As filed with the Securities and Exchange Commission on August 2, 2017

Registration No. 333-

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT

Under

The Securities Act of 1933

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

(Exact name of Registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

16-1590339 (I.R.S. Employer Identification Number)

1305 O'Brien Drive Menlo Park, California 94025 (650) 521-8000

(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Michael Hunkapiller Chief Executive Officer

Pacific Biosciences of California, Inc.

1305 O'Brien Drive

Menlo Park, California 94025 (650) 521-8000

(Name, address, including zip code, and telephone number, including area code, of agent for service)

Copies to: Donna M. Petkanics, Esq. Andrew D. Hoffman, Esq. Wilson Sonsini Goodrich & Rosati, P.C. 650 Page Mill Road Palo Alto, CA 94304 Telephone: (650) 493-9300 Facsimile: (650) 493-6811

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

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

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

dividend or interest reinvestment plans, check the following box.

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

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

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. \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. \Box

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

Large accelerated filer

Non-accelerated filer □ (Do not check if smaller reporting company)

П Smaller reporting company

 \mathbf{X}

Accelerated filer

Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Amount to be Registered	Proposed Maximum Offering Price Per Share(1)(2)	Proposed Maximum Aggregate Offering Price(2)(3)	Amount of Registration Fee(3)
Common Stock, \$0.001 par value per share(4)				
Preferred Stock, \$0.001 par value per share(4)	_	_	_	_
Depositary Shares	_		_	—
Warrants	_	_	_	_
Debt Securities	—	—	—	_
Units	—	—	—	_
Total(5)	\$150,000,000	_	\$150,000,000	\$17,385.00

Pursuant to Rule 457(i) under the Securities Act of 1933 (the "Securities Act"), the securities registered hereunder include such indeterminate number of shares of common stock, preferred stock or depositary shares, number of warrants and principal amount of debt securities as units as may be issued upon conversion or exchange of any preferred stock, warrants or debt securities registered hereunder that provide for conversion or exchange, upon exercise of warrants or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions. The proposed maximum per unit and aggregate offering prices per class of securities will be determined from time to time by the registrant in connection with the issuance by the registrant of the securities registered under this registration statement and is not specified as to each class of security pursuant to General Instruction II.D of Form S-3 under the Securities Act. (1)

(2)

(4)

Calculated pursuant to Rule 457(o) under the Securities as to each class of security instant to General instruction in D of Point 35 under the Securities Act. Includes an indeterminate number of shares of common stock or preferred stock as may be sold from time to time at indeterminate prices. Any securities registered hereunder may be sold separately or as units with other securities registered hereunder. The proposed maximum offering price per unit will be determined by us in connection with the issuance of the securities. In over will the aggregate offering price of all securities issued from time to time pursuant to this Registration Statement exceed \$150,000,000 or the equivalent thereof in one or more foreign currencies, foreign currency units or composite currencies. (5)

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 may not sell the securities until the Registration Statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

SUBJECT TO COMPLETION, DATED AUGUST 2, 2017

PROSPECTUS



\$150,000,000

Pacific Biosciences of California, Inc.

By this prospectus, Pacific Biosciences may offer, from time to time:

- Common stock
- Preferred stock
- Depositary Shares
- Warrants
- Debt securities
- Units

Pacific Biosciences of California, Inc. a Delaware corporation ("Pacific Biosciences" or "PacBio") may offer and sell from time to time, in one or more series or issuances and on terms that Pacific Biosciences will determine at the time of the offering, any combination of the securities described in this prospectus, up to an aggregate amount of \$150,000,000.

We will provide specific terms of any offering in a supplement to this prospectus. Any prospectus supplement may also add, update, or change information contained in this prospectus. You should carefully read this prospectus and the applicable prospectus supplement as well as the documents incorporated or deemed to be incorporated by reference in this prospectus before you purchase any of the securities offered hereby.

These securities may be offered and sold in the same offering or in separate offerings; to or through underwriters, dealers, and agents; or directly to purchasers. The names of any underwriters, dealers, or agents involved in the sale of our securities, their compensation and any over-allotment options held by them will be described in the applicable prospectus supplement. For a more complete description of the plan of distribution of these securities, see the section entitled "Plan of Distribution" beginning on page 28 of this prospectus.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "PACB." We will provide information in any applicable prospectus supplement regarding any listing of securities other than shares of our common stock on any securities exchange.

INVESTING IN OUR SECURITIES INVOLVES SIGNIFICANT RISKS. SEE "<u>RISK FACTORS</u>" BEGINNING ON PAGE 4 OF THIS PROSPECTUS AND IN THE APPLICABLE PROSPECTUS SUPPLEMENT BEFORE INVESTING IN ANY SECURITIES.

NEITHER THE SECURITIES AND EXCHANGE COMMISSION NOR ANY STATE SECURITIES COMMISSION HAS APPROVED OR DISAPPROVED OF THESE SECURITIES OR PASSED UPON THE ADEQUACY OR ACCURACY OF THIS PROSPECTUS. ANY REPRESENTATION TO THE CONTRARY IS A CRIMINAL OFFENSE.

The date of this prospectus is August , 2017

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement on Form S-3 that we filed with the United States Securities and Exchange Commission, or the SEC, using a "shelf" registration process. Under this shelf process, we may, from time to time, sell any combination of the securities described in this prospectus in one or more offerings up to a total amount of \$150,000,000.

This prospectus provides you with a general description of the securities we may offer. 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 to, update or change information contained in the prospectus and, accordingly, to the extent inconsistent, information in this prospectus is superseded by the information in the prospectus supplement.

The prospectus supplement to be attached to the front of this prospectus may describe, as applicable: the terms of the securities offered; the initial public offering price; the price paid for the securities; net proceeds; and the other specific terms related to the offering of the securities.

You should only rely on the information contained or incorporated by reference in this prospectus and any prospectus supplement or issuer free writing prospectus relating to a particular offering. No person has been authorized to give any information or make any representations in connection with this offering other than those contained or incorporated by reference in this prospectus, any accompanying prospectus supplement and any related issuer free writing prospectus in connection with the offering described herein and therein, and, if given or made, such information or representations must not be relied upon as having been authorized by us. Neither this prospectus nor any prospectus supplement nor any related issuer free writing prospectus shall constitute an offer to sell or a solicitation of an offer to buy offered securities in any jurisdiction in which it is unlawful for such person to make such an offering or solicitation. This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits.

You should read the entire prospectus and any prospectus supplement and any related issuer free writing prospectus, as well as the documents incorporated by reference into this prospectus or any prospectus supplement or any related issuer free writing prospectus, before making an investment decision. Neither the delivery of this prospectus or any prospectus supplement or any issuer free writing prospectus nor any sale made hereunder shall under any circumstances imply that the information contained or incorporated by reference herein or in any prospectus supplement or issuer free writing prospectus, as applicable. You should assume that the information appearing in this prospectus, any prospectus supplement or any document incorporated by reference is accurate only as of the date of the applicable documents, regardless of the time of delivery of this prospectus or any sale of securities. Our business, financial condition, results of operations and prospects may have changed since that date.

The names "Pacific Biosciences," "PacBio," "SMRT," "SMRTbell," "Sequel" and our logo are our trademarks.

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Prospectus Summary

This summary description about us and our business highlights selected information contained elsewhere in this prospectus or incorporated in this prospectus by reference. This summary does not contain all of the information you should consider before buying securities in this offering. You should carefully read this entire prospectus and any applicable prospectus supplement, including each of the documents incorporated herein or therein by reference, before making an investment decision. As used in this prospectus, "we," "us," "Pacific Biosciences," "PacBio," "the Company" and "our" refer to Pacific Biosciences of California, Inc., a Delaware corporation.

Pacific Biosciences of California, Inc.

Overview

We design, develop and manufacture sequencing systems to help scientists resolve genetically complex problems. Based on our novel Single Molecule, Real-Time (SMRT®) Sequencing technology, our products enable: de novo genome assembly to finish genomes in order to more fully identify, annotate and decipher genomic structures; full-length transcript analysis to improve annotations in reference genomes, characterize alternatively spliced isoforms and find novel genes; targeted sequencing to more comprehensively characterize genetic variations; and DNA base modification identification to help characterize epigenetic regulation and DNA damage. Our technology combines very high consensus accuracy and long read lengths with the ability to detect real-time kinetic information.

In September 2015, we announced that we had launched a new nucleic acid sequencing platform, the PacBio Sequel[®] System (the "Sequel System"), which will provide higher throughput, more scalability, a reduced footprint and lower sequencing project costs compared to the PacBio[®] RS II System, while maintaining the existing benefits of our SMRT Technology.

Corporate Information

Pacific Biosciences of California, Inc., formerly Nanofluidics, Inc. was incorporated in the State of Delaware in 2000. Our executive offices are located at 1305 O'Brien Drive, Menlo Park, California 94025, and our telephone number is (650) 521-8000. We maintain a website at www.pacb.com where general information about us is available. Our website, and the information contained therein, is not a part of this prospectus.

The Securities We May Offer

We may offer up to \$150,000,000 of common stock, preferred stock, depositary shares, warrants, debt securities and/or units in one or more offerings and in any combination. This prospectus provides you with a general description of the securities we may offer. A prospectus supplement, which we will provide each time we offer securities, will describe the specific amounts, prices and terms of the securities we determine to offer.

Common Stock

We may offer shares of our common stock, par value \$0.001 per share, either alone or underlying other registered securities convertible or exercisable into our common stock. Each holder of our common stock is entitled to one vote for each share on all matters to be voted upon by the stockholders. Holders of our common stock are entitled to receive ratably the dividends, if any, as may be declared from time to time by our board of directors out of funds legally available therefor. If there is a liquidation, dissolution or winding up of our company, holders of our common stock would be entitled to share in our assets remaining after the payment

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of liabilities and any preferential rights of any outstanding preferred stock. The holders of common stock have no preemptive rights. Currently, we do not pay a dividend and do not anticipate paying cash dividends in the foreseeable future.

Preferred Stock and Depositary Shares

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock.

We may also issue fractional shares of preferred stock that will be represented by depositary shares and depositary receipts.

Each series of preferred stock, depositary shares or depositary receipts, if issued, will be more fully described in the particular prospectus supplement that will accompany this prospectus, including redemption provisions, rights in the event of our liquidation, dissolution or winding up, voting rights and rights to convert into common stock. We do not have any shares of our preferred stock, depositary shares or depositary receipts presently outstanding.

Warrants

We may issue warrants for the purchase of common stock, preferred stock or debt securities. We may issue warrants independently or together with other securities.

Debt Securities

We may offer secured or unsecured obligations in the form of one or more series of senior or subordinated debt. The senior debt securities and the subordinated debt securities are together referred to in this prospectus as the "debt securities." The subordinated debt securities generally will be entitled to payment only after payment of our senior debt. Senior debt generally includes all debt for money borrowed by us, except debt that is stated in the instrument governing the terms of that debt to be not senior to, or to have the same rank in right of payment as, or to be expressly junior to, the subordinated debt securities. We may issue debt securities that are convertible into shares of our common stock.

The senior and subordinated debt securities will be issued under separate indentures between us and a trustee. We have summarized the general features of the debt securities to be governed by the indentures. These indentures have been filed as exhibits to the registration statement of which this prospectus forms a part. We encourage you to read these indentures. Instructions on how you can get copies of these documents are provided under the heading "Where You Can Find More Information."

Units

We may issue units comprised of one or more of the other classes of securities issued by us as described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit.

RISK FACTORS

An investment in our securities involves a high degree of risk. The prospectus supplement applicable to each offering of our securities will contain a discussion of the risks applicable to an investment in our securities. Prior to making a decision about investing in our securities, you should carefully consider the specific factors discussed under the heading "Risk Factors" in the applicable prospectus supplement, together with all of the other information contained or incorporated by reference in the prospectus supplement or appearing or incorporated by reference in this prospectus. You should also consider the risks, uncertainties and assumptions discussed under Item 1A, "Risk Factors," in our Annual Report on Form 10-K for the fiscal year ended December 31, 2016 and any updates described in our Quarterly Reports on Form 10-Q, all of which are incorporated herein by reference, and may be amended, supplemented or superseded from time to time by other reports we file with the SEC in the future and any prospectus supplement related to a particular offering. The risks and uncertainties we have described are not the only ones we face. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our operations. The occurrence of any of these known or unknown risks might cause you to lose all or part of your investment in the offered securities.

FORWARD-LOOKING STATEMENTS

This prospectus, each prospectus supplement and the information incorporated by reference in this prospectus and each prospectus supplement contain certain statements that constitute "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Securities Exchange Act of 1934. The words "anticipate," "could," "expect," "believe," "goal," "plan," "intend," "estimate," "may," "seek," "potential," "predict," "project," "should," "would," "will," and similar expressions and variations thereof are intended to identify forward-looking statements, but are not the exclusive means of identifying such statements. Those statements appear in this prospectus Summary," "Risk Factors," "Management's Discussion and Analysis of Financial Condition and Results of Operations" and "Business," and include statements regarding the intent, belief or current expectations of the company and management that are subject to known and unknown risks, uncertainties and assumptions and other factors that could cause actual results and the timing of certain events to differ materially from future results expressed or implied by such forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to those discussed in the section titled "Risk Factors" set forth above.

This prospectus, any prospectus supplement and the information incorporated by reference in this prospectus and any prospectus supplement also contain statements that are based on management's current expectations and beliefs, including estimates and projections about our company, industry, financial condition, results of operations and other matters. These statements are not guarantees of future performance and are subject to numerous risks, uncertainties, and assumptions that are difficult to predict.

Because forward-looking statements are inherently subject to risks and uncertainties, some of which cannot be predicted or quantified, you should not rely upon forward-looking statements as predictions of future events. The events and circumstances reflected in the forward-looking statements may not be achieved or occur and actual results could differ materially from those projected in the forward-looking statements. Except as required by applicable law, including the securities laws of the United States and the rules and regulations of the SEC, we do not plan to publicly update or revise any forward-looking statements contained herein after we distribute this prospectus, whether as a result of any new information, future events or otherwise.

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RATIO OF EARNINGS TO FIXED CHARGES

Our earnings are inadequate to cover fixed charges. The following table sets forth the ratio of earnings to fixed charges for each of the years ended December 31, 2016, 2015, 2014, 2013 and 2012 and for the three months ended June 30, 2017 and June 30, 2016. The following should be read in conjunction with our consolidated financial statements, including the notes thereto, and the other financial information included or incorporated by reference herein. See Exhibit 12.1 hereto for additional detail regarding the computation of the deficiency of earnings to cover fixed charges.

	Three Mon June	Fiscal Year Ended December 31,					
(dollars in thousands)	2017	2016	2016	2015	2014	2013	2012
Ratio of earnings to fixed charges(1)	N/A	N/A	N/A	N/A	N/A	N/A	N/A

(1) For the purpose of calculating such ratios, "earnings" consist of income from continuing operations before income taxes plus fixed charges and "fixed charges" consist of interest expense (net of capitalized portion), capitalized interest, amortization of debt discount and the portion of rental expense representative of interest expense. Earnings were inadequate to cover the fixed charges by approximately \$74,375, \$31,696, \$66,160, \$79,293, and \$94,465 for the years ended December 31, 2016, 2015, 2014, 2013 and 2012 and by approximately \$25,507 and \$18,499 for the three months ended June 30, 2017 and June 30, 2016, respectively.

USE OF PROCEEDS

Unless otherwise indicated in the prospectus supplement, we will use the net proceeds from the sale of securities offered by this prospectus for general corporate purposes, which may include working capital, capital expenditures, other corporate expenses and acquisitions of complementary products, technologies or businesses. However, we have no present agreements or commitments for any such acquisitions. The timing and amount of our actual expenditures will be based on many factors, including cash flows from operations and the anticipated growth of our business. As a result, unless otherwise indicated in the prospectus supplement, our management will have broad discretion to allocate the net proceeds of the offerings. Pending their ultimate use, we intend to invest the net proceeds in short-term, investment-grade, interest-bearing instruments.

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DESCRIPTION OF CAPITAL STOCK

The following information describes our common stock and preferred stock, as well as certain provisions of our amended and restated certificate of incorporation and bylaws. This description is only a summary. You should also refer to our certificate of incorporation and bylaws, which have been filed with the SEC as exhibits to our registration statement, of which this prospectus forms a part.

General

Our authorized capital stock consists of 1,000,000,000 shares of common stock with a \$0.001 par value per share, and 50,000,000 shares of undesignated preferred stock with a \$0.001 par value per share. Our board of directors may establish the rights and preferences of the preferred stock from time to time. As of June 30, 2017, there were 115,561,642 shares of common stock issued and outstanding.

The following is a summary of the material provisions of the common stock and preferred stock provided for in our amended and restated certificate of incorporation and bylaws. For additional detail about our capital stock, please refer to our certificate of incorporation and bylaws, each as amended.

Common Stock

Each holder of our common stock is entitled to one vote for each share on all matters to be voted upon by the stockholders. Subject to any preferential rights of any outstanding preferred stock, holders of our common stock are entitled to receive ratably the dividends, if any, as may be declared from time to time by the board of directors out of funds legally available therefor. We have never declared or paid any cash dividend on our capital stock and do not anticipate paying any cash dividends in the foreseeable future. In the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in our assets remaining after the payment of liabilities and any preferential rights of any outstanding preferred stock.

Holders of our common stock have no preemptive or conversion rights or other subscription rights, and there are no redemption or sinking fund provisions applicable to the common stock. The outstanding shares of common stock are fully paid and non-assessable. The rights, preferences and privileges of the holders of our common stock are subject to, and may be adversely affected by, the rights of the holders of shares of any series of preferred stock that we may designate and issue in the future.

Our common stock is listed on the NASDAQ Global Select Market under the symbol "PACB." The transfer agent and registrar for the common stock is Computershare Trust Company, N.A. Its address is 211 Quality Circle Suite 210, College Station, TX 77845, and its telephone number is 1-866-401-4874.

Preferred Stock

The following description of preferred stock and the description of the terms of any particular series of preferred stock that we choose to issue hereunder and that will be set forth in the related prospectus supplement are not complete. These descriptions are qualified in their entirety by reference to our amended and restated certificate of incorporation and the certificate of designation relating to any series of preferred stock. The rights, preferences, privileges and restrictions of the preferred stock of each series will be fixed by the certificate of designation relating to that series. The prospectus supplement also will contain a description of certain United States federal income tax consequences relating to the purchase and ownership of the series of preferred stock that is described in the prospectus supplement.

