship or opens an account. The parties to this Agreement agree that they will provide _____ with such information as it may request in order for _____ to satisfy the requirements of the USA Patriot Act.

ARTICLE 2. SECURITY FORMS

SECTION 2.01 Forms Generally. The Securities of each series and the Trustee's certificates of authentication shall be in substantially the forms set forth in this Article, or in such other form as shall be established by or pursuant to (i) a Board Resolution of the Company, or (ii) in one or more indentures supplemental hereto, in each case with such appropriate insertions, omissions, substitutions and other variations as are required or permitted by this Indenture, and may have such letters, numbers or other marks of identification and such legends or endorsements placed thereon as may be required to comply with the rules of any securities exchange or Depositary therefor, the Internal Revenue Code of 1986, as amended, and regulations thereunder, or as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution thereof.

Unless it is determined pursuant to a Company Order or as otherwise provided in this Indenture that non-Global Securities ("Physical Securities") are to be issued, the Securities of each series shall be issued in the form of Global Securities.

SECTION 2.02 Form of Face of Security. [THIS SECURITY IS A GLOBAL SECURITY WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF A DEPOSITARY OR A NOMINEE THEREOF. THIS SECURITY MAY NOT BE EXCHANGED IN WHOLE OR IN PART FOR A SECURITY REGISTERED, AND NO TRANSFER OF THIS SECURITY IN WHOLE OR IN PART MAY BE REGISTERED, IN THE NAME OF ANY PERSON OTHER THAN SUCH DEPOSITARY OR A NOMINEE THEREOF, EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE].

[UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY ("DTC"), A NEW YORK CORPORATION, TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF (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 THEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON

IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.]

EMCORE Corporation

[Title of Security]

CUSIP No. _____

\$ _____

EMCORE Corporation, a corporation duly organized and existing under the laws of New Jersey (herein called the “Company”, which term includes any successor Person under the Indenture hereinafter referred to), for value received, hereby promises to pay to _____, or registered assigns, the principal sum of Dollars [INCLUDE IF SECURITY IS A GLOBAL SECURITY — (which amount may from time to time be increased or decreased by adjustments made on the records of the Trustee, as custodian for the Depositary, in accordance with the rules and procedures of the Depositary)] on, and to pay interest thereon from or from the most recent Interest Payment Date to which interest has been paid or duly provided for, [semiannually] on and in each year, commencing at the rate of % per annum, until the principal hereof is paid or made available for payment.

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 Person 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, immediately preceding such Interest Payment Date. Any such interest not so punctually paid or duly provided for will forthwith cease to be payable to the Holder on such Regular Record Date and may either be paid to the Person 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 not less than 10 days prior to such Special Record Date, or be paid at any time in any other lawful manner not inconsistent with the requirements of any securities exchange on which the Securities may be listed, and upon such notice as may be required by such exchange, all as more fully provided in said Indenture. Payment of the principal of and interest on this Security will be made at the office or agency of the Company maintained for that purpose in The City of New York (which may be an office of the Trustee or an affiliate of the Trustee), in such coin or currency of the United States of America as at the time of payment is legal tender for payment of public and private debts; *provided, however*, that at the option of the Company payment of interest may be made by check mailed to the address of the Person entitled thereto as such address shall appear in the Security Register. If this Security is a Global Security, then notwithstanding the foregoing, each such payment will be made in accordance with the procedures of the Depositary as then in effect.

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 referred to on the reverse hereof by manual signature, 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 corporate seal.

Dated:

#PageNum#

EMCORE Corporation

By _____

Name:

Title:

Attest: _____

Name:

Title:

SECTION 2.03 Form of Reverse of Security. 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 [], 2012 (herein called the “Indenture”), between the Company and _____, as Trustee (herein called the “Trustee”, which term includes any successor trustee under the Indenture), 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.

[The Securities are redeemable in whole or in part, at the option of the Company at any time and from time to time, on not less than 30 or more than 60 days’ prior notice mailed to the Holders of the Securities, at a Redemption Price equal to the greater of (i) 100% of the principal amount of the Securities to be redeemed and (ii) the sum of the present values of the Remaining Scheduled Payments thereon discounted to the Redemption Date on a [semiannual] basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus basis points, together in either case with accrued interest on the principal amount being redeemed to the Redemption Date.

Subject to payment by the Company of a sum sufficient to pay the amount due on redemption, interest on this Security (or portion hereof if this Security is redeemed in part) shall cease to accrue upon the Redemption Date of this Security (or portion hereof if this Security is redeemed in part).]

[The Securities do not have the benefit of a sinking fund.]

[INCLUDE IF SECURITY IS A GLOBAL SECURITY — In the event of a deposit or withdrawal of an interest in this Security, including an exchange, transfer, repurchase or conversion of this Security in part only, the Trustee, as custodian for the Depositary, shall make an adjustment on its records to reflect such deposit or withdrawal in accordance with the rules and procedures of the Depositary.]

[INCLUDE IF THE SECURITY IS NOT AN ORIGINAL ISSUE DISCOUNT SECURITY — If an Event of Default with respect to Securities of this series 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.]

[INCLUDE IF THE SECURITY IS AN ORIGINAL ISSUE DISCOUNT SECURITY — If an Event of Default with respect to Securities of this series shall occur and be continuing, an amount of principal of the Securities of this series may be declared due and payable in the manner and with the effect provided in the Indenture. Such amount shall be equal to [— insert formula for determining the amount]. Upon payment (i) of the amount of principal so declared due and payable and (ii) of interest on any overdue principal, premium and interest (in each case to the extent that the payment of such interest shall be legally enforceable), all of the Company’s obligations in respect of the payment of the principal of and premium and interest, if any, on the Securities of this series shall terminate.]

[INCLUDE IF THE SECURITY IS AN ORIGINAL ISSUE DISCOUNT SECURITY — This Security was issued with Original Issue Discount under Section 1272, 1273 and 1275 of the Internal Revenue Code of 1986, as amended. You may contact the Chief Financial Officer of the Company, at EMCORE Corporation, 10420 Research Road, SE, Albuquerque, NM 87123, (505) 332-5000, who will provide you with any required information regarding the Original Issue Discount.]

The Indenture contains provisions for defeasance at any time, upon compliance with certain conditions set forth therein, of (i) the entire Indebtedness evidenced by this Security or (ii) certain restrictive covenants and Events of Default with respect to this Security.

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 of each series to be affected under the Indenture at any time by the Company and the Trustee with the consent of the Holders of not less than a majority in aggregate principal amount of the Outstanding Securities of each series to be affected. The Indenture also contains provisions permitting the Holders of specified percentages in aggregate principal amount of the Outstanding Securities of each series, on behalf of the Holders of all the Securities of such series, to waive compliance by the Company with certain provisions of the Indenture and 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 of any Security issued upon the registration of transfer hereof or in exchange herefor or in lieu hereof, whether or not notation of such consent or waiver is made upon this Security.

As provided in and subject to the provisions of the Indenture, the Holder of this Security shall not have the right to institute any proceeding with respect to the Indenture or for the appointment of a receiver or trustee or for any other remedy thereunder, unless such Holder shall have previously given the Trustee written notice of a continuing Event of Default with respect to the Securities of this series, the Holders of not less than 25% in principal amount of the Outstanding Securities of this series shall have made written request to the Trustee to institute proceedings in respect of such Event of Default as Trustee and offered the Trustee indemnity satisfactory to the Trustee, and the Trustee shall not have received from the Holders of a majority in principal amount of Outstanding Securities of this series a direction inconsistent with such request, and shall have failed to institute any such proceeding, for 60 days after receipt of such notice, request and offer of indemnity. The foregoing shall not apply to any suit instituted by the Holder of this Security for the enforcement of any payment of principal hereof or interest hereon on or after the respective due dates expressed herein.

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 interest on this Security at the times, rate, and in the currency, herein prescribed.

As provided in the Indenture and subject to certain limitations therein set forth, the transfer of this Security is registrable in the Security Register, upon surrender of this Security for registration of transfer at the office or agency of the Company in The City of New York, 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 his attorney duly authorized in writing, and thereupon one or more new Securities of this series, of authorized denominations and for the same aggregate principal amount, will be issued to the designated transferee or transferees.

The Securities are issuable only in registered form without coupons in denominations of \$1,000 and any integral multiple of \$1,000 in excess thereof. As provided in the Indenture and subject to certain limitations therein set forth, Securities of this series are exchangeable for a like aggregate principal amount of Securities of this series of a different authorized denomination, as requested by the Holder surrendering the same.

No service charge shall be made for any such registration of transfer 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.

All terms used in this Security which are defined in the Indenture shall have the meanings assigned to them in the Indenture.

ASSIGNMENT FORM

If you want to assign this Security, fill in the form below and have your signature guaranteed:

I or we assign and transfer this Security to:

(Print or type name, address and zip code and social security or tax ID number of assignee)

and irrevocably appoint _____ agent to transfer this Security on the books of the Company. The agent may substitute another to act for him.

Date:

Signed:

(Sign exactly as your name appears on the other side of this Security)

Signature Guarantee: _____

NOTICE: To be executed by an executive officer.

SECTION 2.04 Form of Trustee's Certificate of Authentication. This is one of the Securities referred to in the within-mentioned Indenture.