Under the terms of our amended and restated certificate of incorporation, our board of directors is authorized to issue shares of preferred stock in one or more series without stockholder approval. Our board of directors has the discretion to determine the rights, preferences, privileges and restrictions, including voting

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rights, dividend rights, conversion rights, redemption privileges and liquidation preferences, of each series of preferred stock. There are no restrictions presently on the repurchase or redemption of any shares of our preferred stock.

The prospectus supplement for a series of preferred stock will specify:

- the maximum number of shares;
- the designation of the shares;
- the annual dividend rate, if any, whether the dividend rate is fixed or variable, the date or dates on which dividends will accrue, the dividend payment dates, and whether dividends will be cumulative;
- the price and the terms and conditions for redemption, if any, including redemption at our option or at the option of the holders, including the time period for redemption, and any accumulated dividends or premiums;
- the liquidation preference, if any, and any accumulated dividends upon the liquidation, dissolution or winding up of our affairs;
- any sinking fund or similar provision, and, if so, the terms and provisions relating to the purpose and operation of the fund;
- the terms and conditions, if any, for conversion or exchange of shares of any other class or classes of our capital stock or any series of any other class or classes, or of any other series of the same class, or any other securities or assets, including the price or the rate of conversion or exchange and the method, if any, of adjustment;
- the voting rights; and
- any or all other preferences and relative, participating, optional or other special rights, privileges or qualifications, limitations or restrictions.

The issuance of shares of preferred stock will affect, and may adversely affect, the rights of holders of common stock. It is not possible to state the actual effect of the issuance of any shares of preferred stock on the rights of holders of common stock until our board of directors determines the specific rights attached to that preferred stock. The effects of issuing additional preferred stock could include one or more of the following:

- 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 changes in control or management of our company.

Preferred stock will be fully paid and nonassessable upon issuance.

Effect of Certain Provisions of our Amended and Restated Certificate of Incorporation and Bylaws and the Delaware Anti-Takeover Statute

Some provisions of Delaware law and our amended and restated certificate of incorporation and bylaws contain provisions that could make the following transactions more difficult:

- acquisition of us by means of a tender offer;
- acquisition of us by means of a proxy contest or otherwise; or
- removal of our incumbent officers and directors.

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Those provisions, summarized below, are expected to discourage coercive takeover practices and inadequate takeover bids and to promote stability in our management. These provisions are also designed to encourage persons seeking to acquire control of us to first negotiate with our board of directors.

Amended and Restated Certificate of Incorporation and Bylaws

Our amended and restated certificate of incorporation and our bylaws provide for the following:

- Undesignated Preferred Stock. The ability to authorize undesignated preferred stock makes it possible for our board of directors to issue one or more series of preferred stock with voting or other rights or preferences that could impede the success of any attempt to change control of our company. These and other provisions may have the effect of deferring hostile takeovers or delaying changes in control or management of our company.
- *Stockholder Meetings*. Our bylaws provide that in general a special meeting of stockholders may be called only by our board of directors, its chairman or our president.
- *Requirements for Advance Notification of Stockholder Nominations and Proposals.* Our bylaws establish advance notice procedures with respect to stockholder proposals and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of directors or a committee of the board of directors.
- Board Classification. Our board of directors is divided into three classes. The directors in each class are elected to serve for a three-year term, one class being elected each year by our stockholders. This system of electing and removing directors may tend to discourage a third party from making a tender offer or otherwise attempting to obtain control of us, because it generally makes it more difficult for stockholders to replace a majority of the directors.
- Limits on Ability of Stockholders to Act by Written Consent. We have provided in our bylaws that our stockholders may not act by written consent. This limit on the ability of our stockholders to act by written consent may lengthen the amount of time required to take stockholder actions. As a result, a holder controlling a majority of our capital stock would not be able to amend our bylaws or remove directors without holding a meeting of our stockholders called in accordance with our bylaws.
- Amendment of Certificate of Incorporation and Bylaws. The amendment of the above provisions of our amended and restated certificate of
 incorporation and bylaws requires approval by holders of at least two-thirds of our outstanding capital stock entitled to vote generally in the
 election of directors.

Delaware Anti-Takeover Statute

We are subject to the provisions of Section 203 of the Delaware General Corporation Law regulating corporate takeovers. In general, Section 203 prohibits a publicly-held Delaware corporation from engaging, under certain circumstances, in a business combination with an interested stockholder for a period of three years following the date the person became an interested stockholder unless:

- prior to the date of the transaction, the board of directors of the corporation approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon completion of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, but not for determining the outstanding voting stock owned by the interested stockholder, (i) shares owned by persons who are directors and also officers, and (ii) shares owned by employee stock plans in which employee participants do not have the right to determine confidentially whether shares held subject to the plan will be tendered in a tender or exchange offer; or

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• at or subsequent to the date of the transaction, the business combination is approved by the board of directors of the corporation and authorized at an annual or special meeting of stockholders, and not by written consent, by the affirmative vote of at least 66-2/3% of the outstanding voting stock which is not owned by the interested stockholder.

Generally, a business combination includes a merger, asset or stock sale, or other transaction resulting in a financial benefit to the interested stockholder. An interested stockholder is a person who, together with affiliates and associates, owns or, within three years prior to the determination of interested stockholder status, did own 15% or more of a corporation's outstanding voting stock.

DESCRIPTION OF THE DEPOSITARY SHARES

General

At our option, we may elect to offer fractional shares of preferred stock, rather than full shares of preferred stock. If we do elect to offer fractional shares of preferred stock, we will issue receipts for depositary shares and each of these depositary shares will represent a fraction of a share of a particular series of preferred stock, as specified in the applicable prospectus supplement. Each owner of a depositary share will be entitled, in proportion to the applicable fractional interest in shares of preferred stock underlying that depositary share, to all rights and preferences of the preferred stock underlying that depositary share. These rights may include dividend, voting, redemption and liquidation rights.

The shares of preferred stock underlying the depositary shares will be deposited with a bank or trust company selected by us to act as depositary, under a deposit agreement by and among us, the depositary and the holders of the depositary receipts. The depositary will be the transfer agent, registrar and dividend disbursing agent for the depositary shares.

The depositary shares will be evidenced by depositary receipts issued pursuant to the depositary agreement. Holders of depositary receipts agree to be bound by the deposit agreement, which requires holders to take certain actions such as filing proof of residence and paying certain charges.

The summary of terms of the depositary shares contained in this prospectus is not complete, and is subject to modification in any prospectus supplement for any issuance of depositary shares. You should refer to the forms of the deposit agreement, our amended and restated certificate of incorporation and the certificate of designation that are, or will be, filed with the SEC for the applicable series of preferred stock.

Dividends

The depositary will distribute cash dividends or other cash distributions, if any, received in respect of the series of preferred stock underlying the depositary shares to the record holders of depositary receipts in proportion to the number of depositary shares owned by those holders on the relevant record date. The relevant record date for depositary shares will be the same date as the record date for the preferred stock.

In the event of a distribution other than in cash, the depositary will distribute property received by it to the record holders of depositary receipts that are entitled to receive the distribution, unless the depositary determines that it is not feasible to make the distribution. If this occurs, the depositary, with our approval, may adopt another method for the distribution, including selling the property and distributing the net proceeds to the holders.

Liquidation preference

If a series of preferred stock underlying the depositary shares has a liquidation preference, in the event of our voluntary or involuntary liquidation, dissolution or winding up, holders of depositary shares will be entitled to receive the fraction of the liquidation preference accorded each share of the applicable series of preferred stock, as set forth in the applicable prospectus supplement.

Redemption

If a series of preferred stock underlying the depositary shares is subject to redemption, the depositary shares will be redeemed from the proceeds received by the depositary resulting from the redemption, in whole or in part, of the preferred stock held by the depositary. Whenever we redeem any preferred stock held by the depositary, the depositary will redeem, as of the same redemption date, the number of depositary shares representing the preferred stock so redeemed. The depositary will mail the notice of redemption to the record holders of the

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depositary receipts promptly upon receiving the notice from us and not fewer than 20 or more than 60 days, unless otherwise provided in the applicable prospectus supplement, prior to the date fixed for redemption of the preferred stock.

Voting

Upon receipt of notice of any meeting at which the holders of preferred stock are entitled to vote, the depositary will mail the information contained in the notice of meeting to the record holders of the depositary receipts underlying the preferred stock. Each record holder of those depositary receipts on the record date will be entitled to instruct the depositary as to the exercise of the voting rights pertaining to the amount of preferred stock underlying that holder's depositary shares. The record date for the depositary will be the same date as the record date for the preferred stock. The depositary will, to the extent practicable, vote the preferred stock underlying the depositary shares in accordance with these instructions. We will agree to take all action that may be deemed necessary by the depositary in order to enable the depositary to vote the preferred stock in accordance with these instructions. The depositary will not vote the preferred stock to the extent that it does not receive specific instructions from the holders of depositary receipts.

Withdrawal of preferred stock

Owners of depositary shares will be entitled to receive upon surrender of depositary receipts at the principal office of the depositary and payment of any unpaid amount due to the depositary, the number of whole shares of preferred stock underlying their depositary shares.

Partial shares of preferred stock will not be issued. Holders of preferred stock will not be entitled to deposit the shares under the deposit agreement or to receive depositary receipts evidencing depositary shares for the preferred stock.

Amendment and termination of the deposit agreement

The form of depositary receipt evidencing the depositary shares and any provision of the deposit agreement may be amended by agreement between the depositary and us. However, any amendment which materially and adversely alters the rights of the holders of depositary shares, other than fee changes, will not be effective unless the amendment has been approved by at least a majority of the outstanding depositary shares. The deposit agreement may be terminated by the depositary or us only if:

- all outstanding depositary shares have been redeemed; or
- there has been a final distribution of the preferred stock in connection with our dissolution and such distribution has been made to all the holders
 of depositary shares.

Charges of depositary

We will pay all transfer and other taxes and governmental charges arising solely from the existence of the depositary arrangement. We will also pay charges of the depositary in connection with:

- the initial deposit of the preferred stock;
- the initial issuance of the depositary shares;
- any redemption of the preferred stock; and
- all withdrawals of preferred stock by owners of depositary shares.

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Holders of depositary receipts will pay transfer, income and other taxes and governmental charges and other specified charges as provided in the deposit agreement for their accounts. If these charges have not been paid, the depositary may:

- refuse to transfer depositary shares;
- withhold dividends and distributions; and
- sell the depositary shares evidenced by the depositary receipt.

Miscellaneous

The depositary will forward to the holders of depositary receipts all reports and communications we deliver to the depositary that we are required to furnish to the holders of the preferred stock. In addition, the depositary will make available for inspection by holders of depositary receipts at the principal office of the depositary, and at such other places as it may from time to time deem advisable, any reports and communications we deliver to the depositary as the holder of preferred stock.

Neither the depositary nor we will be liable if either the depositary or we are prevented or delayed by law or any circumstance beyond the control of either the depositary or us in performing our respective obligations under the deposit agreement. Our obligations and the depositary's obligations will be limited to the performance in good faith of our or the depositary's respective duties under the deposit agreement. Neither the depositary nor we will be obligated to prosecute or defend any legal proceeding in respect of any depositary shares or preferred stock unless satisfactory indemnity is furnished. The depositary and we may rely on:

- written advice of counsel or accountants;
- information provided by holders of depositary receipts or other persons believed in good faith to be competent to give such information; and
- documents believed to be genuine and to have been signed or presented by the proper party or parties.

Resignation and removal of depositary

The depositary may resign at any time by delivering a notice to us. We may remove the depositary at any time. Any such resignation or removal will take effect upon the appointment of a successor depositary and its acceptance of such appointment. The successor depositary must be appointed within 60 days after delivery of the notice for resignation or removal. The successor depositary must be a bank and trust company having its principal office in the United States of America and having a combined capital and surplus of at least \$50,000,000.

Federal income tax consequences

Owners of the depositary shares will be treated for U.S. federal income tax purposes as if they were owners of the preferred stock underlying the depositary shares. As a result, owners will be entitled to take into account for U.S. federal income tax purposes and deductions to which they would be entitled if they were holders of such preferred stock. No gain or loss will be recognized for U.S. federal income tax purposes upon the withdrawal of preferred stock in exchange for depositary shares. The tax basis of each share of preferred stock to an exchanging owner of depositary shares will, upon such exchange, be the same as the aggregate tax basis of the depositary shares exchanged. The holding period for preferred stock in the hands of an exchanging owner of depositary shares will include the period during which such person owned such depositary shares.

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DESCRIPTION OF THE WARRANTS

General

We may issue warrants for the purchase of our debt securities, preferred stock or common stock, or any combination thereof. Warrants may be issued independently or together with our debt securities, preferred stock or common stock and may be attached to or separate from any offered securities. Each series of warrants will be issued under a separate warrant agreement to be entered into between us and a bank or trust company, as warrant agent. The warrant agent will act solely as our agent in connection with the warrants. The warrant agent will not have any obligation or relationship of agency or trust for or with any holders or beneficial owners of warrants. This summary of certain provisions of the warrants is not complete. For the terms of a particular series of warrants, you should refer to the prospectus supplement for that series of warrants and the warrant agreement for that particular series.

Debt warrants

The prospectus supplement relating to a particular issue of warrants to purchase debt securities will describe the terms of the debt warrants, including the following:

- the title of the debt warrants;
- the offering price for the debt warrants, if any;
- the aggregate number of the debt warrants;
- the designation and terms of the debt securities, including any conversion rights, purchasable upon exercise of the debt warrants;
- if applicable, the date from and after which the debt warrants and any debt securities issued with them will be separately transferable;
- the principal amount of debt securities that may be purchased upon exercise of a debt warrant and the exercise price for the warrants, which may be payable in cash, securities or other property;
- the dates on which the right to exercise the debt warrants will commence and expire;
- if applicable, the minimum or maximum amount of the debt warrants that may be exercised at any one time;
- whether the debt warrants represented by the debt warrant certificates or debt securities that may be issued upon exercise of the debt warrants will be issued in registered or bearer form;
- information with respect to book-entry procedures, if any; the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, a discussion of material U.S. federal income tax considerations;
- the antidilution provisions of the debt warrants, if any;
- the redemption or call provisions, if any, applicable to the debt warrants;
- any provisions with respect to the holder's right to require us to repurchase the debt warrants upon a change in control or similar event; and
- any additional terms of the debt warrants, including procedures, and limitations relating to the exchange, exercise and settlement of the debt warrants.

Debt warrant certificates will be exchangeable for new debt warrant certificates of different denominations. Debt warrants may be exercised at the corporate trust office of the warrant agent or any other office indicated in

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the prospectus supplement. Prior to the exercise of their debt warrants, holders of debt warrants will not have any of the rights of holders of the debt securities purchasable upon exercise and will not be entitled to payment of principal or any premium, if any, or interest on the debt securities purchasable upon exercise.

Equity warrants

The prospectus supplement relating to a particular series of warrants to purchase our common stock or preferred stock will describe the terms of the warrants, including the following:

- the title of the warrants;
- the offering price for the warrants, if any;
- the aggregate number of warrants;
- the designation and terms of the common stock or preferred stock that may be purchased upon exercise of the warrants;
- if applicable, the designation and terms of the securities with which the warrants are issued and the number of warrants issued with each security;
- if applicable, the date from and after which the warrants and any securities issued with the warrants will be separately transferable;
- the number of shares of common stock or preferred stock that may be purchased upon exercise of a warrant and the exercise price for the warrants;
- the dates on which the right to exercise the warrants shall commence and expire;
- if applicable, the minimum or maximum amount of the warrants that may be exercised at any one time;
- the currency or currency units in which the offering price, if any, and the exercise price are payable;
- if applicable, a discussion of material U.S. federal income tax considerations;
- the antidilution provisions of the warrants, if any;
- the redemption or call provisions, if any, applicable to the warrants;
- any provisions with respect to the holder's right to require us to repurchase the warrants upon a change in control or similar event; and
- any additional terms of the warrants, including procedures, and limitations relating to the exchange, exercise and settlement of the warrants.

Holders of equity warrants will not be entitled:

- to vote, consent or receive dividends;
- receive notice as stockholders with respect to any meeting of stockholders for the election of our directors or any other matter; or
- exercise any rights as stockholders of us.

DESCRIPTION OF THE DEBT SECURITIES

The debt securities may be either secured or unsecured and will either be our senior debt securities or our subordinated debt securities. The debt securities will be issued under one or more separate indentures between us and a trustee to be specified in an accompanying prospectus supplement. Senior debt securities will be issued under a senior indenture and subordinated debt securities will be issued under a subordinated indenture. Together, the senior indenture and the subordinated indenture are called indentures in this description. This prospectus, together with the applicable prospectus supplement, will describe the terms of a particular series of debt securities.

The following is a summary of selected provisions and definitions of the indentures and debt securities to which any prospectus supplement may relate. The summary of selected provisions of the indentures and the debt securities appearing below is not complete and is subject to, and qualified entirely by reference to, all of the provisions of the applicable indenture and certificates evidencing the applicable debt securities. For additional information, you should look at the applicable indenture and the certificate evidencing the applicable debt security that is filed as an exhibit to the registration statement that includes the prospectus. In this description of the debt securities, the words "we," "us," or "our" refer only to Pacific Biosciences of California, Inc. and not to any of our subsidiaries, unless we expressly state or the context otherwise requires.

The following description sets forth selected general terms and provisions of the applicable indenture and debt securities to which any prospectus supplement may relate. Other specific terms of the applicable indenture and debt securities will be described in the applicable prospectus supplement. If any particular terms of the indenture or debt securities described in a prospectus supplement differ from any of the terms described below, then the terms described below will be deemed to have been superseded by that prospectus supplement.

General

Debt securities may be issued in separate series without limitation as to aggregate principal amount. We may specify a maximum aggregate principal amount for the debt securities of any series.

We are not limited as to the amount of debt securities we may issue under the indentures. Unless otherwise provided in a prospectus supplement, a series of debt securities may be reopened to issue additional debt securities of such series.

The prospectus supplement relating to a particular series of debt securities will set forth:

- whether the debt securities are senior or subordinated;
- the offering price;
- the title;
- any limit on the aggregate principal amount;
- the person who shall be entitled to receive interest, if other than the record holder on the record date;
- the date or dates the principal will be payable;
- the interest rate or rates, which may be fixed or variable, if any, the date from which interest will accrue, the interest payment dates and the regular record dates, or the method for calculating the dates and rates;
- the place where payments may be made;
- any mandatory or optional redemption provisions or sinking fund provisions and any applicable redemption or purchase prices associated with these provisions;

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- if issued other than in denominations of U.S. \$1,000 or any multiple of U.S. \$1,000, the denominations in which the debt securities shall be issuable;
- if applicable, the method for determining how the principal, premium, if any, or interest will be calculated by reference to an index or formula;
- if other than U.S. currency, the currency or currency units in which principal, premium, if any, or interest will be payable and whether we or a holder may elect payment to be made in a different currency;
- the portion of the principal amount that will be payable upon acceleration of maturity, if other than the entire principal amount;
- if the principal amount payable at stated maturity will not be determinable as of any date prior to stated maturity, the amount or method for determining the amount which will be deemed to be the principal amount;
- if applicable, whether the debt securities shall be subject to the defeasance provisions described below under "Satisfaction and discharge; defeasance" or such other defeasance provisions specified in the applicable prospectus supplement for the debt securities;
- any conversion or exchange provisions;
- whether the debt securities will be issuable in the form of a global security;
- the deletion, addition or change in any event of default;
- any change or modification to the subordination provisions applicable to the subordinated debt securities if different from those described below under "Subordinated debt securities";
- any deletion, addition or change in the covenants set forth in the indenture;
- any paying agents, authenticating agents, security registrars or other agents for the debt securities, if other than the trustee;
- any provisions relating to any security provided for the debt securities, including any provisions regarding the circumstances under which collateral may be released or substituted;
- any provisions relating to guaranties for the securities and any circumstances under which there may be additional obligors;
- any provisions granting special rights to holders when a specified event occurs;
- any special tax provisions that apply to the debt securities;
- with respect to any debt securities that do not bear interest, the dates for certain required reports to the applicable trustee;
- any and all additional, eliminated or changed terms that will apply to the debt securities; and
- any other terms of such debt securities.

Unless otherwise specified in the prospectus supplement, the debt securities will be registered debt securities. Debt securities may be sold at a substantial discount below their stated principal amount, bearing no interest or interest at a rate which at time of issuance is below market rates. The U.S. federal income tax considerations applicable to debt securities sold at a discount will be described in the applicable prospectus supplement.

Exchange and transfer

Debt securities may be transferred or exchanged at the office of the security registrar or at the office of any transfer agent designated by us.

We will not impose a service charge for any transfer or exchange, but we may require holders to pay any tax or other governmental charges associated with any transfer or exchange.

In the event of any partial redemption of debt securities of any series, we will not be required to:

- issue, register the transfer of, or exchange, any debt security of that series during a period beginning at the opening of business 15 days before the day of mailing of a notice of redemption and ending at the close of business on the day of the mailing; or
- register the transfer of or exchange any debt security of that series selected for redemption, in whole or in part, except the unredeemed portion being redeemed in part.

We will appoint the trustee as the initial security registrar. Any transfer agent, in addition to the security registrar initially designated by us, will be named in the prospectus supplement. We may designate additional transfer agents or change transfer agents or change the office of the transfer agent. However, we will be required to maintain a transfer agent in each place of payment for the debt securities of each series.

Global securities

The debt securities of any series may be represented, in whole or in part, by one or more global securities. Each global security will:

- be registered in the name of a depositary, or its nominee, that we will identify in a prospectus supplement;
- be deposited with the depositary or nominee or custodian; and
- bear any required legends.

No global security may be exchanged in whole or in part for debt securities registered in the name of any person other than the depositary or any nominee unless:

- the depositary has notified us that it is unwilling or unable to continue as depositary or has ceased to be qualified to act as depositary;
- an event of default is continuing with respect to the debt securities of the applicable series; or
- any other circumstance described in a prospectus supplement has occurred permitting or requiring the issuance of any such security.

As long as the depositary, or its nominee, is the registered owner of a global security, the depositary or nominee will be considered the sole owner and holder of the debt securities represented by the global security for all purposes under the indentures. Except in the above limited circumstances, owners of beneficial interests in a global security will not be:

- entitled to have the debt securities registered in their names;
- entitled to physical delivery of certificated debt securities; or
- considered to be holders of those debt securities under the indenture.

Payments on a global security will be made to the depositary or its nominee as the holder of the global security. Some jurisdictions have laws that require that certain purchasers of securities take physical delivery of

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such securities in definitive form. These laws may impair the ability to transfer beneficial interests in a global security.

Institutions that have accounts with the depositary or its nominee are referred to as "participants." Ownership of beneficial interests in a global security will be limited to participants and to persons that may hold beneficial interests through participants. The depositary will credit, on its book-entry registration and transfer system, the respective principal amounts of debt securities represented by the global security to the accounts of its participants.

Ownership of beneficial interests in a global security will be shown on and effected through records maintained by the depositary, with respect to participants' interests, or any participant, with respect to interests of persons held by participants on their behalf.

Payments, transfers and exchanges relating to beneficial interests in a global security will be subject to policies and procedures of the depositary. The depositary policies and procedures may change from time to time. Neither any trustee nor we will have any responsibility or liability for the depositary's or any participant's records with respect to beneficial interests in a global security.

Payment and paying agents

Unless otherwise indicated in a prospectus supplement, the provisions described in this paragraph will apply to the debt securities. Payment of interest on a debt security on any interest payment date will be made to the person in whose name the debt security is registered at the close of business on the regular record date. Payment on debt securities of a particular series will be payable at the office of a paying agent or paying agents designated by us. However, at our option, we may pay interest by mailing a check to the record holder. The trustee will be designated as our initial paying agent.

We may also name any other paying agents in a prospectus supplement. We may designate additional paying agents, change paying agents or change the office of any paying agent. However, we will be required to maintain a paying agent in each place of payment for the debt securities of a particular series.

All moneys paid by us to a paying agent for payment on any debt security that remain unclaimed for a period ending the earlier of:

- 10 business days prior to the date the money would be turned over to the applicable state; or
- at the end of two years after such payment was due,

will be repaid to us thereafter. The holder may look only to us for such payment.

No protection in the event of a change of control

Unless otherwise indicated in a prospectus supplement with respect to a particular series of debt securities, the debt securities will not contain any provisions that may afford holders of the debt securities protection in the event we have a change in control or in the event of a highly leveraged transaction, whether or not such transaction results in a change in control.

Covenants

Unless otherwise indicated in a prospectus supplement with respect to a particular series of debt securities, the debt securities will not contain any financial or restrictive covenants.

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Consolidation, merger and sale of assets

Unless we indicate otherwise in a prospectus supplement with respect to a particular series of debt securities, we may not consolidate with or merge into any other person (other than one of our subsidiaries), in a transaction in which we are not the surviving corporation, or convey, transfer or lease our properties and assets substantially as an entirety to, any person (other than one of our subsidiaries), unless:

- the successor entity, if any, is a U.S. corporation, limited liability company, partnership, trust or other business entity;
- the successor entity assumes our obligations on the debt securities and under the indentures;
- immediately after giving effect to the transaction, no default or event of default shall have occurred and be continuing; and
- certain other conditions specified in the indenture are met.

Events of default

Unless we indicate otherwise in a prospectus supplement, the following will be events of default for any series of debt securities under the indentures:

- (1) we fail to pay principal of or any premium on any debt security of that series when due;
- (2) we fail to pay any interest on any debt security of that series for 30 days after it becomes due;
- (3) we fail to deposit any sinking fund payment when due;
- (4) we fail to perform any other covenant in the indenture and such failure continues for 90 days after we are given the notice required in the indentures; and
- (5) certain events involving our bankruptcy, insolvency or reorganization.

Additional or different events of default applicable to a series of debt securities may be described in a prospectus supplement. An event of default of one series of debt securities is not necessarily an event of default for any other series of debt securities.

The trustee may withhold notice to the holders of any default, except defaults in the payment of principal, premium, if any, interest, any sinking fund installment on, or with respect to any conversion right of, the debt securities of such series. However, the trustee must consider it to be in the interest of the holders of the debt securities of such series to withhold this notice.

Unless we indicate otherwise in a prospectus supplement, if an event of default, other than an event of default described in clause (5) above, shall occur and be continuing with respect to any series of debt securities, either the trustee or the holders of at least 25 percent in aggregate principal amount of the outstanding securities of that series may declare the principal amount and premium, if any, of the debt securities of that series, or if any debt securities of that series are original issue discount securities, such other amount as may be specified in the applicable prospectus supplement, in each case together with accrued and unpaid interest, if any, thereon, to be due and payable immediately.

Unless we indicate otherwise in a prospectus supplement, if an event of default described in clause (5) above shall occur, the principal amount and premium, if any, of all the debt securities of that series, or if any debt securities of that series are original issue discount securities, such other amount as may be specified in the applicable prospectus supplement, in each case together with accrued and unpaid interest, if any, thereon, will automatically become immediately due and payable. Any payment by us on the subordinated debt securities following any such acceleration will be subject to the subordination provisions described below under "Subordinated debt securities."

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Notwithstanding the foregoing, each indenture will provide that we may, at our option, elect that the sole remedy for an event of default relating to our failure to comply with our obligations described under the section entitled "Reports" below or our failure to comply with the requirements of Section 314(a) (1) of the Trust Indenture Act will for the first 360 days after the occurrence of such an event of default consist exclusively of the right to receive additional interest on the relevant series of debt securities at an annual rate equal to (i) 0.25% of the principal amount of such series of debt securities for the first 180 days after the occurrence of such event of default, which we call "additional interest." If we so elect, the additional interest will accrue on all outstanding debt securities from and including the date on which such event of default first occurs until such violation is cured or waived and shall be payable on each relevant interest payment date to holders of record on the regular record date immediately preceding the interest payment date. On the 361st day after such event of default (if such violation is not cured or waived prior to such 361st day), the debt securities will be subject to acceleration as provided above. In the event we do not elect to pay additional interest upon any such event of default in accordance with this paragraph, the debt securities will be subject to acceleration as provided above.

In order to elect to pay the additional interest as the sole remedy during the first 360 days after the occurrence of any event of default relating to the failure to comply with the reporting obligations in accordance with the preceding paragraph, we must notify all holders of debt securities and the trustee and paying agent of such election prior to the close of business on the first business day following the date on which such event of default occurs. Upon our failure to timely give such notice or pay the additional interest, the debt securities will be immediately subject to acceleration as provided above.

After acceleration, the holders of a majority in aggregate principal amount of the outstanding securities of that series may, under certain circumstances, rescind and annul such acceleration if all events of default, other than the non-payment of accelerated principal, or other specified amounts or interest, have been cured or waived.

Other than the duty to act with the required care during an event of default, the trustee will not be obligated to exercise any of its rights or powers at the request of the holders unless the holders shall have offered to the trustee reasonable indemnity. Generally, the holders of a majority in aggregate principal amount of the outstanding debt securities of any 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.

A holder of debt securities of any series will not have any right to institute any proceeding under the indentures, or for the appointment of a receiver or a trustee, or for any other remedy under the indentures, unless:

- (1) the holder has previously given to the trustee written notice of a continuing event of default with respect to the debt securities of that series;
- (2) the holders of at least 25 percent in aggregate principal amount of the outstanding debt securities of that series have made a written request and have offered reasonable indemnity to the trustee to institute the proceeding; and
- (3) the trustee has failed to institute the proceeding and has not received direction inconsistent with the original request from the holders of a majority in aggregate principal amount of the outstanding debt securities of that series within 60 days after the original request.

Holders may, however, sue to enforce the payment of principal, premium or interest on any debt security on or after the due date or to enforce the right, if any, to convert any debt security (if the debt security is convertible) without following the procedures listed in (1) through (3) above.

We will furnish the trustee an annual statement from our officers as to whether or not we are in default in the performance of the conditions and covenants under the indenture and, if so, specifying all known defaults.

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Modification and waiver

Unless we indicate otherwise in a prospectus supplement, the applicable trustee and we may make modifications and amendments to an indenture with the consent of the holders of a majority in aggregate principal amount of the outstanding securities of each series affected by the modification or amendment.

We may also make modifications and amendments to the indentures for the benefit of holders without their consent, for certain purposes including, but not limited to:

- to evidence the succession of another person to Pacific Biosciences, or successive successions, and the assumption by any such successor of the covenants of Pacific Biosciences in the indentures;
- adding covenants under the indentures;
- adding events of default under the indentures;
- making certain changes to facilitate the issuance of the debt securities;
- to add to, change or eliminate any of the provisions of the indentures or more series of securities, provided that any such addition, change or elimination (A) shall neither (i) apply to any security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (ii) modify the rights of the holder of any such security with respect to such provision or (B) shall become effective only when there is no such security outstanding;
- securing the debt securities;
- providing for guaranties of, or additional obligors on, the debt securities;
- to establish the form or term of debt securities as permitted by the indentures;
- providing for a successor trustee or additional trustees;
- conforming the indenture to the description of the debt securities set forth in this prospectus or the accompanying prospectus supplement;
- curing any ambiguity, defect or inconsistency; provided that such action shall not adversely affect the interest of the holders in any material respect;
- permitting or facilitating the defeasance and discharge of the debt securities;
- make such other provisions in regard to matters or questions arising under the indentures or under any supplemental indentures as our board of directors may deem necessary or desirable, and which does not in each case adversely affect the interests of the holders of the debt securities of a series; and
- comply with requirements of the SEC in order to effect or maintain the qualifications of the indentures under the Trust Indenture Act of 1939, as amended.

However, neither the trustee nor we may make any modification or amendment without the consent of the holder of each outstanding security of that series affected by the modification or amendment if such modification or amendment would:

- change the stated maturity of the principal of, or any installment of principal or interest on, any debt security;
- reduce the principal, premium, if any, or interest on any debt security or any amount payable upon redemption or repurchase, whether at our
 option or the option of any holder, or reduce the amount of any sinking fund payments;
- reduce the principal of an original issue discount security or any other debt security payable on acceleration of maturity;

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- change the place of payment or the currency in which any debt security is payable;
- impair the right to enforce any payment after the stated maturity or redemption date;
- if subordinated debt securities, modify the subordination provisions in a materially adverse manner to the holders;
- · adversely affect the right to convert any debt security if the debt security is a convertible debt security; or
- change the provisions in the indenture that relate to modifying or amending the indenture.

Satisfaction and discharge; defeasance

We may be discharged from our obligations on the debt securities, subject to limited exceptions, of any series that have matured or will mature or be redeemed within one year if we deposit enough money with the trustee to pay all the principal, interest and any premium due to the stated maturity date or redemption date of the debt securities.

Each indenture contains a provision that permits us to elect either or both of the following:

- We may elect to be discharged from all of our obligations, subject to limited exceptions, with respect to any series of debt securities then outstanding. If we make this election, the holders of the debt securities of the series will not be entitled to the benefits of the indenture, except for the rights of holders to receive payments on debt securities or the registration of transfer and exchange of debt securities and replacement of lost, stolen or mutilated debt securities.
- We may elect to be released from our obligations under some or all of any financial or restrictive covenants applicable to the series of debt securities to which the election relates and from the consequences of an event of default resulting from a breach of those covenants.

To make either of the above elections, we must irrevocably deposit in trust with the trustee enough money to pay in full the principal, interest and premium on the debt securities. This amount may be made in cash and/or U.S. government obligations or, in the case of debt securities denominated in a currency other than U.S. dollars, cash in the currency in which such series of securities is denominated and/or foreign government obligations. As a condition to either of the above elections, for debt securities denominated in U.S. dollars we must deliver to the trustee an opinion of counsel that the holders of the debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of the action.

With respect to debt securities of any series that are denominated in a currency other than United States dollars, "foreign government obligations" means:

- direct obligations of the government that issued or caused to be issued the currency in which such securities are denominated and for the payment
 of which obligations its full faith and credit is pledged, or, with respect to debt securities of any series which are denominated in Euros, direct
 obligations of certain members of the European Union for the payment of which obligations the full faith and credit of such members is pledged,
 which in each case are not callable or redeemable at the option of the issuer thereof; or
- obligations of a person controlled or supervised by or acting as an agency or instrumentality of a government described in the bullet above the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by such government, which are not callable or redeemable at the option of the issuer thereof.

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Reports

The indentures provide that any reports or documents that we file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act will be filed with the trustee within 15 days after the same is filed with the SEC. Documents filed by us with the SEC via the EDGAR system will be deemed filed with the trustee as of the time such documents are filed with the SEC.

Notices

Notices to holders will be given by mail to the addresses of the holders in the security register.

Governing law

The indentures and the debt securities will be governed by, and construed under, the laws of the State of New York.

No personal liability of directors, officers, employees and stockholders

No incorporator, stockholder, employee, agent, officer, director or subsidiary of ours will have any liability for any obligations of ours, or because of the creation of any indebtedness under the debt securities, the indentures or supplemental indentures. The indentures provide that all such liability is expressly waived and released as a condition of, and as a consideration for, the execution of such indentures and the issuance of the debt securities.

Regarding the trustee

The indentures limit the right of the trustee, should it become our creditor, to obtain payment of claims or secure its claims.

The trustee will be permitted to engage in certain other transactions with us. However, if the trustee acquires any conflicting interest, and there is a default under the debt securities of any series for which it is trustee, the trustee must eliminate the conflict or resign.

Subordinated debt securities

The following provisions will be applicable with respect to each series of subordinated debt securities, unless otherwise stated in the prospectus supplement relating to that series of subordinated debt securities.

The indebtedness evidenced by the subordinated debt securities of any series is subordinated, to the extent provided in the subordinated indenture and the applicable prospectus supplement, to the prior payment in full, in cash or other payment satisfactory to the holders of senior debt, of all senior debt, including any senior debt securities.

Upon any distribution of our assets upon any dissolution, winding up, liquidation or reorganization, whether voluntary or involuntary, marshalling of assets, assignment for the benefit of creditors, or in bankruptcy, insolvency, receivership or other similar proceedings, payments on the subordinated debt securities will be subordinated in right of payment to the prior payment in full in cash or other payment satisfactory to holders of senior debt of all senior debt.

In the event of any acceleration of the subordinated debt securities of any series because of an event of default with respect to the subordinated debt securities of that series, holders of any senior debt would be entitled to payment in full in cash or other payment satisfactory to holders of senior debt of all senior debt before the holders of subordinated debt securities are entitled to receive any payment or distribution.

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In addition, the subordinated debt securities will be structurally subordinated to all indebtedness and other liabilities of our subsidiaries, including trade payables and lease obligations. This occurs because our right to receive any assets of our subsidiaries upon their liquidation or reorganization, and your right to participate in those assets, will be effectively subordinated to the claims of that subsidiary's creditors, including trade creditors, except to the extent that we are recognized as a creditor of such subsidiary. If we are recognized as a creditor of that subsidiary, our claims would still be subordinate to any security interest in the assets of the subsidiary and any indebtedness of the subsidiary senior to us.

We are required to promptly notify holders of senior debt or their representatives under the subordinated indenture if payment of the subordinated debt securities is accelerated because of an event of default.