_____,
as Trustee

By

Authorized Officer

ARTICLE 3. THE SECURITIES

SECTION 3.01 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. Securities may differ between series in respect of any matters, *provided* that all series of Securities shall be equally and ratably entitled to the benefits of this Indenture. There shall be (i) established in or pursuant to a Board Resolution and (subject to Section 3.03) set forth, or determined in the manner provided, in an Officers' Certificate, or (ii) established in one or more indentures supplemental hereto, at or prior to the issuance of Securities of any series:

- (a) the title of the Securities of the series (which shall distinguish the Securities of that particular series from the Securities of any other series);
- (b) the price or prices (expressed as a percentage of the principal amount thereof) at which the Securities of the series will be issued;
- (c) any limit upon the aggregate principal amount of the Securities of the series which may be authenticated and delivered under this Indenture (except for Securities authenticated and delivered upon registration of transfer of, or in exchange for, or in lieu of, other Securities of the series pursuant to Section 3.04, 3.05, 3.06, 9.07 or 11.07 and except for any Securities which, pursuant to Section 3.03 of the Indenture, shall have not been issued and sold by the Company and are therefore deemed never to have been authenticated and delivered hereunder);
- (d) the date or dates on which the principal and premium, if any, of the Securities of the series is payable;
- (e) the Person to whom any interest, if any, on any Security of the series shall be payable if other than as set forth in Section 3.07; the rate or rates (which may be fixed or variable) per annum or, if applicable, the method used to determine such rate or rates (including, but not limited to, any commodity, commodity index, stock exchange index or financial index) at which the Securities of the series shall bear interest, if any, the date or dates from which such interest, if any, shall accrue, the Interest Payment Dates on which any such interest shall be payable and the Regular Record Date, for the interest payable on any Interest Payment Date;
- (f) the place or places where the principal of and any premium or interest, if any, on the Securities of the series shall be payable, where the Securities of such series may be surrendered for registration of transfer or exchange and where notices and demands to or upon the Company in respect of the Securities of such series and this Indenture may be served, and the method of such payment, if by wire transfer, mail or other means;
- (g) if applicable, the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series may be redeemed, in whole or in part, at the option of the Company and, if other than by a Board Resolution, the manner in which any election by the Company to redeem the Securities shall be evidenced;

- (h) the obligation, if any, of the Company to permit the Securities of such Series to be converted into or exchanged for common stock of the Company or other Securities or property of the Company and the terms and conditions upon which such conversion or exchange shall be effected (including, without limitation, the initial conversion or exchange price or rate, the conversion or exchange period, any adjustment of the applicable conversion or exchange price or rate and any requirements relative to the reservation of such shares for purposes of conversion or exchange);
- (i) if convertible or exchangeable, any applicable limitations on the ownership or transferability of the Securities or property into which such Securities are convertible or exchangeable;
- (j) the obligation, if any, of the Company to redeem or purchase Securities of the series pursuant to any sinking fund or analogous provisions or at the option of a Holder thereof and the period or periods within which, the price or prices at which and the terms and conditions upon which Securities of the series shall be redeemed or purchased in whole or in part, pursuant to such obligation;
- (k) the dates, if any, on which the price or prices at which the Securities of the series will be repurchased by the Company at the option of the Holders thereof and other detailed terms and provisions of such repurchase obligations;
- (l) if other than denominations of \$1,000 and any integral multiple of \$1,000 in excess thereof, the denominations in which Securities of the series shall be issuable;
- (m) the forms of the Securities of the series in fully registered form (and whether the Securities will be issuable as Global Securities);
- (n) if other than the principal amount thereof, the portion of the principal amount of Securities of the series which shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 3.10;
- (o) if applicable, that the Securities of the series, in whole or any specified part, shall be defeasible pursuant to Article 12 and if other than a Board Resolution, the manner in which any election by the Company to defease those Securities shall be evidenced;
- (p) whether the Securities of the series are to be issuable in whole or in part in permanent global form, without coupons, and, if so, (i) the form of any legend or legends which shall be borne by any such permanent Global Security in addition to or in lieu of that set forth in Section 2.02, (ii) any circumstances in addition to or in lieu of those set forth in Clause (2) of the last paragraph of Section 3.05 in which such permanent Global Security may be exchanged in whole or in part for Securities registered, and in which any transfer of such permanent Global Security in whole or in part may be registered, in the name of Persons other than the Depositary for such permanent Global Security or a nominee thereof and (iii) the Depositary with respect to any such permanent Global Security or Securities;
- (q) the currency of denomination of the Securities of the series, which may be Dollars or any Foreign Currency, including, but not limited to, the ECU, and if such currency of denomination is a composite currency other than the ECU, the agency or organization, if any, responsible for overseeing such composite currency;
- (r) if the principal of, or any premium or interest on, any Securities of the series is to be payable, at the election of the Company or the Holder thereof, in one or more currencies or currency units other than that or those in which such Securities are stated to be payable, the currency, currencies or currency units in which the principal of or any premium or interest on such Securities as to which such election is made shall be payable, the periods within which and the terms and conditions upon which such election is to be made and the amount so payable (or the manner in which such amount shall be determined);
- (s) the manner in which the amounts of payment of principal of or interest, if any, on the Securities of the series will be determined, if such amounts may be determined by reference to an index based on a currency or

currencies or by reference to a commodity, commodity index, stock exchange index or financial index;

(t) the provisions, if any, relating to any security or guarantee provided for the Securities of the series, and any subordination in right of payment, if any, of the Securities of the series;

(u) if the principal amount payable at the Stated Maturity of any Securities of the series will not be determinable as of any one or more dates prior to the Stated Maturity, the amount which shall be deemed to be the principal amount of such Securities as of any such date for any purpose thereunder or hereunder, including the principal amount thereof which shall be due and payable upon any Maturity other than the Stated Maturity or which shall be deemed to be Outstanding as of any date prior to the Stated Maturity (or, in any such case, the manner in which such amount deemed to be the principal amount shall be determined);

(v) any addition to or change in the Events of Default which applies to any Securities of the series and any change in the right of the Trustee or the requisite Holders of such Securities to declare the principal amount thereof due and payable pursuant to Section 5.01;

(w) any addition to or change in the covenants set forth in Article Ten which applies to any Securities of the series;

(x) any depositories, interest rate calculation agents, exchange rate calculation agents or other agents with respect to Securities of such series if other than those appointed herein;

(y) the terms, if any, on which Holders of Securities may convert or exchange any Securities of the series into any securities of any Person; and

(z) any other terms of the series (which terms shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 9.01(e)).

All Securities of any one series shall be substantially identical except as to denomination and except as may otherwise be provided in or pursuant to the Board Resolution referred to above and (subject to Section 3.03) set forth in the Officers' Certificate referred to above or in any such indenture supplemental hereto. All Securities of any one series need not be issued at the same time and may be issued from time to time, consistent with the terms of this Indenture, if so provided by or pursuant to the Board Resolution, supplemental indenture hereto or Officers' Certificate referred to above, and the authorized principal amount of any series may not be increased to provide for issuance of additional Securities of such series, unless otherwise provided in such Board Resolution, supplemental indenture or Officers' Certificate.

If any of the terms of the series are established by action taken pursuant to a Board Resolution, a copy of an appropriate record of such action 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 series.

SECTION 3.02 Denominations. The Securities shall be issuable only in registered form and, unless otherwise provided as contemplated by Section 3.01 with respect to any series of Securities, without coupons and in denominations of \$1,000 and any integral multiple of \$1,000 in excess thereof.

SECTION 3.03 Execution, Authentication, Delivery and Dating. The Securities shall be executed on behalf of the Company by its Chairman of the Board, its Vice Chairman of the Board, its Chief Executive Officer, its Chief Financial Officer, its Chief Legal Officer or one of its Vice Presidents, attested by its Secretary or one of its Assistant Secretaries. The signature of any of these officers on the Securities may be manual or facsimile.

Securities 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.

At any time and from time to time after the execution and delivery of this Indenture, the Company may deliver Securities of any series executed by the Company to the Trustee for authentication, together with a Company Order for the authentication and delivery of such Securities, and the Trustee in accordance with the Company Order shall authenticate and deliver such Securities. If the form or terms of the Securities of the series have been established by or pursuant to one or more Board Resolutions as permitted by Sections 2.01 and 3.01, 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 Section 6.01) shall be fully protected in relying upon, an Opinion of Counsel stating:

- (a) if the form of such Securities has been established by or pursuant to Board Resolution as permitted by Section 2.01, that such form has been established in conformity with the provisions of this Indenture;
- (b) if the terms of such Securities have been established by or pursuant to Board Resolution as permitted by Section 3.01, that such terms have been established in conformity with the provisions of this Indenture; and
- (c) that such Securities, when authenticated and delivered by the Trustee and issued by the Company in the manner and subject to any conditions specified in such Opinion of Counsel, will constitute valid and legally binding obligations of the Company, enforceable in accordance with their terms, subject to bankruptcy, insolvency, reorganization and other laws of general applicability relating to or affecting the enforcement of creditors' rights and to general equity principles.

Notwithstanding the provisions of Section 3.01 and of the preceding paragraph, if all Securities of a series are not to be originally issued at one time, it shall not be necessary to deliver the Officers' Certificate otherwise required pursuant to Section 3.01 or the Company Order and Opinion of Counsel otherwise required pursuant to such preceding paragraph at or prior to the time of authentication of each Security of such series if such documents are delivered at or prior to the time of authentication upon original issuance of the first Security of such series to be issued.

Each Security shall be dated the date of its authentication.

No Security shall be entitled to any benefit under this Indenture or be valid or obligatory for any purpose unless there appears on such Security a certificate of authentication substantially in the form provided for herein executed by the Trustee by manual signature, 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 and subject, in the case of a Security in permanent global form, to Section 2.02, if any 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 3.10 together with a written statement (which need not comply with Section 1.02 and need not be accompanied by an Opinion of Counsel) directing such cancellation and 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 3.04 Temporary Securities. Pending the preparation of definitive Securities, 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 and with such appropriate insertions, omissions, substitutions and other variations as the officers executing such Securities may determine, as evidenced by their execution of such Securities.

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 the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a like principal amount of definitive Securities of the same series and of like tenor of authorized denominations. 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.

SECTION 3.05 Registration; Registration of Transfer and Exchange. (a) The Company shall cause to be kept at the Corporate Trust Office of the Trustee a register (the register maintained in such office and in any other office or agency in a Place of Payment being herein sometimes collectively referred to as the “Security Register”) in which, subject to such reasonable regulations as it may prescribe, the Company shall provide for the registration of Securities and of transfers of Securities. The Trustee is hereby appointed “Security Registrar” (the “Security Registrar”) for the purpose of registering Securities and transfers of Securities as herein provided.

Upon surrender for registration of transfer of any Security of any series at an 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 Securities of the same series of any authorized denominations and of a like aggregate principal amount and tenor.

At the option of the Holder, Securities may be exchanged for other Securities of the same series, of any authorized denominations and of a like aggregate principal amount and tenor, upon surrender of the Securities to be exchanged at such office or agency. 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.

All Securities issued upon any registration of transfer 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 exchange.

Every Security presented or surrendered for registration of transfer or for exchange shall (if so required by the Company or the Trustee) 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. As a condition to the registration of transfer of any Restricted Securities, the Company or the Trustee may require evidence satisfactory to them as to the compliance with the restrictions set forth in the legend on such securities.

No service charge shall be made for any registration of transfer 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 exchange of Securities, other than exchanges pursuant to Section 3.04, 9.06 or 11.07 not involving any transfer.

The Company shall not be required to exchange or register a transfer of any Security of a series (i) during the 15-day period immediately preceding the mailing of any notice of redemption of any Security of that series, or (ii) after any notice of redemption has been given to Holders of Securities of that series, except, where such notice provides that such Security is to be redeemed only in part, the Company shall be required to exchange or register a transfer of the portion thereof not to be redeemed.

(b) Neither the Trustee nor any of its agents shall (i) have any duty to monitor compliance with or with respect to any federal or state or other securities or tax laws or (ii) have any duty to obtain documentation on any transfers or exchanges other than as specifically required hereunder.