Under the subordinated indenture, we may also not make payment on the subordinated debt securities if:

- a default in our obligations to pay principal, premium, if any, interest or other amounts on our senior debt occurs and the default continues beyond any applicable grace period, which we refer to as a payment default; or
- any other default occurs and is continuing with respect to designated senior debt that permits holders of designated senior debt to accelerate its
 maturity, which we refer to as a non-payment default, and the trustee receives a payment blockage notice from us or some other person permitted
 to give the notice under the subordinated indenture.

We will resume payments on the subordinated debt securities:

- in case of a payment default, when the default is cured or waived or ceases to exist, and
- in case of a nonpayment default, the earlier of when the default is cured or waived or ceases to exist or 179 days after the receipt of the payment blockage notice.

No new payment blockage period may commence on the basis of a nonpayment default unless 365 days have elapsed from the effectiveness of the immediately prior payment blockage notice. No nonpayment default that existed or was continuing on the date of delivery of any payment blockage notice to the trustee shall be the basis for a subsequent payment blockage notice.

As a result of these subordination provisions, in the event of our bankruptcy, dissolution or reorganization, holders of senior debt may receive more, ratably, and holders of the subordinated debt securities may receive less, ratably, than our other creditors. The subordination provisions will not prevent the occurrence of any event of default under the subordinated indenture.

The subordination provisions will not apply to payments from money or government obligations held in trust by the trustee for the payment of principal, interest and premium, if any, on subordinated debt securities pursuant to the provisions described under the section entitled "Satisfaction and discharge; defeasance," if the subordination provisions were not violated at the time the money or government obligations were deposited into trust.

If the trustee or any holder receives any payment that should not have been made to them in contravention of subordination provisions before all senior debt is paid in full in cash or other payment satisfactory to holders of senior debt, then such payment will be held in trust for the holders of senior debt.

Senior debt securities will constitute senior debt under the subordinated indenture.

Additional or different subordination provisions may be described in a prospectus supplement relating to a particular series of debt securities.

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Definitions

"Designated senior debt" means our obligations under any particular senior debt in which the instrument creating or evidencing the same or the assumption or guarantee thereof, or related agreements or documents to which we are a party, expressly provides that such indebtedness shall be designated senior debt for purposes of the subordinated indenture. The instrument, agreement or other document evidencing any designated senior debt may place limitations and conditions on the right of such senior debt to exercise the rights of designated senior debt.

"Indebtedness" means the following, whether absolute or contingent, secured or unsecured, due or to become due, outstanding on the date of the indenture for such series of securities or thereafter created, incurred or assumed:

- our indebtedness evidenced by a credit or loan agreement, note, bond, debenture or other written obligation;
- all of our obligations for money borrowed;
- all of our obligations evidenced by a note or similar instrument given in connection with the acquisition of any businesses, properties or assets of any kind;
- our obligations:
 - as lessee under leases required to be capitalized on the balance sheet of the lessee under generally accepted accounting principles, or
 - as lessee under leases for facilities, capital equipment or related assets, whether or not capitalized, entered into or leased for financing purposes;
- all of our obligations under interest rate and currency swaps, caps, floors, collars, hedge agreements, forward contracts or similar agreements or arrangements;
- all of our obligations with respect to letters of credit, bankers' acceptances and similar facilities, including reimbursement obligations with respect to the foregoing;
- all of our obligations issued or assumed as the deferred purchase price of property or services, but excluding trade accounts payable and accrued liabilities arising in the ordinary course of business;
- all obligations of the type referred to in the above clauses of another person, the payment of which, in either case, we have assumed or guaranteed, for which we are responsible or liable, directly or indirectly, jointly or severally, as obligor, guarantor or otherwise, or which are secured by a lien on our property; and
- renewals, extensions, modifications, replacements, restatements and refundings of, or any indebtedness or obligation issued in exchange for, any such indebtedness or obligation described in the above clauses of this definition.

"Senior debt" means the principal of, premium, if any, and interest, including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any such proceeding, and rent payable on or in connection with, and all fees and other amounts payable in connection with, our indebtedness. However, senior debt shall not include:

- any debt or obligation if its terms or the terms of the instrument under which or pursuant to which it is issued expressly provide that it shall not be senior in right of payment to the subordinated debt securities or expressly provide that such indebtedness is on the same basis or "junior" to the subordinated debt securities; or
- debt to any of our subsidiaries, a majority of the voting stock of which is owned, directly or indirectly, by us.

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"Subsidiary" means a corporation more than 50% of the outstanding voting stock of which is owned, directly or indirectly, by us or by one or more of our other subsidiaries or by a combination of us and our other subsidiaries. For purposes of this definition, "voting stock" means stock or other similar interests which ordinarily has or have voting power for the election of directors, or persons performing similar functions, whether at all times or only so long as no senior class of stock or other interests has or have such voting power by reason of any contingency.

DESCRIPTION OF THE UNITS

We may issue units comprised of one or more of the other classes of securities described in this prospectus in any combination. Each unit will be issued so that the holder of the unit is also the holder of each security included in the unit. Thus, the holder of a unit will have the rights and obligations of a holder of each included security. The units may be issued under unit agreements to be entered into between us and a unit agent, as detailed in the prospectus supplement relating to the units being offered. The prospectus supplement will describe:

- the designation and terms of the units and of the securities comprising the units, including whether and under what circumstances the securities comprising the units may be held or transferred separately;
- a description of the terms of any unit agreement governing the units;
- a description of the provisions for the payment, settlement, transfer or exchange of the units;
- a discussion of material federal income tax considerations, if applicable; and
- whether the units if issued as a separate security will be issued in fully registered or global form.

The descriptions of the units in this prospectus and in any prospectus supplement are summaries of the material provisions of the applicable agreements. These descriptions do not restate those agreements in their entirety and may not contain all the information that you may find useful. We urge you to read the applicable agreements because they, and not the summaries, define your rights as holders of the units. For more information, please review the forms of the relevant agreements, which will be filed with the SEC promptly after the offering of units and will be available as described under the heading "Where You Can Find More Information."

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PLAN OF DISTRIBUTION

We may sell the securities offered through this prospectus (1) to or through underwriters or dealers, (2) directly to purchasers, including our affiliates, (3) through agents, or (4) through a combination of any these methods. The securities may be distributed at a fixed price or prices, which may be changed, market prices prevailing at the time of sale, prices related to the prevailing market prices, or negotiated prices. The prospectus supplement will include the following information:

- the terms of the offering;
- the names of any underwriters or agents;
- the name or names of any managing underwriter or underwriters;
- the purchase price of the securities;
- the net proceeds from the sale of the securities;
- any delayed delivery arrangements;
- any underwriting discounts, commissions and other items constituting underwriters' compensation;
- any initial public offering price;
- · any discounts or concessions allowed or reallowed or paid to dealers; and
- any commissions paid to agents.

We may engage in at-the-market offerings into an existing trading market in accordance with Rule 415(a)(4). Any at-the-market offering will be through an underwriter or underwriters acting as principal or agent for us.

Sale through underwriters or dealers

If underwriters are used in the sale, the underwriters will acquire the securities for their own account, including through underwriting, purchase, security lending or repurchase agreements with us. The underwriters may resell the securities from time to time in one or more transactions, including negotiated transactions. Underwriters may sell the securities in order to facilitate transactions in any of our other securities (described in this prospectus or otherwise), including other public or private transactions and short sales. Underwriters may offer securities to the public either through underwriting syndicates represented by one or more managing underwriters or directly by one or more firms acting as underwriters. Unless otherwise indicated in the prospectus supplement, the obligations of the underwriters to purchase the securities will be subject to certain conditions, and the underwriters will be obligated to purchase all the offered securities if they purchase any of them. The underwriters may change from time to time any initial public offering price and any discounts or concessions allowed or reallowed or paid to dealers. The prospectus supplement will include the names of the principal underwriters the respective amount of securities underwritten, the nature of the obligation of the underwriters to take the securities and the nature of any material relationship between an underwriter and us.

Some or all of the securities that we offer through this prospectus may be new issues of securities with no established trading market. Any underwriters to whom we sell securities for public offering and sale may make a market in those securities, but they will not be obligated to do so and they may discontinue any market making at any time without notice. Accordingly, we cannot assure you of the liquidity of, or continued trading markets for, any securities offered pursuant to this prospectus.

If dealers are used in the sale of securities offered through this prospectus, we will sell the securities to them as principals. They may then resell those securities to the public at varying prices determined by the dealers at the time of resale. The prospectus supplement will include the names of the dealers and the terms of the transaction.

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Direct sales and sales through agents

We may sell the securities offered through this prospectus directly. In this case, no underwriters or agents would be involved. Such securities may also be sold through agents designated from time to time. The prospectus supplement will name any agent involved in the offer or sale of the offered securities and will describe any commissions payable to the agent by us. Unless otherwise indicated in the prospectus supplement, any agent will agree to use its reasonable best efforts to solicit purchases for the period of its appointment.

We may sell the securities directly to institutional investors or others who may be deemed to be underwriters within the meaning of the Securities Act with respect to any sale of those securities. The terms of any such sales will be described in the prospectus supplement.

Market making, stabilization and other transactions

Unless the applicable prospectus supplement states otherwise, each series of offered securities will be a new issue and will have no established trading market. We may elect to list any series of offered securities on an exchange. Any underwriters that we use in the sale of offered securities may make a market in such securities, but may discontinue such market making at any time without notice. Therefore, we cannot assure you that the securities will have a liquid trading market.

Any underwriter may also engage in stabilizing transactions, syndicate covering transactions and penalty bids in accordance with Rule 104 under the Securities Exchange Act of 1934, as amended. Stabilizing transactions involve bids to purchase the underlying security in the open market for the purpose of pegging, fixing or maintaining the price of the securities. 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.

Penalty bids permit the underwriters to reclaim a selling concession from a syndicate member when the securities originally sold by the syndicate member are purchased in a syndicate covering transaction to cover syndicate short positions. Stabilizing transactions, syndicate covering transactions and penalty bids may cause the price of the securities to be higher than it would be in the absence of the transactions. The underwriters may, if they commence these transactions, discontinue them at any time.

Derivative transactions and hedging

We, the underwriters or other agents may engage in derivative transactions involving the securities. These derivatives may consist of short sale transactions and other hedging activities. The underwriters or agents may acquire a long or short position in the securities, hold or resell securities acquired and purchase options or futures on the securities and other derivative instruments with returns linked to or related to changes in the price of the securities. In order to facilitate these derivative transactions, we may enter into security lending or repurchase agreements with the underwriters or agents. The underwriters or agents may affect the derivative transactions through sales of the securities to the public, including short sales, or by lending the securities in order to facilitate short sale transactions by others. The underwriters or agents may also use the securities purchased or borrowed from us or others (or, in the case of derivatives, securities received from us in settlement of those derivatives) to directly or indirectly settle sales of the securities or close out any related open borrowings of the securities.

Electronic auctions

We may also make sales through the Internet or through other electronic means. Since we may from time to time elect to offer securities directly to the public, with or without the involvement of agents, underwriters or dealers, utilizing the Internet or other forms of electronic bidding or ordering systems for the pricing and allocation of such securities, you should pay particular attention to the description of that system we will provide in a prospectus supplement.

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Such electronic system may allow bidders to directly participate, through electronic access to an auction site, by submitting conditional offers to buy that are subject to acceptance by us, and which may directly affect the price or other terms and conditions at which such securities are sold. These bidding or ordering systems may present to each bidder, on a so-called "real-time" basis, relevant information to assist in making a bid, such as the clearing spread at which the offering would be sold, based on the bids submitted, and whether a bidder's individual bids would be accepted, prorated or rejected. For example, in the case of a debt security, the clearing spread could be indicated as a number of "basis points" above an index treasury note. Of course, many pricing methods can and may also be used.

Upon completion of such an electronic auction process, securities will be allocated based on prices bid, terms of bid or other factors. The final offering price at which securities would be sold and the allocation of securities among bidders would be based in whole or in part on the results of the Internet or other electronic bidding process or auction.

General information

Agents, underwriters, and dealers may be entitled, under agreements entered into with us, to indemnification by us against certain liabilities, including liabilities under the Securities Act. Agents, underwriters and dealers may engage in transactions with or perform services for us in the ordinary course of their businesses.

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LEGAL MATTERS

The validity of the securities offered by this prospectus will be passed upon by Wilson Sonsini Goodrich & Rosati, Professional Corporation, Palo Alto, California.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2016, and the effectiveness of our internal control over financial reporting as of December 31, 2016, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP's reports, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We file annual, quarterly and other reports, proxy statements and other information with the SEC. Our SEC filings are available to the public over the Internet at the SEC's website at http://www.sec.gov. You may also read and copy any document we file at the SEC's Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1-800-SEC-0330 for further information on the Public Reference Room. Our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q, and Current Reports on Form 8-K, including any amendments to those reports, and other information that we file with or furnish to the SEC pursuant to Section 13(a) or 15(d) of the Exchange Act can also be accessed free of charge through the Internet. These filings will be available as soon as reasonably practicable after we electronically file such material with, or furnish it to, the SEC.

We have filed with the SEC a registration statement under the Securities Act of 1933 relating to the offering of these securities. The registration statement, including the attached exhibits, contains additional relevant information about us and the securities. This prospectus does not contain all of the information set forth in the registration statement. You can obtain a copy of the registration statement, at prescribed rates, from the SEC at the address listed above. The registration statement and the documents referred to below under "Information Incorporated by Reference" are also available on our Internet website, www.pacb.com. We have not incorporated by reference into this prospectus the information on our website, and you should not consider it to be a part of this prospectus.

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INFORMATION INCORPORATED BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus certain information we file with it, which means that we can disclose important information by referring you to those documents. The information incorporated by reference is considered to be a part of this prospectus, and information that we file later with the SEC will automatically update and supersede information contained in this prospectus and any accompanying prospectus supplement. We incorporate by reference the documents listed below that we have previously filed with the SEC (excluding any portions of any Form 8-K that are not deemed "filed" pursuant to the General Instructions of Form 8-K):

- our Annual Report on Form 10-K for the fiscal year ended December 31, 2016, including the information specifically incorporated by reference into the Annual Report on Form 10-K from our definitive proxy statement on Schedule 14A, filed on April 4, 2017;
- our Quarterly Reports on Form 10-Q for the fiscal quarters ended March 31, 2017 and June 30, 2017;
- our Current Reports on Form 8-K filed February 2, 2017, April 26, 2017, May 25, 2017, June 14, 2017, and June 20, 2017; and
- the description of our common stock contained in the Registration Statement on Form 8-A relating thereto, including any amendment or report filed for the purpose of updating such description.

We also incorporate by reference into this prospectus additional documents that we may file with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act prior to the completion or termination of the offering, including all such documents we may file with the SEC after the date of the initial registration statement and prior to the effectiveness of the registration statement, but excluding any information deemed furnished and not filed with the SEC. Any statements contained in a previously filed document incorporated by reference into this prospectus is deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus, or in a subsequently filed document also incorporated by reference herein, modifies or supersedes that statement.

This prospectus may contain information that updates, modifies or is contrary to information in one or more of the documents incorporated by reference in this prospectus. You should rely only on the information incorporated by reference or provided in this prospectus. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus is accurate as of any date other than the date of this prospectus or the date of the documents incorporated by reference in this prospectus.

We will provide to each person, including any beneficial owner, to whom this prospectus is delivered, upon written or oral request, at no cost to the requester, a copy of any and all of the information that is incorporated by reference in this prospectus.

Requests for such documents should be directed to:

Pacific Biosciences of California, Inc. 1305 O'Brien Drive Menlo Park, California 94025 Attn: Investor Relations

You may also access the documents incorporated by reference in this prospectus through our website at www.pacb.com. Except for the specific incorporated documents listed above, no information available on or through our website shall be deemed to be incorporated in this prospectus or the registration statement of which it forms a part.

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\$150,000,000



Common Stock

Preferred Stock

Depositary Shares

Warrants

Debt Securities

Units

PROSPECTUS

, 2017

Part II

Information Not Required in the Prospectus

Item 14. Other Expenses of Issuance and Distribution

The following table sets forth the costs and expenses, other than underwriting discounts and commissions, payable by the registrant in connection with the sale of the securities being registered

Securities and Exchange Commission registration fee	\$ 17,385
Nasdaq Global Select Market listing fee	*
Accounting fees and expenses	*
Legal fees and expenses	*
Printing and engraving	*
Fees and expenses of the transfer agent or trustee	*
Miscellaneous	*
Total	\$*

* To be provided by amendment or as an exhibit to a filing with the SEC under Section 13(a), 13(c) or 15(d) of the Securities Exchange Act of 1934, as amended.

Item 15. Indemnification of Directors and Officers

Section 145(a) of the Delaware General Corporation Law provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation or enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such action, suit or proceeding if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no cause to believe his or her conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law provides that a Delaware corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person acted in any of the capacities set forth above, against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if he or she acted under similar standards, except that no indemnification may be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the court in which such action or suit was brought shall determine that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to be indemnified for such expenses which the court shall deem proper.

Section 145 of the Delaware General Corporation Law further provides that: (i) to the extent that a former or present director or officer of a corporation has been successful in the defense of any action, suit or proceeding referred to in subsections (a) and (b) or in the defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by him or her in connection therewith; (ii) indemnification provided for by Section 145 shall not be deemed exclusive of any other rights to which the indemnified party may be entitled; and (iii) the corporation may purchase and maintain

insurance on behalf of any present or former director, officer, employee or agent of the corporation or any person who at the request of the corporation was serving in such capacity for another entity against any liability asserted against such person and incurred by him or her in any such capacity or arising out of his or her status as such, whether or not the corporation would have the power to indemnify him or her against such liabilities under Section 145.

Our amended and restated certificate of incorporation provides for the indemnification of our directors to the fullest extent permissible under Delaware General Corporation Law. Our Bylaws provide for the indemnification of our directors and officers to the maximum extent permitted by the Delaware General Corporation Law. In addition, we have entered into indemnification agreements with our directors and officers, and we maintain insurance policies insuring our directors and officers against certain liabilities that they may incur in their capacity as officers and directors of our company.

See also the undertakings set out in response to Item 17 herein.

Item 16. Exhibits

A list of exhibits filed herewith is contained in the exhibit index that immediately precedes such exhibits and is incorporated herein by reference.

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

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) of this section do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the 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 form of prospectus filed pursuant to Rule 424(b) that is part of the registration statement.