SECTION 3.06 Mutilated, Destroyed, Lost and Stolen Securities. If any mutilated Security is surrendered to the Trustee, the Company shall execute and the Trustee shall authenticate and deliver in exchange therefor a new Security of the same series and of like tenor and principal amount and bearing a number not contemporaneously outstanding.

If there shall be delivered to the Company and the Trustee (i) evidence to their satisfaction of the destruction, loss or theft of any Security 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 has been acquired by a protected purchaser, the Company shall execute and the Trustee shall authenticate and deliver, in lieu of any such destroyed, lost or stolen Security, a new Security of the same series and of like tenor and principal amount and bearing an identification number not contemporaneously outstanding.

In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, or has been called for redemption in full, the Company in its discretion may, instead of issuing a new Security, pay such Security.

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 issued pursuant to this Section in lieu of any destroyed, lost or stolen Security shall constitute an original additional contractual obligation of the Company, whether or not the destroyed, lost or stolen Security 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 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.

SECTION 3.07 *Payment of Interest; Interest Rights Preserved.* Unless otherwise provided as contemplated by Section 3.01 with respect to any series of Securities, interest on any Security which 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.

Any interest on any Security of any series which 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 Holder 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 (a) or (b) below:

(a) The Company may elect to make payment of any Defaulted Interest to the Persons in whose names the 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 Security of such series and the date of the proposed payment, and at the same time the Company shall deposit with the Trustee an amount of money 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 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 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. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so mailed, such Defaulted Interest shall be paid to the Persons in whose names the 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 (b).

(b) The Company may make payment of any Defaulted Interest in any other lawful manner not inconsistent with the requirements of any securities exchange on which the Securities may be listed, and upon such notice as may be required by such 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, each Security delivered under this Indenture upon registration of transfer 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 3.08 Persons Deemed Owners. Prior to due presentment of a 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 Security is registered as the owner of such Security for the purpose of receiving payment of principal of and (subject to Section 3.07) interest on such Security and for all other purposes whatsoever, whether or not such 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.

SECTION 3.09 Book-entry Provisions for Global Securities. (a) The Global Securities initially shall (i) be registered in the name of the Depositary or the nominee of such Depositary, (ii) be delivered to the Trustee as custodian for the Depositary and (iii) bear legends as set forth on the face of the form of Security in Section 2.02.

Members of, or participants in, the Depositary (“Agent Members”) shall have no rights under this Indenture with respect to any Global Security held on their behalf by the Depositary, or the Trustee as its custodian, or under the Global Security, and the Depositary may be treated by the Company, the Trustee and any agent of the Company or the Trustee as the absolute owner of the Global Security for all purposes whatsoever. Notwithstanding the foregoing, 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 the Depositary or impair, as between the Depositary and its Agent Members, the operation of customary practices governing the exercise of the rights of any Holder.

(b) Transfers of the Global Securities shall be limited to transfers in whole, but not in part, to the Depositary, its successors or their respective nominees. Interests of beneficial owners in a Global Security may be transferred or exchanged, in whole or in part, for Physical Securities in accordance with the rules and procedures of the Depositary. In addition, Physical Securities shall be transferred to all beneficial owners in exchange for their beneficial interests in the Global Securities if (A) such Depositary has notified the Company (or the Company becomes aware) that the Depositary (i) is unwilling or unable to continue as Depositary for such Global Security or (ii) has ceased to be a clearing agency registered under the Exchange Act when the Depositary is required to be so registered to act as such Depositary and, in both such cases, no successor Depositary shall have been appointed within 90 days of such notification or of the Company becoming aware of such event, (B) there shall have occurred and be continuing an Event of Default with respect to such Global Security and the Outstanding Securities of such series shall have become due and payable pursuant to Section 5.02 and the Trustee has requested that Physical Securities be issued or (C) the Company has decided to discontinue use of book-entry transfers through the Depositary (or a successor Depositary).

(c) In connection with any transfer or exchange of a portion of the beneficial interest in the Global Security to beneficial owners pursuant to paragraph (b), the Security Registrar shall (if one or more Physical Securities are to be issued) reflect on its books and records the date and a decrease in the principal amount of the Global Security in an amount equal to the principal amount of the beneficial interest in the Global Security to be transferred, and the Company shall execute, and the Trustee shall authenticate and deliver, one or more Physical Securities of like tenor and amount.

(d) In connection with the transfer of the entire Global Security to beneficial owners pursuant to paragraph (b), the Global Security shall be deemed to be surrendered to the Trustee for cancellation, and the Company shall execute, and the Trustee shall authenticate and deliver, to each beneficial owner identified by the Depositary in exchange for its beneficial interest in the Global Security, an equal aggregate principal amount of Physical Securities

of authorized denominations and the same tenor.

(e) Any Global Security issued hereunder shall bear a legend in substantially the following form:

“This Security is a Global Security within the meaning of the Indenture hereinafter referred to and is registered in the name of a Depositary or a nominee thereof. This Security may not be exchanged in whole or in part for a security registered, and no transfer of this security in whole or in part may be registered, in the name of any person other than such Depositary or a nominee thereof, except in the limited circumstances described in the Indenture.”

(f) The Holder of the Global Securities may grant proxies and otherwise authorize any Person, including Agent Members and Persons that may hold interests through Agent Members, to take any action which a Holder is entitled to take under this Indenture or the Securities.

(g) Notwithstanding the other provisions of this Indenture, unless otherwise specified as contemplated by Section 3.01, payment of the principal of and interest, if any, on any Global Security shall be made to the Holder thereof.

(h) Except as provided in Section 3.09(g), the Company, the Trustee and any Agent shall treat a person as the Holder of such principal amount of Outstanding Securities of such series represented by a Global Security as shall be specified in a written statement of the Depositary with respect to such Global Security, for purposes of obtaining any consents, declarations, waivers or directions required to be given by the Holders pursuant to this Indenture.

SECTION 3.10 Cancellation. The Company at any time may 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 for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold. The Trustee shall cancel all Securities surrendered for registration of transfer, exchange, payment, redemption or cancellation and shall dispose of such cancelled Securities, all in accordance with its customary practices. If the Company shall acquire any of the Securities, such acquisition shall not operate as a redemption or satisfaction of the indebtedness represented by such Securities unless and until the same are delivered to the Trustee for cancellation. The Company may not issue new Securities to replace Securities it has paid in full or delivered to the Trustee for cancellation.

SECTION 3.11 Treasury Securities.

In determining whether the Holders of the required principal amount of Securities of a series have concurred in any request, demand, authorization, direction, notice, consent or waiver, Securities of a series owned by the Company or an Affiliate of the Company shall be disregarded, except that for the purposes of determining whether the Trustee shall be protected in relying on any such request, demand, authorization, direction, notice, consent or waiver only Securities of a series that the Trustee knows are so owned shall be so disregarded.

SECTION 3.12 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* 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 elements of identification printed on the Securities, and any such redemption shall not be affected by any defect in or omission of such numbers.

SECTION 3.13 Holder Lists.

The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of Holders of each series of Securities and shall otherwise comply with Trust Indenture Act. If the Trustee is not the Registrar, the Company shall furnish to the Trustee at least ten days before each interest

payment date and at such other times as the Trustee may request in writing a list, in such form and as of such date as the Trustee may reasonably require, of the names and addresses of Holders of each series of Securities.

SECTION 3.14 Computation of Interest. Except as otherwise specified as contemplated by Section 3.01 for Securities of any series, interest on the Securities of each series shall be computed on the basis of a 360-day year of twelve 30-day months.

ARTICLE 4.

SATISFACTION AND DISCHARGE

SECTION 4.01 Satisfaction and Discharge of Indenture. This Indenture shall cease to be of further effect (except as to any surviving rights of registration of transfer or exchange of Securities herein expressly provided for), and the Trustee, on demand of and at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when

- (a) either
 - (i) all Securities theretofore authenticated and delivered (other than (A) Securities which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 3.06 and (B) Securities 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 10.03) have been delivered to the Trustee for cancellation; or
 - (ii) all such Securities not theretofore delivered to the Trustee for cancellation
- (A) *have become due and payable, or*
- (B) *will become due and payable at their Stated Maturity within one year, or*
- (C) *will 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 (A), (B) or (C) above, has deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose an amount sufficient to pay and discharge the entire indebtedness evidenced by such Securities not theretofore delivered to the Trustee for cancellation, for principal 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;

- (b) no Default or Event of Default has occurred and is continuing on the date of such deposit (other than a Default or Event of Default resulting from the borrowing of funds to be applied to such deposit) and the deposit will not result in a breach or violation of, or constitute a default under, any other instrument to which the Company or any guarantor, as applicable, of such Securities is a party or by which the Company or any such guarantor, as applicable, is bound;
- (c) the Company or any guarantor of such Securities has paid or caused to be paid all other sums payable hereunder by the Company;
- (d) the Company has delivered irrevocable instructions to the Trustee for such Securities under this Indenture to apply the deposited money toward the payment of such Securities at maturity or on the redemption date, as the case may be; and
- (e) 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 have been complied with.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 6.07 and, if money shall have been deposited with the Trustee pursuant to subclause (ii) of Clause (a) of this Section, the obligations of the Trustee under Section 4.02 and the last paragraph of Section 10.03 shall survive.

SECTION 4.02 *Application of Trust Money.* Subject to the provisions of the last paragraph of Section 10.03, all money deposited with the Trustee pursuant to Section 4.01 shall be held in trust and applied by it, in accordance with the provisions of the Securities 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 interest for whose payment such money has been deposited with the Trustee; but such money need not be segregated from other funds except to the extent required by law.

If such Trustee or Paying Agent is unable to apply any proceeds in accordance with Section 4.01 hereof by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the Company's and any applicable guarantor's obligations under this Indenture and the applicable Securities shall be revived and reinstated as though no deposit had occurred pursuant to Section 4.01 hereof; *provided* that if the Company has made any payment of principal of, premium, if any, or interest on, any Securities because of the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Securities to receive such payment from the funds held by the Trustee or Paying Agent.

ARTICLE 5. REMEDIES

SECTION 5.01 *Events of Default.* "Event of Default", wherever used herein with respect to Securities of any series, means any one of the following events (whatever the reason for such Event of Default and whether 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):

- (a) default in the payment of the principal of any Security of that series at its Maturity; or
- (b) default in the payment of any interest upon any Security of that series when it becomes due and payable, and continuance of such default for a period of 30 days; or
- (c) default in the deposit of any sinking fund payment, when and as due by the terms of a Security of that series; or
- (d) default in the performance of any covenant, agreement or condition of the Company in this Indenture or the Securities of that series (other than a covenant, agreement or condition a default in whose performance or whose breach is specifically dealt with elsewhere in this section or which has been expressly included in this Indenture solely for the benefit of series of Securities other than that series), and continuance of such default 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 and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or
- (e) the entry by a court having jurisdiction in the premises of (i) a decree or order for relief in respect of the Company of a voluntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or (ii) a decree or order adjudging the Company a bankrupt or insolvent, or approving as properly filed a petition seeking reorganization, arrangement, adjustment or composition of or in respect of the Company under any applicable Federal or State law, or appointing a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or of any substantial part of its property, or ordering the winding up or liquidation of its affairs, and the continuance of any such decree or order for relief or any such other decree or order unstayed and in effect for a period of 60 consecutive days; or

(f) the commencement by the Company of a voluntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or of any other case or proceeding to be adjudicated a bankrupt or insolvent, or the consent by it to the entry of a decree or order for relief in respect of the Company in an involuntary case or proceeding under any applicable Federal or State bankruptcy, insolvency, reorganization or other similar law or to the commencement of any bankruptcy or insolvency case or proceeding against it, or the filing by it of a petition or answer or consent seeking reorganization or relief under any applicable Federal or State law, or the consent by it to the filing of such petition or to the appointment of or taking possession by a custodian, receiver, liquidator, assignee, trustee, sequestrator or other similar official of the Company or of any substantial part of its property, or the making by it of an assignment for the benefit of creditors, or the admission by it in writing of its inability to pay its debts generally as they become due, or the taking of corporate action by the Company in furtherance of any such action; or

(g) the occurrence of any other event of default with respect to the Securities of that series as provided in a supplemental indenture applicable to such series of Securities or a Board Resolution pursuant to which such series of Securities is established.

SECTION 5.02 Acceleration of Maturity; Rescission and Annulment. (a) If an Event of Default (other than those specified in Sections 5.01(f) and 5.01(g)) occurs with respect to any series of Outstanding Securities 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 such series may declare the principal amount (or, if the Securities of any such series are Original Issue Discount Securities, such portion of the principal amount as may be specified in the terms of that series) of all the Securities to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by Holders), and upon any such declaration such principal shall become immediately due and payable.

Notwithstanding the foregoing, in the case of an Event of Default specified in Section 5.01(f), the principal amount (or, if the Securities of any such series are Original Issue Discount Securities, such portion of the principal amount as may be specified in the terms of that series) of all Outstanding Securities will ipso facto become due and payable without any declaration or other Act on the part of the Trustee or any Holder.

(b) At any time after such a declaration of acceleration with respect to the 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 and its consequences if

(i) the Company has paid or deposited with the Trustee a sum sufficient to pay

(A) *all overdue interest on all Securities of the series,*

(B) *the principal of any Securities of that series which have become due otherwise than by such declaration of acceleration and interest thereon at the rate borne by such Securities,*

(C) *to the extent that payment of such interest is lawful, interest upon overdue interest at the rate borne by 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 any other amounts due the Trustee under Section 6.07;*

and

(ii) all Events of Default, other than the non-payment of the principal of Securities of that series which have become due solely by such declaration of acceleration, have been cured or waived as provided in Section 5.13.

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

SECTION 5.03 Collection of Indebtedness and Suits for Enforcement by Trustee. The Company covenants that if

- (i) default is made in the payment of any interest on any Security when such interest becomes due and payable and such default continues for a period of 30 days, or
- (ii) default is made in the payment of the principal of any Security at the Maturity thereof,

the Company will, upon demand of the Trustee, pay to it, for the benefit of the Holders of such Securities, the whole amount then due and payable on such Securities for principal and interest, and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and on any overdue interest, at the rate borne by the 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 an Event of Default with respect to the Securities of any series occurs and is continuing, the Trustee may in its discretion, subject to applicable law, proceed to protect and enforce its rights and the rights of the Holders of Securities of such series by such appropriate judicial proceedings as the Trustee shall deem most effectual 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 5.04 Trustee May File Proofs of Claim. In case of any judicial proceeding relative to the Company (or any other obligor upon the Securities), its property or its creditors, the Trustee shall be entitled and empowered, by intervention in such proceeding or otherwise, to take any and all actions authorized under the Trust Indenture Act in order to have claims of the Holders and the Trustee allowed in any such proceeding. In particular, the Trustee shall be authorized 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 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 it for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel, and any other amounts due the Trustee under Section 6.07.

No provision of this Indenture shall be deemed to authorize the Trustee to authorize or consent to or accept or adopt on behalf of any Holder any plan of reorganization, arrangement, adjustment or composition affecting the Securities or the rights of any Holder thereof or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

SECTION 5.05 Trustee May Enforce Claims Without Possession of Securities. All rights of action and claims under this Indenture or the Securities may be prosecuted and enforced by the Trustee without the possession of any of the Securities 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, and any other amounts due the Trustee under Section 6.07, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.

SECTION 5.06 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 interest, upon presentation of the Securities 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 under Section 6.07; and

SECOND: To the payment of the amounts then due and unpaid for principal of and interest on the Securities 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 amounts due and payable on such Securities for principal and interest, respectively.

SECTION 5.07 Limitation on Suits. No Holder of any Security 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

- (i) such Holder has previously given written notice to the Trustee of a continuing Event of Default with respect to the Securities of that series;
- (ii) the Holders of not less than 25% in aggregate 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;
- (iii) such Holder or Holders have offered to the Trustee reasonable indemnity satisfactory to the Trustee against the costs, expenses and liabilities to be incurred in compliance with such request;
- (iv) the Trustee for 60 days after its receipt of such notice, request and offer of indemnity has failed to institute any such proceeding; and
- (v) 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 aggregate principal amount of the Outstanding Securities of that series;

it being understood and intended that no one or more 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 Holders, or to obtain or to seek to obtain priority or preference over any other Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all the Holders.

SECTION 5.08 Unconditional Right of Holders to Receive Principal and Interest. Notwithstanding any other provision in this Indenture, the Holder of any Security shall have the right, which is absolute and unconditional, to receive payment of the principal of and (subject to Section 3.07) interest on such Security on the respective Stated Maturities expressed in such Security 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 5.09 Restoration of Rights and Remedies. If the Trustee or any Holder 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, subject to any determination in such proceeding, the Company, the Trustee and the Holders shall 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 5.10 Rights and Remedies Cumulative. Except as otherwise provided with respect to the replacement or payment of mutilated, destroyed, lost or stolen Securities in the last paragraph of Section 3.06, no right or remedy herein conferred upon or reserved to the Trustee or to the Holders 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 5.11 Delay or Omission Not Waiver. No delay or omission of the Trustee or of any Holder of any Security 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, as the case may be.

SECTION 5.12 Control by Holders. The Holders of 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*

- (i) such direction shall not be in conflict with any rule of law or with this Indenture, and
- (ii) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction.

SECTION 5.13 Waiver of Past Defaults. The Holders of not less than a majority in principal amount of the Outstanding Securities affected by any past default hereunder (all voting together as one class) may, on behalf of the Holders of all the Securities affected by such past default, waive such past default and its consequences, subject to the payment of the amounts required under Section 5.02(b) (i) (D), except a default

- (i) in the payment of the principal of or interest on any Security, or
- (ii) 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 affected.

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 impair any right consequent thereon.

SECTION 5.14 Undertaking for Costs. 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, in either case in respect to the Securities, a court may require any party litigant in such suit to file an undertaking to pay the costs of the suit, and the court may assess reasonable costs, including reasonable attorney's fees, against any party litigant in the suit having due regard to the merits and good faith of the claims or defenses made by the party litigant; but the provisions of this Section shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 25% 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 interest on any Security on or after the maturity of such Security.

SECTION 5.15 Waiver of 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 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.

ARTICLE 6. THE TRUSTEE

SECTION 6.01 Certain Duties and Responsibilities. The duties and responsibilities of the Trustee shall be as provided by the Trust Indenture Act. Notwithstanding the foregoing, 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. 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.

SECTION 6.02 Notice of Defaults. The Trustee shall give the Holders notice of any default hereunder as and to the

extent provided by the Trust Indenture Act; *provided, however*, that in the case of any default of the character specified in Section 5.01(d), no such notice to Holders shall be given until at least 30 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.

SECTION 6.03 Certain Rights of Trustee. Subject to the provisions of Section 6.01:

- (a) 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, other evidence of indebtedness or other paper or document believed by it to be genuine and to have been signed or presented by the proper party or parties, and the Trustee need not investigate any fact or matter stated in the document;
- (b) any request or direction of the Company mentioned herein shall be sufficiently evidenced by a Company Request or Company Order and any resolution of the Board of Directors of the Company or of any committee acting pursuant to authority duly delegated to it by the Board of Directors may be sufficiently evidenced by a Board Resolution;
- (c) 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;
- (d) the Trustee may consult with counsel of its 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;
- (e) 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 pursuant to this Indenture, unless such Holders shall have offered to the Trustee reasonable security or indemnity against the costs, expenses and liabilities which might be incurred by it in compliance with such request or direction;
- (f) 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, other evidence of indebtedness or other paper or document, but the Trustee, in its discretion, may make such further inquiry or investigation into such facts or matters as it may see fit;
- (g) 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;
- (h) the Trustee shall not be charged with knowledge of any Default or Event of Default (except as provided in Section 5.01(e)) with respect to the Securities unless either (i) a Responsible Officer shall have actual knowledge of such Default or Event of Default or (ii) written notice of such Default or Event of Default shall have been given to the Trustee by the Company or any other obligor on such Securities or by any Holder of such Securities and such notice references the Securities generally or the Securities of a particular series and this Indenture;
- (i) the Trustee may act through agents, attorneys, custodians, or nominees and shall not be responsible for the misconduct or negligence of any agent, attorney, custodian, or nominee appointed with due care. No Depositary shall be deemed an agent, attorney, custodian, or nominee of the Trustee and the Trustee shall not be responsible for any act or omission by any Depositary;
- (j) in no event shall the Trustee be liable for the selection of investments or for investment losses incurred thereon. The Trustee shall have no liability in respect of losses incurred as a result of the liquidation of any investment prior to its stated maturity or failure to provide timely written direction; and

(k) the Trustee shall not be liable for any action taken, suffered or omitted by it in good faith and believed by it to be authorized or within the discretion or rights or powers conferred upon it by this Indenture; *provided* that the Trustee's conduct does not constitute negligence or bad faith.

SECTION 6.04 Trustee's Disclaimer. The Trustee makes no representation as to the validity or adequacy of this Indenture or the Securities, it shall not be accountable for the Company's use of the proceeds from the Securities, and it shall not be responsible for any statement in the Securities other than its authentication.

SECTION 6.05 May Hold Securities. The Trustee, any Paying Agent, any Security Registrar or any other agent of the Company, in its individual or any other capacity, may become the owner or pledgee of Securities and, subject to Sections 6.08 and 6.13, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Paying Agent, Security Registrar or such other agent.