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



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- (3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.
- (4) That, for the purpose of determining liability under the Securities Act of 1933 to any purchaser:
 - (i) If the registrant is relying on Rule 430B,
 - (A) 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
 - (B) 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 the effective date; or
 - (ii) If the registrant is subject to Rule 430C, each prospectus filed pursuant to Rule 424(b) as part of a registration statement relating to an offering, other than registration statements relying on Rule 430B or other than prospectuses filed in reliance on Rule 430A, shall be deemed to be part of and included in the registration statement as of the date it is first used after effectiveness. *Provided, however,* that no statement made in a 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 first use, supersede or modify any statement that was made in the registration statement or made in any such document immediately prior to such date of first use.
- (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 and 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

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- (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 foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act of 1933 and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding), is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.
- (d) The undersigned registrant hereby undertakes that:
 - (1) For purposes of determining any liability under the Securities Act of 1933, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.
 - (2) For the purpose of determining any liability under the Securities Act of 1933, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.
- (e) 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 SEC under Section 305(b)(2) of the Trust Indenture Act.

Signatures

Pursuant to the requirements of the Securities Act of 1933, the Registrant 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 on Form S-3 to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of Menlo Park, State of California, on August 2, 2017.

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

By: /s/ Susan K. Barnes

Susan K. Barnes Executive Vice President, Chief Financial Officer and Principal Accounting Officer

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Michael Hunkapiller and Susan K. Barnes, and each of them individually, as his or her true and lawful attorneys-in-fact and agents with full power of substitution and resubstitution, for him or her and in his or her name, place and stead, in any and all capacities to sign the Registration Statement filed herewith and any or all amendments to said Registration Statement (including post-effective amendments and registration statements filed pursuant to Rule 462(b) under the Securities Act of 1933, as amended, and otherwise), and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission granting unto said attorneys-in-fact and agents the full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the foregoing, as full to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or her substitute, may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated:

Signature	Title	Date
/s/ Michael Hunkapiller	Executive Chairman, Chief Executive	August 2, 2017
Michael Hunkapiller	Officer and President	
/s/ Susan K. Barnes Susan K. Barnes	Executive Vice President, Chief Financial Officer and Principal Accounting Officer	August 2, 2017
/s/ David Botstein David Botstein	Director	August 2, 2017
/s/ William W. Ericson William W. Ericson	Director	August 2, 2017
/s/ Randall S. Livingston Randall S. Livingston	Director	August 2, 2017
/s/ John F. Milligan John F. Milligan	Director	August 2, 2017

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/s/ Marshall L. Mohr Marshall L. Mohr	Director	August 2, 2017
/s/ Kathy Ordoñez Kathy Ordoñez	Director	August 2, 2017
/s/ Lucy Shapiro Lucy Shapiro	Director	August 2, 2017

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Exhib Numbe	
1.1	Form of Underwriting Agreement*
3.1(1) Amended and Restated Certificate of Incorporation
3.2(2	2) Amended and Restated Bylaws
4.1(3	3) Specimen Stock Certificate
4.2	Senior Indenture
4.3	Form of Senior Debt Security (included in Exhibit 4.2)
4.4	Subordinated Indenture
4.5	Form of Subordinated Debt Security (included in Exhibit 4.4)
4.6	Form of Certificate of Designation*
4.7	Form of Preferred Stock Certificate*
4.8	Form of Deposit Agreement*
4.9	Form of Depositary Receipt (included in Exhibit 4.8)
4.10	Form of Warrant Agreement*
4.11	Form of Warrant Certificate*
4.12	Form of Unit Agreement*
5.1	Opinion of Wilson Sonsini Goodrich & Rosati, Professional Corporation
12.1	Computation of Ratio of Earnings to Fixed Charges
23.1	Consent of Independent Registered Public Accounting Firm
23.2	Consent of Wilson Sonsini Goodrich & Rosati, Professional Corporation (included in Exhibit 5.1)
24.1	Power of Attorney (see signature page to this Registration Statement on Form S-3)
25.1	Form T-1 Statement of Eligibility of Trustee for Senior Indenture under the Trust Indenture Act of 1939*
25.2	Form T-1 Statement of Eligibility of Trustee for Subordinated Indenture under the Trust Indenture Act of 1939*
*	To be filed by amendment or as an exhibit to a report pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and incorporated herein by reference.

(1)

Incorporated herein by reference. Incorporated by reference to exhibit 3.1 to registrant's Form 10-K filed with the SEC on March 23, 2011. Incorporated by reference to exhibit 3.2 to registrant's Form 10-K filed with the SEC on March 23, 2011. Incorporated by reference to exhibit 4.1 to registrant's Form S-1/A filed with SEC on October 1, 2010. (2) (3)

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

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AS TRUSTEE

INDENTURE

DATED AS OF , 20

SENIOR DEBT SECURITIES

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Pacific Biosciences of California, Inc.

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

Section 310	(a)(1)	6.9
Section 510	(a)(1) (a)(2)	6.9
	(a)(2) (a)(3)	Not Applicable
		Not Applicable
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Continu 211	(b)	6.8, 6.10
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	(c)(1)	1.2
	(c)(2)	1.2
	(c)(3)	Not Applicable
	(d)	Not Applicable
	(e)	1.2
Section 315	(a)	6.1
	(b)	6.2
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	(a)(1)(A)	5.2, 5.12
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	(a)(2)	Not Applicable
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	(c)	1.4
Section 317	(a)(1)	5.3
	(a)(2)	5.4
	(b)	10.3
Section 318	(a)	1.7
		1.7

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

INDENTURE, dated as of, 20, between Pacific Biosciences of California, Inc., a corporation duly organized and existing under the laws of the State of Delaware (herein called the "Company"), having its principal executive office at 1305 O'Brien Drive, Menlo Park, California 94025, and , 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 unsecured 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.

The Indenture is subject to, and will be governed by, the provisions of the Trust Indenture Act that are required to be a part of and govern indentures qualified under the Trust Indenture Act.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

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

ARTICLE 1

DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

Section 1.1 Definitions.

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

(1) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;

(2) all other terms used herein which are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein;

(3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted accounting principles in the United States of America, and, except as otherwise herein expressly provided, the term "generally accepted accounting principles" with respect to any computation required or permitted hereunder shall mean such accounting principles in the United States of America as are generally accepted at the date of such computation;

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(4) all references to "\$" refer to the lawful currency of the United States of America;

(5) unless the context otherwise requires, any reference to an "Article" or a "Section" refers to an Article or a Section, as the case may be, of this Indenture; and

(6) 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 1.4.

"Additional Interest" has the meaning specified in Section 5.2(b).

"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.

"Authenticating Agent" means any Person authorized by the Trustee pursuant to Section 6.14 to act on behalf of the Trustee to authenticate Securities of one or more series.

"Board of Directors" means either the board of directors of the Company or any duly authorized committee of that board empowered to act for it with respect to this Indenture.

"Board Resolution" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification, 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 are authorized or obligated by law or executive order to close.

"Commission" means the Securities and Exchange Commission, 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.

"Common Stock" includes any stock of any class of the Company which has no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company and which is not subject to redemption by the Company; <u>provided</u>, <u>however</u>, subject to the provisions of Article 14 and any indenture supplemental hereto, shares issuable upon conversion of Securities shall include only shares of the class designated as Common Stock of the Company at the date of this Indenture or shares of any class or classes resulting from any reclassification or reclassifications thereof and which have no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company and which are not subject to redemption by the Company; <u>provided</u>, <u>further</u>, that if at any time there shall be more than one such resulting class, the shares of each such class then so issuable shall be substantially in the proportion which the total number of shares of such class resulting from all such reclassifications bears to the total number of shares of all such classes resulting from all such reclassifications.

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"Company" means the corporation 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 by any two of the following in the name of the Company: the Chairman of the Board, the Vice Chairman of the Board, the Chief Executive Officer, the President or any executive officer, the principal financial officer, the principal accounting officer, the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary of the Company, and delivered to the Trustee.

"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.

"Corporate Trust Office" means the corporate trust office of the Trustee at , Attention: Corporate Trust Department, or such other office, designated by the Trustee by written notice to the Company, at which at any particular time its corporate trust business shall be administered.

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

"Covenant Defeasance" has the meaning specified in Section 13.3.

"Defaulted Interest" has the meaning specified in Section 3.7.

"Defeasance" has the meaning specified in Section 13.2.

"Depositary" means, with respect to Securities of any series issuable in whole or in part in the form of one or more Global Securities, a clearing agency registered under the Exchange Act that is designated to act as Depositary for such Securities as contemplated by Section 3.1.

"euro" or "euros" means the currency adopted by those nations participating in the third stage of the economic and monetary union provisions of the Treaty on European Union, signed at Maastricht on February 7, 1992.

"European Economic Area" means the member nations of the European Economic Area pursuant to the Oporto Agreement on the European Economic Area dated May 2, 1992, as amended.

"European Union" means the member nations of the European Union established by the Treaty of European Union, signed at Maastricht on February 7, 1992, which amended the Treaty of Rome establishing the European Community.

"Event of Default" has the meaning specified in Section 5.1.

"Exchange Act" means the Securities Exchange Act of 1934 and any statute successor thereto, in each case as amended from time to time.

"Expiration Date" has the meaning specified in Section 1.4.

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"Foreign Government Obligation" means with respect to Securities of any series which are not denominated in the currency of the United States of America (x) any security which is (i) a direct obligation of the government which issued or caused to be issued the currency in which such security is denominated and for the payment of which obligations its full faith and credit is pledged or, with respect to Securities of any series which are denominated in euros, a direct obligation of any member nation of the European Union for the payment of which obligation the full faith and credit of the respective nation is pledged so long as such nation has a credit rating at least equal to that of the highest rated member nation of the European Economic Area, or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of a government specified in clause (i) above the payment of which is unconditionally guaranteed as a full faith and credit obligation by the such government, which, in either case (i) or (ii), 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 Specific payment of principal of or interest on any Foreign 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 Foreign Government Obligation or the specific payment of principal or interest evidenced by such depositary receipt.

"Global Security" means, with respect to any series of Securities, a Security executed by the Company and delivered by the Trustee to the Depositary or held by the Trustee as custodian for the Depositary pursuant to a safekeeping agreement with the Depositary, all in accordance with the Indenture, which shall be registered in global form without interest coupons in the name of the Depositary or its nominee.

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

"Indenture" means this instrument as originally executed and 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, for all purposes of this instrument and any such supplemental indenture, 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. The term "Indenture" shall also include the terms of particular series of Securities established as contemplated by Section 3.1; provided, however, that if at any time more than one Person is acting as Trustee under this Indenture due to the appointment of one or more separate Trustees for any one or more separate series of Securities, "Indenture" shall mean, with respect to such series of Securities for which any such Person is Trustee, 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 and shall include the terms of particular series of Securities for which such Person is Trustee established as contemplated by Section 3.1, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is not Trustee, regardless of when such terms or provisions were adopted, and exclusive of any provisions or terms adopted by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee, but to which such person, as such Trustee, was not a party; provided, further that in the event that this Indenture is supplemented or amended by one or more indentures supplemental hereto.

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"interest," when used with respect to an Original Issue Discount Security, which by its terms bears interest only at Maturity, means interest payable at Maturity.

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

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

"Maturity," when used with respect to any Security, means the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, repurchase at the option of the Holder, upon redemption or otherwise.

"Notice of Default" means a written notice of the kind specified in Section 5.1(4).

"Officers' Certificate" means a certificate signed by any two of the following in the name of the Company: the Chairman of the Board, a Vice Chairman of the Board, the Chief Executive Officer, the President, any executive officer, the principal financial officer, the principal accounting officer, the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee. One of the officers signing an Officers' Certificate given pursuant to Section 10.4 shall be the principal executive or principal financial officer of the Company.

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

"Original Issue Discount Security" means any 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 pursuant to Section 5.2.

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

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

(2) Securities 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; <u>provided</u> that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;

(3) Securities as to which Defeasance has been effected pursuant to Section 13.2; and

(4) Securities which have been paid pursuant to Section 3.6 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company;

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provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given, made or taken any request, demand, authorization, direction, notice, consent, waiver or other action hereunder as of any date, (A) 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 5.2, (B) if, as of such date, the principal amount payable at the Stated Maturity of a Security is not determinable, the principal amount of such Security which shall be deemed to be Outstanding shall be the amount of a Security denominated in one or more non-U.S. dollar 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 3.1, of the principal amount of a Security described in clause (A) or (B) above, of the amount determined as provided in such clause), and (D) 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, waiver or other action, only Securities which 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 Company or of such other obligor.

"Paying Agent" means any Person authorized by the Company to pay the principal of or any premium or interest on any Securities on behalf of the Company.

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

"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 and interest on the Securities of that series are payable as specified as contemplated by Section 3.1.

"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 3.6 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.

"Prospectus" means the prospectus (including any prospectus supplement) used with respect to the offer and sale of the Securities of any series.

"Record Date" means any Regular Record Date or Special Record Date.

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

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"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.

"Regular Record Date" for the interest payable on any Interest Payment Date on the Securities of any series means the date specified for that purpose as contemplated by Section 3.1.

"Reporting Default" has the meaning specified in Section 5.2(b).

"Responsible Officer" means, when used with respect to the Trustee, an officer of the Trustee in the Corporate Trust Office assigned and duly authorized by the Trustee to administer its corporate trust matters.

"Securities" has the meaning stated in the first recital of this Indenture and more particularly means any Securities authenticated and delivered under this Indenture.

"Securities Act" means the Securities Act of 1933 and any statute successor thereto, in each case as amended from time to time.

"Security Register" and "Security Registrar" have the respective meanings specified in Section 3.5.

"Special Record Date" for the payment of any Defaulted Interest means a date fixed by the Trustee pursuant to Section 3.7.

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

"Subsidiary" means a Person of which at least a majority of the outstanding voting stock having the power to elect a majority of the board of directors of such Person (in the case of a corporation) is, or of which at least a majority of the equity interests (in the case of a Person which is not a corporation) are, at the time 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 or similar interests to the Company which ordinarily has or have voting power for the election of directors, or persons performing similar functions, whether at all times or only so long as no senior class of stock or other interests has or have such voting power by reason of any contingency.

"Trust Indenture Act" means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed; <u>provided</u>, <u>however</u>, 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 or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, "Trustee" as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

"U.S. Government Obligation" means (x) any security which is (i) 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 (ii) an obligation of a Person controlled or supervised by and acting as an agency or

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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 (i) or (ii), 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, <u>provided</u> 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.

Section 1.2 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, and shall comply with the requirements of the Trust Indenture Act and any other requirements set forth in this Indenture.

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

(1) a statement that each individual signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;

(2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

(3) a statement that, in the opinion of each such individual, he or she has made such examination or investigation as is necessary to enable him or her to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

Section 1.3 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 or her 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

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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.

Any such certificate or opinion of an officer of the Company or of counsel may be based, insofar as it relates to accounting matters, upon a certificate or opinion of, or representations by, an accountant or firm of accountants in the employ of the Company, unless such officer or counsel, as the case may be, knows, that the certificate or opinion or representations with respect to the accounting matters upon which his or her certificate or opinion are based 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 1.4 Acts of Holders; Record Dates.

Any request, demand, authorization, direction, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made 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 an 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. The Trustee shall promptly deliver to the Company copies of any such instrument or instruments delivered to the Trustee. 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 6.1) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section.

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 or her the execution thereof. Where such execution is by a signer acting in a capacity other than his or her individual capacity, such certificate or affidavit shall also constitute sufficient proof of his or her 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 that the Trustee deems sufficient.

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

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.

The Company may set any day as a record date for the purpose of determining the Holders of Outstanding Securities of any series entitled to give, make or take any request, demand, authorization, direction, vote, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made or taken by

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Holders of Securities of such series. If any record date is set pursuant to this paragraph, the Holders of Outstanding Securities of the relevant series on such record date, and no other Holders, shall be entitled to take the relevant action, whether or not such Holders remain Holders after such record date; <u>provided</u> that no such action shall be effective hereunder unless taken on or prior to the applicable Expiration Date by Holders of the requisite principal amount of Outstanding Securities of such series on such record date. Nothing in this paragraph shall be construed to prevent the Company from setting a new record date for any action for which a record date has previously been set pursuant to this paragraph (whereupon the record date previously set shall automatically and with no action by any Person be canceled and of no effect), and nothing in this paragraph shall be construed to render ineffective any action taken by Holders of the requisite principal amount of Outstanding Securities of the relevant series on the date such action is taken. Promptly after any record date is set pursuant to this paragraph, the Company, at its own expense, shall cause notice of such record date, the proposed action by Holders and the applicable Expiration Date to be given to the Trustee in writing and to each Holder of Securities of the relevant series in the manner set forth in Section 1.6.

With respect to any record date set pursuant to this Section, the Company may designate any day as the "Expiration Date" and from time to time may change the Expiration Date to any earlier or later day; <u>provided</u> that no such change shall be effective unless notice of the proposed new Expiration Date is given to the Trustee in writing, and to each Holder of Securities of the relevant series in the manner set forth in Section 1.6, on or prior to the existing Expiration Date. If an Expiration Date is not designated with respect to any record date set pursuant to this Section, the Company shall be deemed to have initially designated the 180th day after such record date as the Expiration Date with respect thereto, subject to its right to change the Expiration Date as provided in this paragraph. Notwithstanding the foregoing, no Expiration Date shall be later than the 180th day after the applicable record date.

Without limiting the foregoing, a Holder entitled hereunder to take any action hereunder with regard to any particular Security may do so with regard to all or any part of the principal amount of such Security or by one or more duly appointed agents each of which may do so pursuant to such appointment with regard to all or any part of such principal amount.

Section 1.5 Notices, etc., to Trustee and Company.

Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing (or by facsimile transmissions, <u>provided</u> that oral confirmation of receipt shall have been received) to or with the Trustee at its Corporate Trust Office, Attention: Corporate Trust Department, or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, personally delivered or sent via overnight courier 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: Chief Financial Officer.

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Section 1.6 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 by first-class postage prepaid, or delivered by hand or overnight courier to each Holder affected by such event, at its 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. Neither the failure to mail or delivered by hand or overnight courier any notice, nor any defect in any notice so mailed or delivered by hand or overnight courier, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders. 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 1.7 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 the Trust Indenture 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 1.8 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 1.9 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 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 1.11 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 successors hereunder and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

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Section 1.12 Governing Law.

THIS INDENTURE AND THE SECURITIES SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

Section 1.13 Legal Holidays.

In any case where any Interest Payment Date, Redemption Date or Stated Maturity of any Security or the last date on which a Holder has the right to convert a Security at a particular conversion price or conversion rate, as the case may be, shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or of the Securities (other than a provision of any Security which specifically states that such provision shall apply in lieu of this Section)) payment of interest or principal (and premium, if any) or, if applicable to a particular series of Securities, conversion 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 Redemption Date, at the Stated Maturity or on such last day for conversion, as the case may be.