SECTION 6.06 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 6.07 Compensation and Reimbursement. The Company agrees:

(i) to pay to the Trustee from time to time such compensation as the Company and the Trustee shall from time to time agree in writing 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);

(ii) except as otherwise expressly provided herein, to reimburse the Trustee upon its request for all reasonable expenses, disbursements and advances incurred or made by the Trustee in accordance with any provision of this Indenture (including the reasonable compensation and the expenses and disbursements of its agents and counsel), except any such expense, disbursement or advance as may be attributable to its negligence or bad faith; and

(iii) to indemnify the Trustee (including its directors and officers) for, and to hold it harmless against, any loss, liability or expense incurred without negligence or bad faith on its part, arising out of or in connection with the acceptance or administration of this trust, including the reasonable 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.

The obligations of the Company under this Section 6.07 shall survive the satisfaction and discharge of this Indenture and the resignation or removal of the Trustee. To secure the Company's payment obligations in this Section 6.07, the Trustee shall have a Lien prior to the Securities on all money or property held or collected by the Trustee, except that held in trust to pay principal and interest on the Securities. Such Lien shall survive the satisfaction and discharge of this Indenture. When the Trustee incurs expenses or renders services after a Default or an Event of Default specified in Sections 5.01(f) or 5.01(g) hereof occurs, the expenses and the compensation for the services (including the fees and expenses of its agents and counsel) are intended to constitute expenses of administration under U.S. Code, Title 11 or any other similar foreign, federal or state law for the relief of debtors.

In no event shall the Trustee be liable for any indirect, special or consequential loss or damage of any kind whatsoever, including, but not limited to, lost profits.

In no event shall the Trustee be liable for any failure or delay in the performance of its obligations hereunder because of circumstances beyond its control, including, but not limited to, acts of God, flood, natural catastrophes, riot, loss or malfunctions of utilities, or government action, which delay, restrict or prohibit the providing of the services contemplated by this Agreement.

SECTION 6.08 Disqualification; Conflicting Interests. If the Trustee has or shall acquire a conflicting interest within the meaning of the Trust Indenture Act, the Trustee shall either eliminate such interest or resign, to the extent and in the manner provided by, and subject to the provisions of, the Trust Indenture Act and this Indenture.

SECTION 6.09 Corporate Trustee Required; Eligibility. There shall at all times be a Trustee hereunder which shall be a Person that is eligible pursuant to the Trust Indenture Act to act as such and has a combined capital and surplus of at least \$50,000,000. If such Person publishes reports of condition at least annually, pursuant to law or to the requirements of said supervising or examining authority, then for the purposes of this Section, the combined capital and surplus of such Person 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.

SECTION 6.10 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 under Section 6.11.

(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 30 days after the giving of such notice of resignation, the resigning Trustee may petition any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

(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.

(d) If at any time:

(i) the Trustee shall fail to comply with Section 6.08 after written request therefor by the Company or by any Holder who has been a bona fide Holder of a Security for at least six months, or

(ii) the Trustee shall cease to be eligible under Section 6.09 and shall fail to resign after written request therefor by the Company or by any such Holder, or

(iii) the Trustee shall become incapable of acting or shall be adjudged a bankrupt or insolvent, or

(iv) 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, (A) the Company by a Company Order may remove the Trustee, or (B) subject to Section 5.14, any Holder who has been a bona fide Holder of a Security of any series 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 such series of Securities and the appointment of a successor Trustee.

(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 a Company Order, shall promptly appoint a successor Trustee with respect to the Securities of such 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 Securities of such series and 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 and accepted appointment in the manner hereinafter provided, any Holder 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 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 Securities of any series and each appointment of a successor Trustee with respect to Securities of such series to all Holders of Securities of such series in the manner provided in Section 1.06. Each notice shall include the name of the successor Trustee and the address of its Corporate Trust Office.

SECTION 6.11 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 the 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.

(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 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 to be 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, as the case may be.

(d) No such 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 6.12 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 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 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 so authenticated with the same effect as if such successor Trustee had itself authenticated such Securities.

SECTION 6.13 Preferential Collection of Claims Against. If and when the Trustee shall be or become a creditor of the Company (or any other obligor upon the Securities), the Trustee shall be subject to the provisions of the Trust Indenture Act regarding the collection of claims against the Company (or any such other obligor).

ARTICLE 7.

HOLDERS' LISTS AND REPORTS BY TRUSTEE

SECTION 7.01 Company to Furnish Trustee Names and Addresses of Holders. The Company will furnish or cause to be furnished to the Trustee

(a) with respect to the Securities of any series, not more than 15 days after each Regular Record Date, if any, for such series, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of the Securities of such series as of such Regular Record Date, 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; excluding from any such list names and addresses received by the Trustee in its capacity as Security Registrar; *provided, however*, that no such list need be furnished so long as the Trustee is acting as Security Registrar.

SECTION 7.02 Preservation of Information; Communications to Holders. (a) The Trustee shall preserve, in as current a form as is reasonably practicable, the names and addresses of Holders contained in the most recent list furnished to the Trustee as provided in Section 7.01 and the names and addresses of Holders received by the Trustee in its capacity as Security Registrar. The Trustee may destroy any list furnished to it as provided in Section 7.01 upon receipt of a new list so furnished.

(b) The rights of Holders to communicate with other Holders with respect to their rights under this Indenture or under the Securities, and the corresponding rights and duties of the Trustee, shall be as provided by the Trust Indenture Act.

(c) Every Holder of Securities, by receiving and holding the same, agrees with the Company and the Trustee that neither the Company nor the Trustee nor any agent of either of them shall be held accountable by reason of any disclosure of information as to names and addresses of Holders made pursuant to the Trust Indenture Act.

SECTION 7.03 Reports by Trustee. (a) Within 60 days after May 15 in each year, the Trustee shall transmit by mail to all Holders, as their names and addresses appear on the register kept by the Registrar, a brief report dated as of such May 15, in accordance with, and to the extent required under the Trust Indenture Act.

(b) The Trustee shall transmit to Holders such other reports concerning the Trustee and its actions under this Indenture as may be required pursuant to the Trust Indenture Act at the times and in the manner provided pursuant thereto.

(c) A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each stock exchange upon which the Securities are listed, with the Commission and with the Company. The Company will notify the Trustee when the Securities are listed on any stock exchange.

ARTICLE 8.

CONSOLIDATION, MERGER, CONVEYANCE, TRANSFER OR LEASE

SECTION 8.01 *Company May Consolidate, Etc., Only on Certain Terms.* The Company shall not consolidate with or merge into any other Person or convey, transfer or lease all or substantially all of its properties and assets to any Person, and the Company shall not permit any Person to consolidate with or merge into the Company, in a transaction in which the Company is not the surviving entity, unless:

(i) in case the Company shall consolidate with or merge into another Person or convey, transfer or lease all or substantially all of its properties and assets to any Person, the Person formed by such consolidation or into which the Company is merged or the Person which acquires by conveyance or transfer, or which leases, the properties and assets of the Company shall be a corporation, limited liability company, partnership or trust, shall be organized and validly existing under the laws of the United States of America, any State thereof or the District of Columbia and shall expressly assume, by an indenture supplemental hereto, executed and delivered to the Trustee, in form satisfactory to the Trustee, the due and punctual payment of the principal of and interest, if any, on all the outstanding Securities and the performance or observance of every covenant of this Indenture on the part of the Company to be performed or observed;

(ii) immediately after giving effect to such transaction and treating any Indebtedness which becomes an obligation of the Company as a result of such transaction as having been incurred by the Company at the time of such transaction, no Event of Default, and no event which, after notice or lapse of time or both, would become an Event of Default, shall have happened and be continuing; and

(iii) the Company has delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that such consolidation, merger, conveyance, transfer or lease and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture comply with this Article.

SECTION 8.02 *Successor Substituted.* Upon any consolidation of the Company with, or merger of the Company into, any other Person or any conveyance, transfer or lease of all or substantially all of the properties and assets of the Company in accordance with Section 8.01, the successor Person formed by such consolidation or into which the Company is merged or to which such conveyance, transfer or lease is made shall succeed to, and be substituted for, and may exercise every right and power of, the Company under this Indenture with the same effect as if such successor Person had been named as the Company herein, and thereafter, except in the case of a lease, the predecessor Person shall be relieved of all obligations and covenants under this Indenture and the Securities.

ARTICLE 9.

SUPPLEMENTAL INDENTURES

SECTION 9.01 *Supplemental Indentures Without Consent of Holders.* Notwithstanding Section 9.02 of this Indenture, the Company and the Trustee may amend or supplement this Indenture or the Securities of one or more series without the consent of any Holder for certain purposes, including:

(a) evidencing the succession of another Person to the Company and such Person's assumption of the Company's obligations under the Indenture;

(b) adding to the Company's covenants or Events of Default;

(c) establishing forms or terms of the Securities of a particular series; and

(d) curing ambiguities and other purposes which do not adversely affect the Holders of the Outstanding Securities of a particular series in any material respect.

Upon the request of the Company authorizing the execution of any such amended or supplemental indenture, and

upon receipt by the Trustee of the documents described in Section 6.03 hereof, the Trustee will join with the Company in the execution of any amended or supplemental indenture authorized or permitted by the terms of this Indenture and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee will not be obligated to enter into such amended or supplemental indenture that affects its own rights, duties or immunities under this Indenture or otherwise.

SECTION 9.02 Supplemental Indentures with Consent of Holders. The Company and the Trustee may enter into a supplemental indenture with the written consent of the Holders of at least a majority in aggregate principal amount of the Outstanding Securities of each series affected by such supplemental indenture (including consents obtained in connection with a tender offer or exchange offer for the Securities of such series), for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of any supplemental indenture or of modifying in any manner the rights of the Holders of each such series. Except as provided in Section 5.13, the Holders of at least a majority in principal amount of the Outstanding Securities of each series by notice to the Trustee (including consents obtained in connection with a tender offer or exchange offer for the Securities of such series) may waive compliance by the Company with any provision of this Indenture or the Securities with respect to such series.

It shall not be necessary for the consent of the Holders of Securities under this Section 9.02 to approve the particular form of any proposed supplemental indenture or waiver, but it shall be sufficient if such consent approves the substance thereof. Upon the request of the Company authorizing the execution of any such amended or supplemental indenture, and upon the filing with the Trustee of evidence satisfactory to the Trustee of the consent of the Holders of Securities as aforesaid, and upon receipt by the Trustee of the documents described in Section 6.03 hereof, the Trustee will join with the Company in the execution of such amended or supplemental indenture unless such amended or supplemental indenture directly affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion, but will not be obligated to, enter into such amended or supplemental Indenture.