Section 1.14 Indenture and Securities Solely Corporate Obligations.

No recourse for the payment of the principal of or premium, if any, or interest on any Security, or for any claim based thereon or otherwise in respect thereof, and no recourse under or upon any obligation, covenant or agreement of the Company in this Indenture or in any supplemental indenture or in any Security, or because of the creation of any indebtedness represented thereby, shall be had against any incorporator, stockholder, employee, agent, officer, or director or subsidiary, as such, past, present or future, of the Company or of any successor corporation, either directly or through the Company or any successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that all such liability is hereby expressly waived and released as a condition of, and as a consideration for, the execution of this Indenture and the issue of the Securities.

Section 1.15 Indenture May be Executed in Counterparts.

This instrument may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument.

ARTICLE 2

SECURITY FORMS

Section 2.1 Forms Generally

The Securities of each series shall be in substantially such form as shall be established by or pursuant to a Board Resolution and as set forth in such Board Resolution (including such terms as set forth in any form of Securities for each series approved by such Board Resolution) or, to the extent established pursuant to rather than set forth in a Board Resolution, in an Officers' Certificate detailing such establishment (including any exhibit attached thereto), or 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

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Depositary therefor or as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution thereof. If the form of Securities of any series is 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 Company Order contemplated by Section 3.3 for the authentication and delivery of such Securities. Any such Board Resolution or record of such action shall have attached thereto a true and correct copy of the form of Security referred to therein approved by or pursuant to such Board Resolution.

The definitive Securities shall be printed, lithographed or engraved on steel engraved borders or may be produced in any other manner, all as determined by the officers executing such Securities, as evidenced by their execution of such Securities.

Section 2.2 Reserved.

Section 2.3 Reserved.

Section 2.4 Form of Legend for Global Securities.

Unless otherwise specified as contemplated by Section 3.1 for the Securities evidenced thereby, every Global Security authenticated and delivered 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.

Section 2.5 Form of Trustee's Certificate of Authentication.

The Trustee's certificates of authentication shall be in substantially the following form:

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

as Trustee

By:

Authorized Officer

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ARTICLE 3

THE SECURITIES

Section 3.1 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 up to the aggregate principal amount of Securities of that series from time to time authorized by or pursuant to a Board Resolution of the Company, pursuant to one or more indentures supplemental hereto or pursuant to an Officers' Certificate pursuant to a Board Resolution. Prior to the initial issuance of Securities of any series, there shall be established in or pursuant to a Board Resolution of the Company and set forth in an Officers' Certificate of the Company, established in one or more indentures supplemental hereto, or established in an Officers' Certificate pursuant to a Board Resolution with respect to the Securities of the series:

(1) the title of the Securities of the series (which shall distinguish the Securities of the series from Securities of any other series);

(2) 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 3.4, 3.5, 3.6, 9.6 or 11.7 and except for any Securities which, pursuant to Section 3.3, are deemed never to have been authenticated and delivered hereunder);

(3) the Person to whom any interest on a Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest;

(4) the date or dates on which the principal of any Securities of the series is payable;

(5) the rate or rates (which may be fixed or variable) at which any Securities of the series shall bear interest, if any, the date or dates from which any such interest shall accrue, the Interest Payment Dates on which any such interest shall be payable and the Regular Record Date for any such interest payable on any Interest Payment Date (or the method for determining the dates and rates);

(6) the place or places where the principal of and any premium and interest on any Securities of the series shall be payable;

(7) the period or periods within which, the price or prices at which and the terms and conditions upon which any 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;

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(8) the obligation, if any, of the Company to redeem or purchase any Securities of the series pursuant to any sinking fund or analogous provisions or any redemption or purchase at the option of the Holder thereof and the period or periods within which, the price or prices at which and the terms and conditions upon which any Securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(9) if other than denominations of \$1,000 and any integral multiple thereof, the denominations in which any Securities of the series shall be issuable;

(10) if the amount of principal of or any premium or interest on any Securities of the series may be determined with reference to an index or pursuant to a formula, the manner in which such amounts shall be determined;

(11) if other than the currency of the United States of America, the currency, currencies or currency units in which the principal of or any premium or interest on any Securities of the series shall be payable and the manner of determining the equivalent thereof in the currency of the United States of America for any purpose, including for purposes of the definition of "Outstanding" in Section 1.1;

(12) 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);

(13) the percentage of the principal amount at which the Securities will be issued, and, if other than the entire principal amount thereof, the portion of the principal amount of any Securities of the series which shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 5.2;

(14) 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);

(15) if applicable, that the Securities of the series, in whole or any specified part, shall be defeasible pursuant to Section 13.2 or Section 13.3 or both such Sections, or any other defeasance provisions applicable to any Securities of the series, and, if other than by a Board Resolution, the manner in which any election by the Company to defease such Securities shall be evidenced;

(16) if applicable, the terms of any right to convert or exchange Securities of the series;

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(17) if applicable, that any Securities of the series shall be issuable in whole or in part in the form of one or more Global Securities and, in such case, the respective Depositaries for such Global Securities, the form of any legend or legends which shall be borne by any such Global Security in addition to or in lieu of that set forth in Section 2.4 and any circumstances in addition to or in lieu of those set forth in clause (2) of the last paragraph of Section 3.5 in which any such Global Security may be exchanged in whole or in part for Securities registered, and any transfer of such Global Security in whole or in part may be registered, in the name or names of Persons other than the Depositary for such Global Security or a nominee thereof;

(18) any addition to or deletion of 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 5.2;

(19) any addition to or deletion of or change in the covenants set forth in Article 10 which applies to Securities of the series;

(20) any Authenticating Agents, Paying Agents, Security Registrars or such other agents necessary in connection with the issuance of the Securities of such series, including, without limitation, exchange rate agents and calculation agents;

(21) if applicable, the terms of any security that will be provided for a series of Securities, including any provisions regarding the circumstances under which collateral may be released or substituted;

(22) if applicable, the terms of any guaranties for the Securities and any circumstances under which there may be additional obligors on the Securities;

(23) any provisions granting special rights to holders when a specified event occurs;

(24) any provisions with respect to any special interest premium or other premium; any special tax provisions that apply to any series of Securities; with respect to any series of Securities that do not bear interest, the date for certain required reports to the Trustee; any and all additional, eliminated or changed terms that will apply to such series of Securities; and

(25) any other terms of the series of Securities (which terms shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 9.1(5)).

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 3.3) set forth, or determined in the manner provided, in the Officers' Certificate (including any exhibit attached thereto) referred to above or in any such indenture supplemental hereto.

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 (including any exhibit attached thereto) setting forth the terms of the series.

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Section 3.2 Denominations.

The Securities of each series shall be issuable only in registered form without coupons and only in such denominations as shall be specified as contemplated by Section 3.1. In the absence of any such specified denomination with respect to the Securities of any series, the Securities of such series shall be issuable in denominations of \$1,000 and any integral multiple thereof.

Section 3.3 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 principal financial officer, its principal accounting officer, its President or one of its executive officers, and attested by its Treasurer, its Secretary or one of its Assistant Treasurers or 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 2.1 and 3.1, 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 6.1) shall be fully protected in relying upon, a certified copy of such Board Resolution, an Officers' Certificate or supplemental indenture hereto setting forth the terms of the series and an Opinion of Counsel (which Opinion of Counsel may contain customary qualifications and exceptions), with such Opinion of Counsel stating,

(1) if the form of such Securities has been established by or pursuant to Board Resolution as permitted by Section 2.1, that such form has been established in conformity with the provisions of this Indenture;

(2) if the terms of such Securities have been established by or pursuant to Board Resolution as permitted by Section 3.1, that such terms have been established in conformity with the provisions of this Indenture; and

(3) 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 binding obligations of the Company enforceable in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights and to general equity principles.

If such form or terms have been so established, the Trustee shall not be required to authenticate such Securities if the issue of such Securities pursuant to this Indenture will affect the Trustee's own rights, duties or immunities under the Securities and this Indenture or otherwise in a manner that is not reasonably acceptable to the Trustee.

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Notwithstanding the provisions of Section 3.1 and of this Section 3.3, if all Securities of a series are not to be originally issued at one time, it shall not be necessary to deliver an Officers' Certificate or supplemental indenture hereto otherwise required pursuant to Section 3.1 or the Company Order and Opinion of Counsel otherwise required pursuant to this Section 3.3 at or prior to the authentication of each Security of such series if such documents are delivered at or prior to the 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. Notwithstanding the foregoing, 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 3.9, 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.

Neither the Company nor the Trustee shall have any responsibility for any defect in the CUSIP number that appears on any Security, check, advice of payment or redemption notice, and any such document may contain a statement to the effect that CUSIP numbers have been assigned by an independent service for convenience of reference and that neither the Company nor the Trustee shall be liable for any inaccuracy in such numbers.

Section 3.4 Temporary Securities.

Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination, substantially of the tenor of the definitive Securities in lieu of which they are issued 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 one or more definitive Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount. 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 and tenor.

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Section 3.5 Registration; Registration of Transfer and Exchange.

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 of the Company 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" for the purpose of registering Securities and transfers of Securities as herein provided.

Upon surrender for registration of transfer of any Security of a series at the 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 like tenor and aggregate principal amount.

At the option of the Holder, Securities of any series may be exchanged for other Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount, 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 its attorney duly authorized in writing.

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 3.4, 9.6 or 11.7 not involving any transfer.

If the Securities of any series (or of any series and specified tenor) are to be redeemed in part, the Company shall not be required (A) to issue, register the transfer of or exchange any Securities of that series (or of that series and specified tenor, as the case may be) during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of any such Securities selected for redemption under Section 11.3 and ending at the close of business on the day of such mailing, or (B) to register the transfer of or exchange any Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.

The provisions of clauses (1), (2), (3) and (4) below shall apply only to Global Securities:

(1) Each Global Security authenticated under this Indenture shall be registered in the name of the Depositary designated for such Global Security or a nominee thereof and delivered to such Depositary or a nominee thereof or custodian therefor, and each such Global Security shall constitute a single Security for all purposes of this Indenture.

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(2) Notwithstanding any other provision in this Indenture, no Global Security may be exchanged in whole or in part for Securities registered, and no transfer of a Global Security in whole or in part may be registered, in the name of any Person other than the Depositary for such Global Security or a nominee thereof unless (A) such Depositary (i) has notified the Company that it 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, (B) there shall have occurred and be continuing an Event of Default with respect to such Global Security or (C) there shall exist such circumstances, if any, in addition to or in lieu of the foregoing as have been specified for this purpose as contemplated by Section 3.1.

(3) Subject to clause (2) above, any exchange of a Global Security for other Securities may be made in whole or in part, and all Securities issued in exchange for a Global Security or any portion thereof shall be registered in such names as the Depositary for such Global Security shall direct.

(4) Every Security authenticated and delivered upon registration of transfer of, or in exchange for or in lieu of, a Global Security or any portion thereof, whether pursuant to this Section, Section 3.4, 3.6, 9.6 or 11.7 or otherwise, shall be authenticated and delivered in the form of, and shall be, a Global Security, unless such Security is registered in the name of a Person other than the Depositary for such Global Security or a nominee thereof.

Section 3.6 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 bona fide 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 a number not contemporaneously outstanding.

In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, 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 of any series 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 of that series duly issued hereunder.

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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 3.7 Payment of Interest; Interest Rights Preserved.

Except as otherwise provided as contemplated by Section 3.1 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 (1) or (2) below:

(1) 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. 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 given to each Holder of Securities of such series in the manner set forth in Section 1.6, not less than 10 days prior to such Special Record Date. Notice of the proposed payment of 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 (2).

(2) The Company may make payment of any Defaulted Interest on the Securities of any series in any other lawful manner not inconsistent with the requirements of any securities exchange on which such 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.

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Section 3.8 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 any premium and (subject to Section 3.7) any 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 3.9 Cancellation.

All Securities surrendered for payment, redemption, registration of transfer or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee and shall be promptly canceled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly canceled by the Trustee. No Securities shall be authenticated in lieu of or in exchange for any Securities canceled as provided in this Section, except as expressly permitted by this Indenture. All canceled Securities held by the Trustee shall be disposed of in accordance with its customary procedures.

Section 3.10 Computation of Interest.

Except as otherwise specified as contemplated by Section 3.1 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 4.1 Satisfaction and Discharge of Indenture.

This Indenture shall upon Company Request 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, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when

(1) either

(A) all Securities theretofore authenticated and delivered (other than (i) Securities which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 3.6 and (ii) Securities for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Trustee or the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 10.3) have been delivered to the Trustee for cancellation; or

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(B) all such Securities not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

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

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

and the Company, in the case of (i), (ii) or (iii) above, has deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose money in an amount sufficient to pay and discharge the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal and any premium and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

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

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

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 6.7, the obligations of the Trustee to any Authenticating Agent under Section 6.14 and, if money shall have been deposited with the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 4.2 and the last paragraph of Section 10.3 shall survive.

Section 4.2 Application of Trust Money.

Subject to the provisions of the last paragraph of Section 10.3, all money deposited with the Trustee pursuant to Section 4.1 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 any premium and interest for whose payment such money has been deposited with the Trustee.

ARTICLE 5

REMEDIES

Section 5.1 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), unless in the Board Resolution (or an Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing such series, it is provided that such series shall not have the benefit of said Event of Default:

(1) default in the payment of the principal or the Redemption Price of or any premium on any Security of that series at its Maturity; or

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(2) 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

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

(4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of series of Securities other than that series), and continuance of such default or breach for a period of 90 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities of that series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or

(5) the entry by a court having jurisdiction in the premises of (A) 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 (B) 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 90 consecutive days; or

(6) 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

(7) any other Event of Default provided with respect to Securities of that series in the Board Resolution (or in an Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing that series.

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Section 5.2 Acceleration of Maturity; Rescission and Annulment.

(a) Unless the Board Resolution (or Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing such series provides otherwise, if an Event of Default (other than an Event of Default specified in Section 5.1(5) or 5.1(6)) with respect to Securities of any series at the time Outstanding occurs and is continuing, then in every such case the Trustee or the Holders of not less than 25% in principal amount of the Outstanding Securities of that series may declare the principal amount of all the Securities of that series (or, if any Securities of that series are Original Issue Discount Securities, such portion of the principal amount of such Securities as may be specified by the terms thereof), and premium, if any, together with accrued and unpaid interest, if any, thereon, to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by the Holders), and upon any such declaration such principal amount (or specified amount), and premium, if any, together with accrued and unpaid interest, if any, thereon, shall become immediately due and payable. If an Event of Default specified in Section 5.1(5) or 5.1(6) with respect to Securities of any series at the time Outstanding occurs, the principal amount of all the Securities of that series (or, if any Securities of that series are Original Issue Discount Securities, such portion of the principal amount of all the Securities of that series (or, if any thereon, shall become immediately due and payable. If an Event of Default specified in Section 5.1(5) or 5.1(6) with respect to Securities of any series at the time Outstanding occurs, the principal amount of such Securities as may be specified by the terms thereof), and premium, if any, together with accrued and unpaid interest, if any, thereon, shall automatically, and without any declaration or other action on the part of the Trustee or any Holder, become immediately due and payable.

(b) Notwithstanding the foregoing, at the election of the Company, the sole remedy with respect to an Event of Default for the failure by the Company to comply with its obligations under Section 314(a)(1) of the Trust Indenture Act relating to the Company's failure to file any documents or reports that the Company is required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act or of its covenants set forth in Section 7.4 (any such Event of Default, a "Reporting Default"), shall for the first 360 calendar days after the occurrence of such Reporting Default consist exclusively of the right to receive additional interest (the "Additional Interest") on the Securities at an annual rate equal to (i) 0.25% of the principal amount of the Securities for the first 180 calendar days after the occurrence of such Reporting Default and (ii) 0.50% of the principal amount of the Securities from the 181st day to, and including, the 360th day after the occurrence of such Reporting Default. If the Company so elects, the Additional Interest shall accrue on all Outstanding Securities from and including the date on which such Reporting Default first occurs until such violation is cured or waived and shall be payable as provided in Section 3.7. On the 361st day after such Reporting Default (if such violation is not cured or waived prior to such 181st calendar day), then the Trustee or the Holders of not less than 25% in principal amount of the Outstanding securities may declare the principal of, and premium, if any, together with accrued and unpaid interest, if any, on all such Securities to be due and payable immediately.

If the Company elects to pay the Additional Interest as the sole remedy for the Reporting Default, the Company shall notify in writing, by a certificate, the Holders, the Paying Agent and the Trustee of such election at any time on or before the close of business on the first Business Day following the date on which such Event of Default first occurs. Unless and until a Responsible Officer of the Trustee receives at the Corporate Trust Office such a certificate, the Trustee may assume without inquiry that Additional Interest is not payable. The Company shall pay the Additional Interest semi-annually in arrears, with the first semi-annual payment due on the first Interest Payment Date following the date of such Reporting Default, in the same manner as described on the face of the Security.

(c) At any time after such a declaration of acceleration with respect to Securities of any series has been made and before a judgment or decree for payment of the money due has been obtained by the

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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

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

(A) all overdue interest on all Securities of that series,

(B) the principal of (and premium, if any, on) any Securities of that series which have become due otherwise than by such declaration of acceleration and any interest thereon at the rate or rates prescribed therefor in such Securities,

(C) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates prescribed therefor in such Securities, and

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

(2) all Events of Default with respect to Securities of that series, other than the 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 5.3 Collection of Indebtedness and Suits for Enforcement by Trustee.

The Company covenants that if

(1) default is made in the payment of the principal or the Redemption Price of (or premium, if any, on) any Security at the Maturity thereof, or

(2) 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.

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 any premium and interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and premium and on any overdue interest, at the rate or rates prescribed therefor in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series 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.

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Section 5.4 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 6.7.

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; <u>provided</u>, <u>however</u>, that the Trustee may, on behalf of the Holders, vote for the election of a trustee in bankruptcy or similar official and be a member of a creditors' or other similar committee.

Section 5.5 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, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.

Section 5.6 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 any premium 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 6.7;

SECOND: To the payment of the amounts then due and unpaid for principal of and any premium, if any, 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 any premium, if any, and interest, respectively; and

THIRD: The balance, if any, to the Company or any other Person or Persons entitled thereto.

Section 5.7 Limitation on Suits.

No Holder of any Security of any series shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless

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

(2) the Holders of at least 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;

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

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

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

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

Section 5.8 Unconditional Right of Holders to Receive Principal, Premium and Interest and to Convert.

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 any premium and (subject to Section 3.7) interest on such Security on the respective Stated Maturities expressed in such Security (or, in the case of redemption, on the Redemption Date), to convert such Securities in accordance with Article 14 to the extent that such right to convert is applicable to 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 5.9 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.