After a supplemental indenture or waiver under this section becomes effective, the Company shall mail to the Holders of Securities affected thereby, a notice briefly describing the supplemental indenture or waiver. Any failure by the Company to mail or publish such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such supplemental indenture or waiver.

SECTION 9.03 Limitations

Without the consent of each Holder affected, an amendment or waiver may not (with respect to any Securities held by a non-consenting Holder):

- (a) change the Stated Maturity of the principal of, or any installment of interest on, or the redemption price of, any such Security;
- (b) reduce the principal amount of or interest on, any such Security;
- (c) change currency of payment of principal of or interest on, any such Security;
- (d) impair the right to institute suit for the enforcement of any payment on any such Security;
- (e) reduce the percentage in principal amount of Outstanding Securities of a particular series, the consent of whose Holders is required for modification or amendment of the Indenture, or for waiver of compliance with certain provisions of the Indenture or waiver of certain defaults; or
- (f) modify such provisions with respect to modification and waiver.

SECTION 9.04 Execution of Supplemental Indentures. In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this

Indenture, the Trustee shall be entitled to receive, and (subject to Section 6.01) shall be fully protected in relying upon, in addition to the documents required by Section 1.02, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture.

SECTION 9.05 Effect of Supplemental Indentures. Until an amendment or waiver becomes effective, a consent to it by a Holder of a Security is a continuing consent by the Holder and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security, even if notation of the consent is not made on any Security. However, any such Holder or subsequent Holder may revoke the consent as to his Security or portion of a Security if the Trustee receives the notice of revocation before the date the amendment or waiver becomes effective.

Any amendment or waiver once effective shall bind every Holder of each series affected by such amendment or waiver unless it is of the type described in any of clauses (a) through (f) of Section 9.03. In that case, the amendment or waiver shall bind each Holder of a Security who has consented to it and every subsequent Holder of a Security or portion of a Security that evidences the same debt as the consenting Holder's Security.

SECTION 9.06 Conformity with Trust Indenture Act. Every supplemental indenture executed pursuant to this Article shall conform to the requirements of the Trust Indenture Act.

SECTION 9.07 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.

SECTION 9.08 Trustee Protected. In executing, or accepting the additional trusts created by, any supplemental indenture permitted by this Article or the modifications thereby of the trusts created by this Indenture, the Trustee shall be entitled to receive, and (subject to Section 6.01) 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 shall sign all supplemental indentures, except that the Trustee need not sign any supplemental indenture that adversely affects its rights.

ARTICLE 10.

COVENANTS SECTION

SECTION 10.01 Payment of Principal and Interest. The Company covenants and agrees for the benefit of each series of Securities that it will duly and punctually pay the principal of and any premium or interest on the Securities of that series in accordance with the terms of the Securities of that series and this Indenture.

SECTION 10.02 Maintenance of Office or Agency. The Company shall maintain in each Place of Payment for any series of Securities an office or agency (which may be an office of the Trustee or an affiliate of the Trustee) where Securities of that series may be presented or surrendered for payment, where Securities of that series may be surrendered for registration of transfer 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 shall give prompt written notice to the Trustee of the location, and any change in the location, of 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, and the Company hereby appoints the Trustee as its agent to receive all such presentations, surrenders, notices and demands.

The Company may also from time to time designate one or more other offices or agencies where the Securities of

one or more series may be presented or surrendered for any or all such purposes and may from time to time rescind such designation; *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 each Place of Payment for Securities of any series for such purposes. The Company will give prompt written notice to the Trustee and the Holders of any such designation or rescission and of any change in the location of any such other office or agency.

SECTION 10.03 Money for Security 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 Securities, it shall, on or before each due date of the principal of 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 sufficient to pay the principal or interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided and shall 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, it will, prior to 10:00 a.m., New York City time, on each due date of the principal of or interest on any Securities of that series, deposit with a Paying Agent a sum sufficient to pay such amount, such sum to be held as provided by the Trust Indenture Act, 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 shall 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 (i) comply with the provisions of the Trust Indenture Act applicable to it as a Paying Agent and (ii) during the continuance of any default by the Company (or any other obligor upon the Securities of that series) in the making of any payment in respect of the Securities of that series, upon the written request of the Trustee, forthwith pay to the Trustee all sums held in trust by such Paying Agent as such.

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 money.

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 or interest on any Security of any series and remaining unclaimed for two years after such principal or interest has become due and payable shall be paid to the Company on 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 thereof, 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 a newspaper published in the English language, customarily published on each New York City Business Day and of general circulation in The City of New York, 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 shall be repaid to the Company.

SECTION 10.04 Existence. Subject to Article Eight, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect its existence, rights (charter and statutory) and franchises; *provided, however*, that the Company shall not be required to preserve any such right or franchise if the Board of Directors of the Company shall determine that the preservation thereof is no longer desirable in the conduct of the business of the Company and that the loss thereof is not disadvantageous in any material respect to the Holders.

SECTION 10.05 Reports and Delivery of Certain Information. The Company shall file with the Trustee all quarterly and annual reports on Forms 10-Q and 10-K and all current reports on Form 8-K and all proxy statements

which the Company is then required to file with the Commission pursuant to Section 13 or 15(d) of the Exchange Act; provided, that any such information or reports required to be filed with the Commission pursuant to Section 13 or 15(d) of the Exchange Act shall be filed with the Trustee within 15 days after the same is filed with the Commission, and provided further that if the Company files the reports required by this Section 10.05 with the Commission and such reports are publicly available, it shall be deemed to have satisfied its obligation to furnish such reports pursuant to this Section 10.05.

SECTION 10.06 Resale of Certain Securities. During the period beginning on the Issue Date and ending on the date that is two years from the Issue Date, the Company shall not, and shall not permit any of its “affiliates” (as defined under Rule 144 under the Securities Act or any successor provision thereto) to, resell any Securities which constitute “restricted securities” under Rule 144 that have been reacquired by any of them. The Trustee shall have no responsibility in respect of the Company’s performance of its agreement in the preceding sentence.

SECTION 10.07 Book-Entry System. If the Securities cease to trade in the Depository’s book-entry settlement system, the Company covenants and agrees that it shall use reasonable efforts to make such other book-entry arrangements that it determines are reasonable for the Securities.

ARTICLE 11.

OPTIONAL REDEMPTION OF SECURITIES

SECTION 11.01 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 3.01 for Securities of any series) in accordance with this Article.

SECTION 11.02 Election to Redeem; Notice to Trustee.

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution. In case of any redemption at the election of the Company of less than all the Securities of any series, the Company shall, at least 60 days prior to the Redemption Date fixed by the Company (unless a shorter notice shall be satisfactory to the Trustee), notify the Trustee of such Redemption Date, of the tenor, if applicable, of the Securities to be redeemed, 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 11.03 Selection by Trustee of Securities to Be Redeemed.

If less than all the Securities of any series 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 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 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 Securities redeemed or to be redeemed only in part, to the portion of the principal amount of such Securities which has been or is to be redeemed.

SECTION 11.04 Notice of Redemption.

Notice of redemption shall be given by first-class mail, postage prepaid, mailed not less than 30 nor more than 60 days prior to the Redemption Date to each Holder of Securities to be redeemed, at the address appearing in the Security Register.

All notices of redemption shall state:

- (a) the Redemption Date,
- (b) the Redemption Price,
- (c) if less than all the Outstanding Securities of any series are to be redeemed, the identification (and, in the case of partial redemption, the principal amounts) of the particular Securities to be redeemed,
- (d) that on the Redemption Date the Redemption Price will become due and payable upon each such Security to be redeemed and, if applicable, that interest thereon will cease to accrue on and after said date,
- (e) the place or places where such Securities are to be surrendered for payment of the Redemption Price,
- (f) the CUSIP numbers, if any, of such Security,
- (g) for any Securities that by their terms may be converted, the terms of conversion, the date on which the right to convert the Security to be redeemed will terminate and the place or places where such Securities may be surrendered for conversion, and
- (h) that the redemption is for a sinking fund, if such is the case.

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, and shall be irrevocable. The notice of redemption mailed in the manner herein provided shall be conclusively presumed to have been duly given whether or not the Holder receives such notice. In any case, failure to give such notice by mail or any defect in the notice to the Holder of any Security shall not affect the validity of the proceeding for the redemption of any other Security.

SECTION 11.05 Deposit of Redemption Price.

Prior to 10:00 a.m. New York City time on 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, segregate and hold in trust as provided in Section 10.03) an amount of money sufficient to pay the Redemption Price of, and (except if the Redemption Date shall be an Interest Payment Date) accrued interest on, all the Securities which are to be redeemed on that date, other than any Securities called for redemption on that date which have been converted prior to the date of such deposit.

If any Security called for redemption is 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 (subject to any right of the Holder of such Security or any Predecessor Security to receive interest as provided in the last paragraph of Section 3.07 or in the terms of such Security) be paid to the Company upon Company Request or, if then held by the Company, shall be discharged from such trust.

SECTION 11.06 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, and from and after such date (unless the Company shall default in the payment of the Redemption Price and accrued interest), such Securities shall cease to

bear interest. Upon surrender of any such Security for redemption in accordance with said notice, such Security shall be paid by the Company at the Redemption Price, together with accrued interest to the Redemption Date; *provided, however*, that installments of interest 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 3.07.

If any Security called for redemption shall not be so paid upon surrender thereof for redemption, the principal and any premium shall, until paid, bear interest from the Redemption Date at the rate prescribed therefor in the Security.

SECTION 11.07 Securities Redeemed in Part. Any Security which is to be redeemed only in part 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 to the Holder, a new Security or Securities of the same series and of like tenor, 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.

ARTICLE 12.

DEFEASANCE AND COVENANT DEFEASANCE

SECTION 12.01 Company's Option to Effect Defeasance or Covenant Defeasance. The Company may elect, at its option at any time, to have Section 12.02 or Section 12.03 applied to any series of the Outstanding Securities upon compliance with the conditions set forth below in this Article. Any such election shall be evidenced by a Board Resolution.

SECTION 12.02 Defeasance and Discharge. Upon the Company's exercise of its option (if any) to have this Section applied to the Outstanding Securities of any series, the Company shall be deemed to have been discharged from its obligations with respect to such series of Securities as provided in this Section on and after the date the conditions set forth in Section 12.04 are satisfied (hereinafter called "Defeasance"). For this purpose, such Defeasance means that the Company shall be deemed to have paid and discharged the entire indebtedness represented by the Outstanding Securities of such series and to have satisfied all its other obligations under such series of Securities and this Indenture insofar as such series of Securities are concerned (and the Trustee, at the expense of the Company, shall execute proper instruments acknowledging the same), subject to the following which shall survive until otherwise terminated or discharged hereunder: (a) the rights of Holders of such series of Securities to receive, solely from the trust fund described in Section 12.04 and as more fully set forth in such Section, payments in respect of the principal of and interest on such Securities when payments are due, (b) the Company's obligations with respect to such series of Securities under Sections 3.04, 3.05, 3.06, 10.02 and 10.03, (c) the rights, powers, trusts, duties and immunities of the Trustee hereunder and (d) this Article. Subject to compliance with this Article, the Company may exercise its option (if any) to have this Section applied to the Outstanding Securities of any series notwithstanding the prior exercise of its option (if any) to have Section 12.03 applied to such series of Securities.

SECTION 12.03 Covenant Defeasance. Upon the Company's exercise of its option (if any) to have this Section applied to any series of the Securities, (a) the Company shall, with respect to such series of Securities, be released from its obligations under Article 8 and (b) the occurrence of any event specified in Sections 5.01(d) (with respect to Article 8) or 5.01(e) shall be deemed not to be or result in an Event of Default, in each case with respect to such series of Securities as provided in this Section on and after the date the conditions set forth in Section 12.04 are satisfied (hereinafter called "Covenant Defeasance"). For this purpose, such Covenant Defeasance means that, with respect to such series of Securities, 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 specified Section (to the extent so specified in the case of Section 5.01(d)), whether directly or indirectly by reason of any reference elsewhere herein to any such Section or by reason of any reference in any such Section to any other provision herein or in any other document, but the remainder of this Indenture and such series of Securities shall be unaffected thereby.

SECTION 12.04 Conditions to Defeasance or Covenant Defeasance. The following shall be the conditions to the application of Section 12.02 or Section 12.03 to the then Outstanding Securities of any series:

- (a) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee which satisfies the requirements contemplated by Section 6.09 and agrees to comply with the provisions of this Article 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 benefits of the Holders of such series of Securities, (i) money in an amount, or (ii) U.S. Government Obligations which through the scheduled payment of principal and interest in respect thereof in accordance with their terms will provide, not later than one day before the due date of any payment, money in an amount, or (iii) a combination thereof, in each case sufficient, 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 any such other qualifying trustee) to pay and discharge, the principal of and interest, if any, on such series of Securities on the respective Stated Maturities, in accordance with the terms of this Indenture and such series of Securities. As used herein, "U.S. Government Obligation" means (x) any security which is (1) a direct obligation of the United States of America for the payment of which the full faith and credit of the United States of America is pledged or (2) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of the United States of America the payment of which is unconditionally guaranteed as a full faith and credit obligation by the United States of America, which, in either case (1) or (2), is not callable or redeemable at the option of the issuer thereof, and (y) any depositary receipt issued by a bank (as defined in Section 3(a) (2) of the Securities Act) as custodian with respect to any U.S. Government Obligation which is specified in Clause (x) above and held by such bank for the account of the holder of such depositary receipt, or with respect to any specific payment of principal of or interest on any U.S. Government Obligation which is so specified and held, *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 depositary receipt from any amount received by the custodian in respect of the U.S. Government Obligation or the specific payment of principal or interest evidenced by such depositary receipt.
- (b) In the event of an election to have Section 12.02 apply to such series of Securities, 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 this instrument, there has been a change in the applicable Federal income tax law, in either case (i) or (ii) to the effect that, and based thereon such opinion shall confirm that, the Holders of such series of Securities will not recognize gain or loss for Federal income tax purposes as a result of the deposit, Defeasance and discharge to be effected with respect to such series of Securities and will be subject to Federal income tax on the same amount, in the same manner and at the same times as would be the case if such deposit, Defeasance and discharge were not to occur.
- (c) In the event of an election to have Section 12.03 apply to such series of Securities, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such series of Securities will not recognize gain or loss for Federal income tax purposes as a result of the deposit and Covenant Defeasance to be effected with respect to such series of Securities and will be subject to Federal income tax on the same amount, in the same manner and at the same times as would be the case if such deposit and Covenant Defeasance were not to occur.
- (d) The Company shall have delivered to the Trustee an Officers' Certificate to the effect that such series of Securities, if then listed on any securities exchange, will not be delisted as a result of such deposit.
- (e) No event which is, or after notice or lapse of time or both would become, an Event of Default with respect to such series of Securities shall have occurred and be continuing at the time of such deposit or, with regard to any such event specified in Sections 5.01(f) and 5.01(g), at any time on or prior to the 90th day after the date of such deposit (it being understood that this condition shall not be deemed satisfied until after such 90th day).
- (f) Such Defeasance or Covenant Defeasance shall not cause the Trustee to have a conflicting interest within the meaning of the Trust Indenture Act (assuming all Securities are in default within the meaning of such Act).

(g) Such Defeasance or Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, any other agreement or instrument to which the Company is a party or by which the Company is bound.

(h) Such Defeasance or Covenant Defeasance shall not result in the trust arising from such deposit constituting an investment company within the meaning of the Investment Company Act unless such trust shall be registered under such Act or exempt from registration thereunder.

(i) The Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent with respect to such Defeasance or Covenant Defeasance have been complied with.

SECTION 12.05 *Deposited Money and U.S. Government Obligations to be Held in Trust; Miscellaneous Provisions.* Subject to the provisions of the last paragraph of Section 10.03, all money and U.S. Government Obligations (including the proceeds thereof) deposited with the Trustee or other qualifying trustee (solely for purposes of this Section and Section 12.06, the Trustee and any such other trustee are referred to collectively as the "Trustee") pursuant to Section 12.04 in respect of the Outstanding Securities of such series shall be held in trust and applied by the Trustee, in accordance with the provisions of such series of Securities and this Indenture, to the payment, either directly or through any such Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Holders of such series of Securities, of all sums due and to become due thereon in respect of principal and interest, but money so held in trust need not be segregated from other funds except to the extent required by law.

The Company shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the U.S. Government Obligations deposited pursuant to Section 12.04 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 Outstanding Securities.

Anything in this Article to the contrary notwithstanding, the Trustee shall deliver or pay to the Company from time to time upon Company Request any money or U.S. Government Obligations held by it as provided in Section 12.04 with respect to the Outstanding Securities of any series 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 the Defeasance or Covenant Defeasance, as the case may be, with respect to such series of Securities.

SECTION 12.06 *Reinstatement.* If the Trustee or the Paying Agent is unable to apply any money in accordance with this Article with respect to the Outstanding Securities of any series by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, then the obligations under this Indenture and such series of Securities from which the Company has been discharged or released pursuant to Section 12.02 or 12.03 shall be revived and reinstated as though no deposit had occurred pursuant to this Article with respect to such series of Securities, until such time as the Trustee or Paying Agent is permitted to apply all money held in trust pursuant to Section 12.05 with respect to such series of Securities in accordance with this Article; *provided, however*, that if the Company makes any payment of principal of or interest on any such Security of that series following such reinstatement of its obligations, the Company shall be subrogated to the rights (if any) of the Holders of such series of Securities to receive such payment from the money so held in trust.

ARTICLE 13.

SINKING FUNDS

SECTION 13.01 *Applicability of Article.* The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of any series if so specified as contemplated by Section 3.01 for Securities of such series.

The minimum amount of any sinking fund payment provided for by the terms of the 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 the Securities of any series is herein referred to as an “optional sinking fund payment”. If provided for by the terms of the Securities of any series, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 13.02. Each sinking fund payment shall be applied to the redemption of the Securities of any series as provided for by the terms of the Securities of such series.

SECTION 13.02 Satisfaction of Sinking Fund Payments with Securities. The Company (1) may deliver Outstanding Securities of a series (other than any previously called for redemption) and (2) may apply as a credit Securities of a series which have been converted in accordance with their terms or 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, in each case in satisfaction of all or any part of any sinking fund payment with respect to the Securities of such series required to be made pursuant to the terms of the Securities of such series as provided for by the terms of such series; provided that the Securities to be so credited have not been previously so credited. The Securities to be so credited shall be received, together with an Officers’ Certificate with respect thereto, not later than 15 days prior to the date on which the Trustee begins the process of selecting Securities for redemption, and shall be credited for such purpose by the Trustee at the Redemption Price, as specified in the Securities to be so redeemed (or at such other prices as may be specified for such Securities as contemplated in Section 3.01), for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly.

If as a result of the delivery or credit of Securities in lieu of cash payments pursuant to this Section 13.02, the principal amount of Securities of such series to be redeemed in order to exhaust the aforesaid cash payment shall be less than \$100,000, the Trustee need not call Securities of such series for redemption, except upon receipt of a Company Order that such action be taken, and such cash payment shall be held by the Trustee or a Paying Agent and applied to the next succeeding sinking fund payment, provided, however, that the Trustee or such Paying Agent shall from time to time upon receipt of a Company Order pay over and deliver to the Company any cash payment so being held by the Trustee or such Paying Agent upon delivery by the Company to the Trustee of Securities of that series purchased by the Company having an unpaid principal amount equal to the cash payment required to be released to the Company.

SECTION 13.03 Redemption of Securities for Sinking Fund. Not less than 60 days prior to each sinking fund payment date for any series of Securities, the Company will deliver to the Trustee an Officers’ Certificate specifying the amount of the next ensuing sinking fund payment for that series pursuant to the terms of such Securities, the portion thereof, if any, which is to be satisfied by payment of cash and the portion thereof, if any, which is to be satisfied by delivering and crediting Securities of that series pursuant to Section 13.02 stating that such Securities have not been previously used as a credit against any sinking fund payment and will also deliver to the Trustee any Securities to be so delivered. 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 11.03 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 11.04. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Section 11.05, 11.06 and 11.07.

This instrument 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 instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Indenture to be duly executed as of the day and year first above written.

EMCORE Corporation

By _____

_____ ,

as Trustee,

By _____

By _____

August 10, 2012

Emcore Corporation
10420 Research Road, S.E.
Albuquerque, NM 87123

Re: Emcore Corporation
Registration Statement on Form S-3

Ladies and Gentlemen:

We are providing this opinion letter in our capacity as special counsel to Emcore Corporation, a New Jersey corporation (the "Company"), in connection with the filing by the Company of a registration statement on Form S-3 (the "Registration Statement") under the Securities Act of 1933, as amended (the "Securities Act"), with the United States Securities and Exchange Commission (the "Commission"). The Registration Statement relates to the sale by the Company of (a) Common Stock, no par value per share, (b) Preferred Stock, (c) Debt Securities, (d) Warrants, (e) Units, and (f) any combination of the foregoing (collectively, the "Securities") to be issued by the Company in the future upon the filing of an appropriate amendment to the Registration Statement and/or Supplement to the Prospectus contained therein. The Debt Securities will be issued pursuant to an indenture by and among the Company, as issuer, and a trustee to be selected by the Company (the "Trustee"), in the form included as Exhibit 4.2 to the Registration Statement, as such indenture may be amended or supplemented from time to time (the "Indenture").