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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 3.6, 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 Securities 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 (subject to the limitations contained in this Indenture) 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, <u>provided</u> that

(1) such direction shall not be in conflict with any rule of law or with this Indenture and the Trustee shall not have determined that the action so directed would be unjustly prejudicial to Holders of Securities of that series, or any other series, not taking part in such direction; and

(2) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction or this Indenture.

Section 5.13 Waiver of Past Defaults.

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

(1) a default in the payment of the principal of or any premium or interest on any Security of such series as and when the same shall become due and payable by the terms thereof, otherwise than by acceleration (unless such default has been cured and a sum sufficient to pay all matured installments of interest, principal and premium, if any, has been deposited with the Trustee), or

(2) to the extent such right is applicable to such Security, a failure by the Company on request to convert any Security into Common Stock; or

(3) in respect of a covenant or provision hereof which under Article 9 cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series affected.

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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, suffered or omitted by it as Trustee, a court may require any party litigant in such suit to file an undertaking to pay the costs of such suit, and may assess costs against any such party litigant, in the manner and to the extent provided in the Trust Indenture Act; <u>provided</u> that neither this Section nor the Trust Indenture Act shall be deemed to authorize any court to require such an undertaking or to make such an assessment in any suit instituted by the Company.

This Section does not apply to a suit by a Holder to enforce payment of principal of or interest on any Security on the respective due dates, a suit by a Holder to enforce the right to convert in any suit for the enforcement of the right to convert any Security in accordance with Article 14 to the extent such right to convert is applicable to such Security, or a suit by Holders of more than 10% in principal amount of the Outstanding Securities.

Section 5.15 Waiver of Usury, Stay or Extension Laws.

The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

ARTICLE 6

THE TRUSTEE

Section 6.1 Certain Duties and Responsibilities.

The duties and responsibilities of the Trustee shall be as provided by the Trust Indenture Act and as set forth herein. 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.

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Section 6.2 Notice of Defaults.

If a default occurs hereunder with respect to Securities of any series, the Trustee shall give the Holders of Securities of such series notice of such default as and to the extent provided by the Trust Indenture Act; <u>provided</u>, <u>however</u>, that except in the case of a default in the payment of principal or Redemption Price of (or premium, if any) or interest on any Securities of such series or in the payment of any sinking fund installment or any conversion right applicable to Securities of such series, the Trustee shall be protected in withholding such notice if and so long as a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interests of the holders of Securities of such series; <u>provided</u>, <u>further</u>, <u>however</u>, that in the case of any default of the character specified in Section 5.1(4) with respect to Securities of such series, no such notice to Holders shall be given until at least 60 days after the occurrence thereof. For the purpose of this Section, the term "default" means any event which is, or after notice or lapse of time or both would become, an Event of Default with respect to Securities of such series.

Except with respect to Section 10.1, the Trustee shall have no duty to inquire as to the performance of the Company with respect to the covenants contained in Article 10. In addition, the Trustee shall not be deemed to have knowledge of an Event of Default except (i) any Default or Event of Default occurring pursuant to Sections 5.1(1), 5.1(2) and 5.1(3) (defaults in payments on the Securities) or (ii) any Default or Event of Default of which the Trustee shall have received written notification or obtained actual knowledge.

Delivery of reports, information and documents to the Trustee under Section 7.4 is for informational purposes only and the Trustee's receipt of the foregoing shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of their covenants hereunder (as to which the Trustee is entitled to rely conclusively on Officers' Certificates).

Section 6.3 Certain Rights of Trustee.

Subject to the provisions of Section 6.1:

(1) in the absence of bad faith on the part of the Trustee, the Trustee may rely and shall be 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;

(2) 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 shall be sufficiently evidenced by a Board Resolution;

(3) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) is entitled to and may, in the absence of bad faith on its part, rely upon an Officers' Certificate;

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(4) the Trustee may consult with counsel and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders 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;

(6) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, 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, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, personally or by agent or attorney; and

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

Section 6.4 Not Responsible for Recitals or Issuance of Securities.

The recitals contained herein and in the Securities, except the Trustee's certificates of authentication, shall be taken as the statements of the Company, and neither the Trustee nor any Authenticating Agent assumes any responsibility for their correctness. The Trustee makes no representations as to the validity, sufficiency or priority of this Indenture or of the Securities. Neither the Trustee nor any Authenticating Agent shall be accountable for the use or application by the Company of Securities or the proceeds thereof.

Section 6.5 May Hold Securities and Act as Trustee under Other Indentures.

The Trustee, any Authenticating Agent, 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 6.8 and 6.13, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

Subject to the limitations imposed by the Trust Indenture Act, nothing in this Indenture shall prohibit the Trustee from becoming and acting as trustee under other indentures under which other securities, or certificates of interest of participation in other securities, of the Company are outstanding in the same manner as if it were not Trustee hereunder.

Section 6.6 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 with the Company.

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Section 6.7 Compensation and Reimbursement.

The Company agrees:

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

(2) except as otherwise expressly provided herein, to reimburse 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

(3) to indemnify the Trustee 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 the trust or trusts hereunder, including the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 5.1(5) or Section 5.1(6) 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 any applicable bankruptcy, insolvency, reorganization or similar law.

Section 6.8 Conflicting Interests.

If the Trustee has or shall acquire a conflicting interest within the meaning of the Trust Indenture Act and there is an Event of Default under the Securities of that series, 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. To the extent permitted by the Trust Indenture Act, the Trustee shall not be deemed to have a conflicting interest by virtue of being a trustee under this Indenture with respect to Securities of more than one series.

Section 6.9 Corporate Trustee Required; Eligibility.

There shall at all times be one (and only one) Trustee hereunder with respect to the Securities of each series, which may be Trustee hereunder for Securities of one or more other series. Each Trustee shall be a Person that is eligible pursuant to the Trust Indenture Act to act as such and has (or if the Trustee is a member of a bank holding company system, its bank holding company has) a combined capital and surplus of at least \$50,000,000. If any such Person or bank holding company publishes reports of condition at least annually, pursuant to law or to the requirements of its supervising or examining authority, then for the purposes of this Section and to the extent permitted by the Trust Indenture Act, the combined capital and surplus of such Person or bank holding company 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 with respect to the Securities of any series 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.

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Section 6.10 Resignation and Removal; Appointment of Successor.

No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 6.11.

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 the instrument of acceptance by a successor Trustee required by Section 6.11 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.

The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series, delivered to the Trustee and to the Company.

If at any time:

(1) the Trustee shall fail to comply with Section 6.8 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

(2) the Trustee shall cease to be eligible under Section 6.9 and shall fail to resign after written request therefor by the Company or by any such Holder, or

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

then, in any such case, (A) the Company by a Board Resolution may remove the Trustee with respect to all Securities, or (B) subject to Section 5.14, 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 removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

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 Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series) and shall comply with the applicable requirements of Section 6.11. 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 in accordance with the applicable requirements of Section 6.11, become the successor Trustee with respect to the Securities of any series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company

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or the Holders and accepted appointment in the manner required by Section 6.11, the retiring Trustee may petition, or any Holder who has been a bona fide Holder of a Security of such series for at least six months may petition, on behalf of himself and all others similarly situated, any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series to all Holders of Securities of such series in the manner provided in Section 1.6. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

Section 6.11 Acceptance of Appointment by Successor.

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.

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 co-trustees of the same trust and that each such Trustee shall be truste of a trust or trusts hereunder 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 Securities of the retiring Trustee with respect to the Securities of that or those series to which the appointment of such successor Trustee, such retiring Trustee shall deliver of such successor Trustee, such therein and each such successor Trustee, such retiring Trustee is not retiring trustee is not retiring Trustee shall become effective to the securities of the retiring Trustee with resp

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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 the first or second preceding paragraph, as the case may be.

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

Section 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 (including the administration of the trust created by this Indenture), shall be the successor of the Trustee hereunder, <u>provided</u> 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. In the event that any Securities shall not have been authenticated by such predecessor Trustee, any such successor Trustee may authenticate and deliver such Securities in either its own name or that of such predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

Section 6.13 Preferential Collection of Claims Against Company.

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).

Section 6.14 Appointment of Authenticating Agent.

The Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon original issue and upon exchange, registration of transfer or partial redemption thereof or pursuant to Section 3.6, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a corporation organized and doing business under the laws of the United States of America, any State thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having (or if the Authenticating Agent is a member of a bank holding company system, its bank holding company has) a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by Federal or State authority. If such Authenticating Agent 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 Authenticating Agent 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 an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, <u>provided</u> such corporation shall be otherwise eligible under this Section, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent may resign at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, the Trustee may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment in the manner provided in Section 1.6 to all Holders of Securities of the series with respect to which such Authenticating Agent will serve. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Trustee agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section, and the Trustee shall be entitled to be reimbursed for such payments, subject to the provisions of Section 6.7.

If an appointment with respect to one or more series is made pursuant to this Section 6.14, the Securities of such series may have endorsed thereon, in lieu of the Trustee's certificate of authentication, an alternative certificate of authentication in the following form:

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

As Trustee

By:

By:

As Authenticating Agent

Authorized Officer

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ARTICLE 7

HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

Section 7.1 Company to Furnish Trustee Names and Addresses of Holders.

The Company will furnish or cause to be furnished to the Trustee

(1) semi-annually, not later than 15 days after the Regular Record Date for each respective series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Securities of each series as of such Regular Record Date, as the case may be, or if there is no Regular Record Date for such series of Securities, semi-annually, and

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

provided that no such list need be furnished by the Company to the Trustee so long as the Trustee is acting as Security Registrar.

Section 7.2 Preservation of Information; Communications to Holders.

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 7.1 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 7.1 upon receipt of a new list so furnished.

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 privileges of the Trustee, shall be as provided by the Trust Indenture Act.

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 7.3 Reports by Trustee.

The Trustee shall transmit to Holders such 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.

Reports so required to be transmitted at stated intervals of not more than 12 months shall be transmitted no later than July 15 in each calendar year, commencing with the first July 15 after the first issuance of Securities pursuant to this Indenture.

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 any Securities are listed, with the Commission and with the Company. The Company will notify the Trustee when any Securities are listed on any stock exchange.

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Section 7.4 Reports by Company.

Any information, documents or other reports that the Company shall file 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; <u>provided</u> that any such information, documents or reports filed or furnished with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval (or EDGAR) system shall be deemed to be filed with the Trustee as of the time such information, documents or reports are filed or furnished via EDGAR.

ARTICLE 8

CONSOLIDATION, MERGER, CONVEYANCE, TRANSFER OR LEASE

Section 8.1 Company May Consolidate, etc., Only on Certain Terms.

The Company shall not consolidate with or merge into any other Person (other than a Subsidiary of the Company) (in a transaction in which the Company is not the surviving corporation) or convey, transfer or lease its properties and assets substantially as an entirety to any Person (other than a Subsidiary of the Company), unless:

(1) in case the Company shall consolidate with or merge into another Person (in a transaction in which the Company is not the surviving corporation) or convey, transfer or lease its properties and assets substantially as an entirety 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 substantially as an entirety shall be a corporation, limited liability company, partnership, trust or other business entity, 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 any premium and interest on all the Securities and the performance or observance of every covenant of this Indenture on the part of the Company to be performed or observed and the conversion rights shall be provided for in accordance with Article 14, if applicable, or as otherwise specified pursuant to Section 3.1, by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the Person (if other than the Company) formed by such consolidation or into which the Company shall have been merged or by the Person which shall have acquired the Company's assets;

(2) immediately after giving effect to 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 occurred and be continuing; and

(3) 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 and that all conditions precedent herein provided for relating to such transaction have been complied with.

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Section 8.2 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 the properties and assets of the Company substantially as an entirety in accordance with Section 8.1, 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 9.1 Supplemental Indentures Without Consent of Holders.

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

(1) to evidence the succession of another Person to the Company, or successive successions, and the assumption by any such successor of the covenants of the Company herein and in the Securities in compliance with Article 8; or

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

(3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such additional Events of Default are to be for the benefit of less than all series of Securities, stating that such additional Events of Default are expressly being included solely for the benefit of such series); or

(4) to add to or change any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the issuance of Securities in bearer form, registrable or not registrable as to principal, and with or without interest coupons, or to permit or facilitate the issuance of Securities in uncertificated form; or

(5) to add to, change or eliminate any of the provisions of this Indenture in respect of one or more series of Securities, <u>provided</u> that any such addition, change or elimination (A) shall neither (i) apply to any Security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (ii) modify the rights of the Holder of any such Security with respect to such provision or (B) shall become effective only when there is no such Security Outstanding; or

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(6) to secure the Securities, including provisions regarding the circumstances under which collateral may be released or substituted; or

(7) to add or provide for a guaranty of the Securities or additional obligors on the Securities; or

(8) to establish the form or terms of Securities of any series as permitted by Sections 2.1 and 3.1; or

(9) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, pursuant to the requirements of Section 6.11; or

(10) to conform this Indenture to the description of the Securities set forth in the Prospectus for such series of Securities; or

(11) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture, <u>provided</u> that such action pursuant to this clause (11) shall not adversely affect the interests of the Holders of Securities of any series in any material respect; or

(12) to supplement any of the provisions of the Indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of Securities pursuant to Articles 4 and 13, provided that any such action shall not adversely affect the interests of the Holders of Securities of such series or any other series of Securities in any material respect; or

(13) make such other provisions in regards to matters or questions arising under the Indenture or any supplemental indenture hereto as the Board of Directors may deem necessary or desirable, and which does not in each case adversely affect the interest of the Holders of Securities of any series; or

(14) comply with the requirements of the Commission in order to effect or maintain the qualification of the Indenture under the Trust indenture Act.

Section 9.2 Supplemental Indentures with Consent of Holders.

With the consent of the Holders of a majority in principal amount of the Outstanding Securities of each series affected by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities of such series under this Indenture; <u>provided</u>, <u>however</u>, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby, change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Security, or reduce the principal amount thereof or the rate of interest thereon or any premium payable upon the redemption or repurchase thereof, whether at the option of the Company or at the option of the Holder, or reduce the amount of any

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sinking fund payment, or reduce the amount of the principal of an Original Issue Discount Security or any other Security which would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.2 of the Indenture, or change the Place of Payment or currency in which, any Security or any premium or interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the Redemption Date), or in the case of Securities of any series that are convertible into Common Stock or other securities of the Company pursuant to Article 14 and any supplemental indenture hereto, adversely affect the rights of the Holders to convert any of the Securities of such series other than as provided in or pursuant to this Indenture or any supplemental indenture, or reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver (of compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture, or modify any of the provisions of this Section or Section 5.13, except to increase any such percentage or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby; provided, however, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to "the Trustee" and concomitant changes in this Section, or the deletion of this proviso, in accordance with the requirements of Sections 6.11 and 9.1(9).

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

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

Section 9.3 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 Sections 6.1 and 6.3) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

Section 9.4 Effect of Supplemental Indentures.

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

Section 9.5 Conformity with Trust Indenture Act.

The Indenture shall incorporate and be governed by the provisions of the Trust Indenture Act that are required to be part of and to govern indentures qualified under the Trust Indenture Act.

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Section 9.6 Reference in Securities to Supplemental Indentures.

Securities of any series authenticated and delivered after the execution of any supplemental indenture pursuant to this Article may, and shall if required by the Trustee, bear a notation in form approved by the Trustee as to any matter provided for in such supplemental indenture. If the Company shall so determine, new Securities of any series so modified as to conform, in the opinion of the Trustee and the Company, to any such supplemental indenture may be prepared and executed by the Company and authenticated and delivered by the Trustee in exchange for Outstanding Securities of such series.

ARTICLE 10

COVENANTS

Section 10.1 Payment of Principal, Premium 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 and interest on the Securities of that series in accordance with the terms of the Securities and this Indenture.

Section 10.2 Maintenance of Office or Agency.

The Company will maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment, where Securities of that series may be surrendered for registration of transfer or exchange, where Securities of that series may be surrendered for conversion to the extent that such right to convert is applicable to such Security and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of 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. Unless otherwise provided in a supplemental indenture or pursuant to Section 3.1 hereof, the Place of Payment for any series of Securities shall be the Corporate Trust Office of the Trustee.

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 designations; <u>provided</u>, <u>however</u>, 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 of any such designation or rescission and of any change in the location of any such other office or agency.

Section 10.3 Money for Securities Payments To Be Held in Trust.

If the Company shall at any time act as its own Paying Agent with respect to any series of Securities, it will, on or before each due date of the principal of or any premium 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 and any premium and interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities, it will, on or prior to each due date of the principal of or any premium 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 will cause each Paying Agent for any series of Securities other than the Trustee to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent will (1) comply with the provisions of the Trust Indenture Act applicable to it as a Paying Agent and (2) 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 for payment in respect of the Securities of that series.

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 amounts deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of or any premium or interest on any Security of any series and remaining unclaimed for a period ending on the earlier of the date that is ten Business Days prior to the date such money would escheat to the State or two years after such principal, premium 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, 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 Business Day and of general circulation in each Place of Payment, notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid to the Company.

Section 10.4 Statement by Officers as to Default.

The Company will deliver to the Trustee, within 120 days after the end of each fiscal year of the Company ending after the date hereof, an Officers' Certificate, stating whether or not to the best knowledge of the signers thereof the Company is in default in the performance and observance of any of the terms, provisions and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and, if the Company shall be in default, specifying all such defaults and the nature and status thereof of which they may have knowledge. The fiscal year of the Company currently ends on December 31; and the Company will give the Trustee prompt written notice of any change of its fiscal year.

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Section 10.5 Existence.

Subject to Article 8, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its existence.

Section 10.6 Reserved.

Section 10.7 Reserved.

Section 10.8 Waiver of Certain Covenants.

Except as otherwise specified as contemplated by Section 3.1 for Securities of such series, the Company may, with respect to the Securities of any series, omit in any particular instance to comply with any term, provision or condition set forth in any covenant provided pursuant to Section 3.1(19), 9.1(2) or 9.1(7), for the benefit of the Holders of such series if before the time for such compliance the Holders of at least a majority in principal amount of the Outstanding Securities of such series shall, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition, but no such waiver shall extend to or affect such term, provision or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

ARTICLE 11

REDEMPTION OF SECURITIES

Section 11.1 Applicability of Article.

Securities of any series that are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 3.1 for such Securities) in accordance with this Article.

Section 11.2 Election to Redeem; Notice to Trustee.