You have requested that we render the opinion set forth in this letter and we are furnishing this opinion in accordance with the requirements of Part II, Item 16 of Form S-3 and Item 601(b)(5)(i) of Regulation S-K promulgated by the Commission under the Securities Act.

In connection with the foregoing registration, we have examined originals, or copies certified or otherwise identified to our satisfaction, of (i) the form of Registration Statement and the form of Indenture, each as provided to us by the Company, (ii) the Company's Restated Certificate of Incorporation, as amended and restated to date (the "Certificate of Incorporation"), (iii) the Company's By-Laws, as amended and/or restated to date (the "By-Laws"), (iv) certain resolutions of the Board of Directors of the Company relating to the Registration Statement, and (v) such other documents as we have deemed necessary or appropriate for purposes of rendering the opinion set forth herein.

In our examination, we have assumed the legal capacity of all natural persons, the genuineness of all signatures, the authenticity of all documents submitted to us as certified or photostatic copies and the authenticity of the originals of such latter documents. With your consent, we have also assumed (a) that each of the Debt Securities and the Indenture, and any other documents executed by parties other than the Company with respect to the Securities (collectively, the "Documents") have been duly authorized, executed and delivered by the parties thereto other than the Company, (b) that the Documents constitute legally valid and binding obligations of the parties thereto other than the Company, enforceable against each of them in accordance with their respective terms, and (c) that the status of the Documents as legally valid and binding obligations of the parties is not affected by any (i) breaches of, or defaults under, agreements or instruments, (ii) violations of statutes, rules, regulations or court or governmental orders, or (iii) failures to obtain required consents, approvals or authorizations from, or to make required registrations, declarations or filings with, governmental authorities. As to any facts material to the opinion expressed herein that were not independently established or verified, we have relied upon statements and representations of officers and other representatives of the Company and others.

Based upon and subject to the foregoing, we are of the opinion that:

1. When an issuance of Common Stock has been duly authorized by all necessary corporate action of the Company, upon issuance, delivery and payment therefor and in an amount not less than the par value thereof, in an amount less than or equal to the number of shares of Common Stock authorized by the Company's Certificate of Incorporation remaining available for issuance and in the manner contemplated by the Registration Statement and Prospectus Documents and by such corporate action, such shares of Common Stock will be validly issued, fully paid and nonassessable.

2. When a series of Preferred Stock has been duly established in accordance with the terms of the Company's Certificate of Incorporation, and authorized by all necessary corporate action of the Company, in an amount less than or equal to the number of shares of Preferred Stock authorized by the Company's Certificate of Incorporation remaining available for issuance, and upon issuance, delivery and payment therefor in the manner contemplated by the Registration Statement and Prospectus Documents and by such corporate action, such shares of such series of Preferred Stock will be validly issued, fully paid and nonassessable.

3. When an appropriately qualified trustee has been selected and agrees to act as Trustee under the Indenture, the Indenture has been duly authorized, executed and delivered by the Company, and the specific terms of any particular series of Debt Securities have been duly established in accordance with the Indenture and applicable law and authorized by all necessary corporate action of the Company (including, without limitation, by the adoption by the Board of Directors of the Company of resolutions duly authorizing the issuance and delivery of such Debt Securities), and when any such Debt Securities have been duly executed and issued by the Company, duly authenticated by the Trustee and duly delivered by or on behalf of the Company against payment therefor in accordance with the Indenture and in the manner contemplated by the Registration Statement and Prospectus Documents and by such corporate action, such Debt Securities will be the legally valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

4. When a Warrant Agreement has been duly authorized, executed and delivered by the Company in accordance with applicable law, the specific terms of a particular issuance of Warrants have been duly established in accordance with the Warrant Agreement and authorized by all necessary corporate action of the Company, and the Warrants have been duly executed, authenticated, issued and delivered against payment therefor in accordance with the Warrant Agreement and in the manner contemplated by the Registration Statement and Prospectus Documents and by such corporate action (assuming the securities issuable upon exercise of the Warrants have been duly authorized and reserved for issuance by all necessary corporate action and in accordance with applicable law), the Warrants will be legally valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

5. When Units have been duly authorized, executed and delivered by the Company in accordance with applicable law, the specific terms of a particular issuance of Units have been duly established and authorized by all necessary corporate action of the Company, and the Units have been duly executed, authenticated, issued and delivered against payment therefor in accordance with the Warrant Agreement and in the manner contemplated by the Registration Statement and Prospectus Documents and by such corporate action (assuming the securities issuable upon exercise of the Units have been duly authorized and reserved for issuance by all necessary corporate action and in accordance with applicable law), the Units will be legally valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

Our opinions are limited to the laws of the State of New Jersey. Our opinions are subject to: (i) the effect of bankruptcy, insolvency, reorganization, preference, fraudulent transfer, moratorium or other similar laws relating to or affecting the rights and remedies of creditors; (ii) the effect of general principles of equity, whether considered in a proceeding in equity or at law (including the possible unavailability of specific performance or injunctive relief), concepts of materiality, reasonableness, good faith and fair dealing, and the discretion of the court before which a proceeding is brought; (iii) the invalidity under certain circumstances under law or court decisions of provisions providing for the indemnification of or contribution to a party with respect to a liability where such indemnification or contribution is contrary to public policy; and (iv) we express no opinion as to (a) any provision for liquidated damages, default interest, late charges, monetary penalties, make-whole premiums or other economic remedies to the extent such provisions are deemed to constitute a penalty, (b) consents to, or restrictions upon, governing law, jurisdiction, venue, arbitration, remedies or judicial relief, (c) any waiver of rights or defenses under usury laws; (d) any provision requiring the payment of attorneys' fees, where such payment is contrary to law or public policy; (e) any provision permitting, upon acceleration of the Debt Securities, collection of that portion of the stated principal amount thereof which might be determined to constitute unearned interest thereon; and (f) the severability, if invalid, of provisions to the foregoing effect.

We hereby consent to the filing of this opinion with the Commission as Exhibit 5. In giving this consent, we do not hereby admit that we are in the category of persons whose consent is required under Section 7 of the Securities Act or the rules and regulations of the Commission promulgated thereunder.

This opinion is limited to the specific issues addressed herein, and no opinion may be inferred or implied beyond that expressly stated herein. We assume no obligation to revise or supplement this opinion should the present laws of the State of New Jersey be changed by legislative action, judicial decision or otherwise.

Very truly yours,

/s/ DILLON, BITAR & LUTHER, L.L.C.

DILLON, BITAR & LUTHER, L.L.C.

EMCORE Corporation
Computation of Ratio of Earnings to Fixed Charges
(in thousands)
(unaudited)

We are presenting this computation of ratio of earnings to fixed charges pursuant to the requirements set forth in Item 503 of Regulation S-K under the Securities Act of 1933.

<i>(in thousands)</i>	Nine Months Ended June 30,		Fiscal Year Ended September 30,			
	2012	2011	2010	2009	2008	2007
Earnings:						
Loss before income tax expense	\$ (30,959)	\$ (34,219)	\$ (23,694)	\$ (138,801)	\$ (80,860)	\$ (58,722)
Add: Loss from equity method investment	1,201	1,842	—	—	—	—
Add: Fixed charges	1,066	1,542	1,372	1,475	2,213	5,718
Total earnings	<u>(28,692)</u>	<u>(30,835)</u>	<u>(22,322)</u>	<u>(137,326)</u>	<u>(78,647)</u>	<u>(53,004)</u>
Fixed charges:						
Interest expense	399	642	439	542	1,580	4,985
Estimated interest portion of rental expense	667	900	933	933	633	733
Total fixed charges	<u>1,066</u>	<u>1,542</u>	<u>1,372</u>	<u>1,475</u>	<u>2,213</u>	<u>5,718</u>
Ratio of earnings to fixed charges	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>	<u>*</u>
Deficiency of earnings available to cover fixed charges	<u>\$ 29,758</u>	<u>\$ 32,377</u>	<u>\$ 23,694</u>	<u>\$ 138,801</u>	<u>\$ 80,860</u>	<u>\$ 58,722</u>

* Our earnings were insufficient to cover fixed charges for the period indicated.

Interest expense also includes amortization expense associated with capitalized financing costs. The interest portion of rental expense was estimated to be equal to one-third of total rental expense.

SUBSIDIARIES OF REGISTRANT*

Corona Optical Systems, Inc., a Delaware corporation

EMCORE Fiber Optics, Inc., a Delaware corporation

EMCORE Hong Kong, Limited, a Hong Kong corporation

EMCORE IRB Company, LLC, a New Mexico limited liability company

EMCORE Netherlands B.V., a Netherlands corporation

EMCORE Solar Arizona, Inc., a Delaware corporation

EMCORE Solar New Mexico LLC, a New Mexico limited liability company

EMCORE Solar Power, Inc., a Delaware corporation

EMCORE Spain S.L., a Spanish corporation

K2 Optronics, Inc. a Delaware corporation

Langfang EMCORE Optoelectronics Company, Limited, a Chinese corporation

Opticomm Corporation, a Delaware corporation

**As of August 10, 2012*

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors
EMCORE Corporation:

We consent to the use of our reports with respect to the consolidated financial statements and the effectiveness of internal control over financial reporting incorporated by reference herein and to the reference to our firm under the heading "Experts" in the prospectus.

Our report dated December 29, 2011, on the effectiveness of internal control over financial reporting as of September 30, 2011, expresses our opinion that EMCORE Corporation did not maintain effective internal control over financial reporting as of September 30, 2011 because of the effect of material weaknesses on the achievement of the objectives of the control criteria and contains an explanatory paragraph that states material weaknesses related to certain inventory reserve transactions and certain inventory held by third parties have been identified and included in management's assessment.

Our report dated December 29, 2011 on the consolidated financial statements refers to a change in the annual testing date for goodwill impairment.

/s/ KPMG LLP

KPMG LLP
Albuquerque, New Mexico
August 10, 2012

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in this Registration Statement on Form S-3 of our report dated December 29, 2009 (January 10, 2011 as to the effects of correcting the 2009 financial statements described in Note 2) relating to the 2009 consolidated financial statements of EMCORE Corporation and subsidiaries appearing in the Annual Report on Form 10-K of EMCORE Corporation for the year ended September 30, 2011, and to the reference to us under the heading "Experts" in the Prospectus, which is part of this Registration Statement.

/s/ Deloitte & Touche LLP

DELOITTE & TOUCHE LLP
Dallas, Texas
August 10, 2012