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution or in another manner specified as contemplated by Section 3.1 for such Securities. In case of any redemption at the election of the Company of less than all the Securities of any series (including any such redemption affecting only a single Security), the Company shall, at least 45 days prior to the Redemption Date fixed by the Company (unless a shorter notice shall be satisfactory to the Trustee or is specified in the Board Resolution (or in an Officers' Certificate pursuant to such Board Resolution detailing such establishment) or supplemental indenture establishing such series), notify the Trustee of such Redemption Date, of the principal amount of Securities of such series to be redeemed and, if applicable, of the tenor of the Securities to be redeemed.

Section 11.3 Selection by Trustee of Securities to Be Redeemed.

If less than all the Securities of any series are to be redeemed (unless all the Securities of such series and of a specified tenor are to be redeemed or unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 45 days prior to the Redemption Date by

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the Trustee, from the Outstanding Securities of such series not previously called for redemption, by lot, or in the Trustee's discretion, on a pro-rata basis, <u>provided</u> that the unredeemed portion of the principal amount of any Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security. If less than all the Securities of such series and of a specified tenor are to be redeemed (unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 45 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series and specified tenor not previously called for redemption in accordance with the preceding sentence.

If any Security selected for partial redemption is converted in part before termination of the conversion right with respect to the portion of the Security so selected, the converted portion of such Security shall be deemed (so far as may be) to be the portion selected for redemption. Securities that have been converted during a selection of Securities to be redeemed shall be treated by the Trustee as Outstanding for the purpose of such selection.

The Trustee shall promptly notify the Company in writing of the Securities selected for redemption as aforesaid and, in case of any Securities selected for partial redemption as aforesaid, the principal amount thereof to be redeemed.

The provisions of the three preceding paragraphs shall not apply with respect to any redemption affecting only a single Security, whether such Security is to be redeemed in whole or in part. In the case of any such redemption in part, the unredeemed portion of the principal amount of the Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security.

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 11.4 Notice of Redemption.

Notice of redemption shall be given in the manner provided in Section 1.6, not fewer than 30 nor more than 60 days prior to the Redemption Date, unless a shorter period is specified in the Securities to be redeemed, to each Holder of Securities to be redeemed, at its address appearing in the Security Register or, if the Securities are held in book-entry form, sent by electronic transmission.

All notices of redemption shall state:

- (1) the Redemption Date,
- (2) the Redemption Price (including accrued interest, if any),

(3) if less than all the Outstanding Securities of any series consisting of more than a single Security are to be redeemed, the identification (and, in the case of partial redemption of any such Securities, the principal amounts) of the particular Securities to be redeemed and, if less than all the Outstanding Securities of any series consisting of a single Security are to be redeemed, the principal amount of the particular Security to be redeemed,

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(4) in case any Security is to be redeemed in part only, that on and after the Redemption Date, upon surrender of the Security, the Holder of such Security will receive, without charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed;

(5) that on the Redemption Date the Redemption Price 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,

(6) the place or places where each such Security is to be surrendered for payment of the Redemption Price,

(7) if applicable, the conversion price or the conversion rate, as the case may be, the date on which the right to convert the principal of the Securities or the portions thereof to be redeemed will terminate, and the place or places where such Securities may be surrendered for conversion,

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

(9) the CUSIP number or numbers and/or common code(s) of the Security being redeemed.

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.

Section 11.5 Deposit of Redemption Price.

On or prior to any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 10.3) 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, if any, on, all the Securities which are to be redeemed on that date.

To the extent such Security of a series is convertible pursuant to Article 14, upon conversion of any such Security called for redemption, any money deposited with the Trustee or with a Paying Agent or so segregated and held in trust for the redemption of such Security shall (subject to the right of any Holder of such Security to receive interest as provided in the last paragraph of Section 3.7) be paid to the Company on Company Request, or if then held by the Company, shall be discharged from such trust.

Section 11.6 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, if any) 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, if any, to the Redemption Date; <u>provided</u>, <u>however</u>, that, unless otherwise specified as contemplated by Section 3.1, installments of interest whose Stated Maturity is on or prior to the Redemption Date will 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 3.7.

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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 11.7 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 its attorney duly authorized in writing), and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Security or Securities of the same series 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

SINKING FUNDS

Section 12.1 Applicability of Article.

The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of any series except as otherwise specified as contemplated by Section 3.1 for such Securities.

The minimum amount of any sinking fund payment provided for by the terms of any Securities is herein referred to as a "mandatory sinking fund payment," and any payment in excess of such minimum amount provided for by the terms of such Securities is herein referred to as an "optional sinking fund payment." If provided for by the terms of any Securities, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 12.2. Each sinking fund payment shall be applied to the redemption of Securities as provided for by the terms of such Securities.

Section 12.2 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 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 any Securities of such series required to be made pursuant to the terms of such Securities as and to the extent provided for by the terms of such Securities; <u>provided</u> that the Securities to be so credited have not been previously so credited. The Securities to be so credited shall be received and credited for such purpose by the Trustee at the Redemption Price, as specified in the Securities so to be redeemed, for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly.

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Section 12.3 Redemption of Securities for Sinking Fund.

Not fewer than 60 days prior to each sinking fund payment date for any Securities, the Company will deliver to the Trustee an Officers' Certificate specifying the amount of the next ensuing sinking fund payment for such Securities 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 pursuant to Section 12.2 and will also deliver to the Trustee any Securities to be so delivered. Not fewer than 30 days prior to 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 11.3 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 11.4. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 11.6 and 11.7.

ARTICLE 13

DEFEASANCE AND COVENANT DEFEASANCE

Section 13.1 Company's Option to Effect Defeasance or Covenant Defeasance.

The Company may elect, at its option at any time, to have Section 13.2 or Section 13.3 applied to any Securities or any series of Securities, as the case may be, designated pursuant to Section 3.1 as being defeasible pursuant to such Section 13.2 or 13.3, in accordance with any applicable requirements provided pursuant to Section 3.1 and upon compliance with the conditions set forth below in this Article. Any such election shall be evidenced by a Board Resolution or in another manner specified as contemplated by Section 3.1 for such Securities.

Section 13.2 Defeasance and Discharge.

Upon the Company's exercise of its option (if any) to have this Section applied to any Securities or any series of Securities, as the case may be, the Company shall be deemed to have been discharged from its obligations with respect to such Securities as provided in this Section on and after the date the conditions set forth in Section 13.4 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 such Securities and to have satisfied all its other obligations under such Securities and this Indenture insofar as such 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:

(1) the rights of Holders of such Securities to receive, solely from the trust fund described in Section 13.4 and as more fully set forth in such Section, payments in respect of the principal of and any premium and interest on such Securities when payments are due,

(2) the Company's obligations with respect to such Securities under Sections 3.4, 3.5, 3.6, 10.2 and 10.3, and, if applicable, Article 14,

(3) the rights, powers, trusts, duties and immunities of the Trustee hereunder, and

(4) this Article.

Subject to compliance with this Article, the Company may exercise its option (if any) to have this Section applied to any Securities notwithstanding the prior exercise of its option (if any) to have Section 13.3 applied to such Securities.

Section 13.3 Covenant Defeasance.

Upon the Company's exercise of its option (if any) to have this Section applied to any Securities or any series of Securities, as the case may be,

(1) the Company shall be released from any covenants provided pursuant to Sections 3.1(19), 9.1(2) or 9.1(7) for the benefit of the Holders of such Securities and

(2) the occurrence of any event specified in Section 5.1(4) (with respect to any such covenants provided pursuant to Section 3.1(19), 9.1(2) or 9.1(7)) and the occurrence of any other Event of Default specified pursuant to Section 3.1 shall be deemed not to be or result in an Event of Default,

in each case with respect to such Securities or any series of Securities as provided in this Section on and after the date the conditions set forth in Section 13.4 are satisfied (hereinafter called "Covenant Defeasance"). For this purpose, such Covenant Defeasance means that, with respect to such 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 5.1(4) and the occurrence of any other Event of Default specified pursuant to Section 3.1), whether directly or indirectly by reason of any reference elsewhere herein to any such Section or by reason of any reference in any other provision herein or in any other document, but the remainder of this Indenture and such Securities shall be unaffected thereby.

Section 13.4 Conditions to Defeasance or Covenant Defeasance.

The following shall be the conditions to the application of Section 13.2 or Section 13.3 to any Securities or any series of Securities, as the case may be:

(1) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee which satisfies the requirements contemplated by Section 6.9 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 Securities,

(A) in the case of Securities of a series denominated in currency of the United States of America,

(i) cash in currency of the United States of America 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, an amount in cash, or

(iii) a combination thereof, or

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(B) in the case of Securities of a series denominated in currency other than that of the United States of America,

(i) cash in the currency in which such series of Securities is denominated in an amount, or

(ii) Foreign 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, an amount in cash, 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 any premium and interest on such Securities on the respective Stated Maturities, in accordance with the terms of this Indenture and such Securities.

(2) In the event of an election to have Section 13.2 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel stating that (A) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or (B) since the date of this instrument, there has been a change in the applicable Federal income tax law, in either case (A) or (B) to the effect that, and based thereon such opinion shall confirm that, the Holders of such Securities will not recognize gain or loss for Federal income tax on the same amount, in the same times as would be the case if such deposit, Defeasance and discharge were not to occur.

(3) In the event of an election to have Section 13.3 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such 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 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.

(4) The Company shall have delivered to the Trustee an Officers' Certificate to the effect that neither such Securities nor any other Securities of the same series, if then listed on any securities exchange, will be delisted as a result of such deposit.

(5) No event which is, or after notice or lapse of time or both would become, an Event of Default with respect to such Securities or any other Securities shall have occurred and be continuing at the time of such deposit or, with regard to any such event specified in Sections 5.1(5) and (6), 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).

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(6) 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).

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

(8) 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.

(9) 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 13.5 Deposited Money, U.S. Government Obligations and Foreign Government Obligations to be Held in Trust; Miscellaneous Provisions.

Subject to the provisions of the last paragraph of Section 10.3, all money, U.S. Government Obligations and Foreign Government Obligations (including the proceeds thereof) deposited with the Trustee or other qualifying trustee (solely for purposes of this Section and Section 13.6, the Trustee and any such other trustee are referred to collectively as the "Trustee") pursuant to Section 13.4 in respect of any Securities shall be held in trust and applied by the Trustee, in accordance with the provisions of such 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 Securities, of all sums due and to become due thereon in respect of principal and any premium 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 or Foreign Government Obligations deposited pursuant to Section 13.4 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, U.S. Government Obligations or Foreign Government Obligations held by it as provided in Section 13.4 with respect to any Securities 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 Securities.

Section 13.6 Reinstatement.

If the Trustee or the Paying Agent is unable to apply any money in accordance with this Article with respect to any Securities 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 Securities from which the Company has been discharged or released pursuant to Section 13.2 or 13.3 shall be revived and reinstated as though no deposit had occurred pursuant to this Article with respect to such Securities, until such time as the Trustee or Paying Agent is permitted to apply all money held in trust pursuant to Section 13.5 with respect to such Securities in accordance with this Article; provided, however,

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that if the Company makes any payment of principal of or any premium or interest on any such Security following such reinstatement of its obligations, the Company shall be subrogated to the rights (if any) of the Holders of such Securities to receive such payment from the money so held in trust.

ARTICLE 14

CONVERSION OF SECURITIES

Section 14.1 Conversion.

The terms of any conversion provision that shall be applicable to the Securities of any series shall be set forth in one or more indentures supplemental hereto for the Securities of such series.

[Remainder of page intentionally left blank]

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

Pacific Biosciences of California, Inc.

By:_____

_____,

Title:_____

as Trustee

By:_____ Title:_____

Exhibit 4.4

PACIFIC BIOSCIENCES OF CALIFORNIA, INC.

TO

AS TRUSTEE

INDENTURE

DATED AS OF , 20

SUBORDINATED DEBT SECURITIES

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Pacific Biosciences of California, Inc.

Certain Sections of this Indenture relating to Sections 3.10 through 3.18, inclusive, of the Trust Indenture Act of 1939:

G .: 010	() (4)	
Section 310	(a)(1)	6.9
	(a)(2)	6.9
	(a)(3)	Not Applicable
	(a)(4)	Not Applicable
0 1 011	(b)	6.8, 6.10
Section 311	(a)	6.13
a b b c	(b)	6.13
Section 312	(a)	7.1, 7.2
	(b)	7.2
	(c)	7.2
Section 313	(a)	7.3
	(b)	7.3
	(c)	7.3
	(d)	7.3
Section 314	(a)	7.4
	(a)(4)	1.1, 10.4
	(b)	Not Applicable
	(c)(1)	1.2
	(c)(2)	1.2
	(c)(3)	Not Applicable
	(d)	Not Applicable
	(e)	1.2
Section 315	(a)	6.1
	(b)	6.2
	(c)	6.1
	(d)	6.1
	(e)	5.14
Section 316	(a)	1.1
	(a)(1)(A)	5.2, 5.12
	(a)(1)(B)	5.13
	(a)(2)	Not Applicable
	(b)	5.8
	(c)	1.4
Section 317	(a)(1)	5.3
	(a)(2)	5.4
	(b)	10.3
Section 318	(a)	1.7
		1.7

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

INDENTURE, dated as of , 20, between Pacific Biosciences of California, Inc., a corporation duly organized and existing under the laws of the State of Delaware (herein called the "Company"), having its principal executive office at 1305 O'Brien Drive, Menlo Park, California 94025, and , 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 unsecured subordinated 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.

The Indenture is subject to, and will be governed by, the provisions of the Trust Indenture Act that are required to be a part of and govern indentures qualified under the Trust Indenture Act.

NOW, THEREFORE, THIS INDENTURE WITNESSETH:

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

ARTICLE 1

DEFINITIONS AND OTHER PROVISIONS OF GENERAL APPLICATION

Section 1.1 Definitions.

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

(1) the terms defined in this Article have the meanings assigned to them in this Article and include the plural as well as the singular;

(2) all other terms used herein which are defined in the Trust Indenture Act, either directly or by reference therein, have the meanings assigned to them therein;

(3) all accounting terms not otherwise defined herein have the meanings assigned to them in accordance with generally accepted accounting principles in the United States of America, and, except as otherwise herein expressly provided, the term "generally accepted accounting principles" with respect to any computation required or permitted hereunder shall mean such accounting principles in the United States of America as are generally accepted at the date of such computation;

(4) all references to "\$" refer to the lawful currency of the United States of America;

(5) unless the context otherwise requires, any reference to an "Article" or a "Section" refers to an Article or a Section, as the case may be, of this Indenture; and

(6) 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 1.4.

"Additional Interest" has the meaning specified in Section 5.2(b).

"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.

"Authenticating Agent" means any Person authorized by the Trustee pursuant to Section 6.14 to act on behalf of the Trustee to authenticate Securities of one or more series.

"Board of Directors" means either the board of directors of the Company or any duly authorized committee of that board empowered to act for it with respect to this Indenture.

"Board Resolution" means a copy of a resolution certified by the Secretary or an Assistant Secretary of the Company to have been duly adopted by the Board of Directors and to be in full force and effect on the date of such certification, 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 are authorized or obligated by law or executive order to close.

"Commission" means the Securities and Exchange Commission, 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.

"Common Stock" includes any stock of any class of the Company which has no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company and which is not subject to redemption by the Company; <u>provided</u>, <u>however</u>, subject to the provisions of Article 14 and any indenture supplemental hereto, shares issuable upon conversion of Securities shall include only shares of the class designated as Common Stock of the Company at the date of this Indenture or shares of any class or classes resulting from any reclassification or reclassifications thereof and which have no preference in respect of dividends or of amounts payable in the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Company and which are not subject to redemption by the Company; <u>provided</u>, <u>further</u>, that if at any time there shall be more than one such resulting class, the shares of each such class then so issuable shall be substantially in the proportion which the total number of shares of such class resulting from all such reclassifications bears to the total number of shares of all such classes resulting from all such reclassifications.

"Company" means the corporation 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.

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"Company Request" or "Company Order" means a written request or order signed by any two of the following in the name of the Company: the Chairman of the Board, the Vice Chairman of the Board, the Chief Executive Officer, the President or any executive officer, the principal financial officer, the principal accounting officer, the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary of the Company, and delivered to the Trustee.

"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.

"Corporate Trust Office" means the corporate trust office of the Trustee at , Attention: Corporate Trust Department, or such other office, designated by the Trustee by written notice to the Company, at which at any particular time its corporate trust business shall be administered.

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

"Covenant Defeasance" has the meaning specified in Section 13.3.

"Defaulted Interest" has the meaning specified in Section 3.7.

"Defeasance" has the meaning specified in Section 13.2.

"Depositary" means, with respect to Securities of any series issuable in whole or in part in the form of one or more Global Securities, a clearing agency registered under the Exchange Act that is designated to act as Depositary for such Securities as contemplated by Section 3.1.

"Designated Senior Debt" means the Company's obligations under any particular Senior Debt in which the instrument creating or evidencing the same or the assumption or guarantee thereof (or related agreements or documents to which the Company is a party) expressly provides that such Senior Debt shall be "Designated Senior Debt" for purposes of this Indenture (provided, that such instrument, agreement or other document may place limitations and conditions on the right of such Senior Debt to exercise the rights of Designated Senior Debt). If any payment made to any holder of any Designated Senior Debt or its Representative with respect to such Designated Senior Debt is rescinded or must otherwise be returned by such holder or Representative upon the insolvency, bankruptcy or reorganization of the Company or otherwise, the reinstated Indebtedness of the Company arising as a result of such rescission or return shall constitute Designated Senior Debt effective as of the date of such rescission or return.

"euro" or "euros" means the currency adopted by those nations participating in the third stage of the economic and monetary union provisions of the Treaty on European Union, signed at Maastricht on February 7, 1992.

"European Economic Area" means the member nations of the European Economic Area pursuant to the Oporto Agreement on the European Economic Area dated May 2, 1992, as amended.

"European Union" means the member nations of the European Union established by the Treaty of European Union, signed at Maastricht on February 7, 1992, which amended the Treaty of Rome establishing the European Community.

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"Event of Default" has the meaning specified in Section 5.1.

"Exchange Act" means the Securities Exchange Act of 1934 and any statute successor thereto, in each case as amended from time to time.

"Expiration Date" has the meaning specified in Section 1.4.

"Foreign Government Obligation" means with respect to Securities of any series which are not denominated in the currency of the United States of America (x) any security which is (i) a direct obligation of the government which issued or caused to be issued the currency in which such security is denominated and for the payment of which obligations its full faith and credit is pledged or, with respect to Securities of any series which are denominated in euros, a direct obligation of any member nation of the European Union for the payment of which obligation the full faith and credit of the respective nation is pledged so long as such nation has a credit rating at least equal to that of the highest rated member nation of the European Economic Area, or (ii) an obligation of a Person controlled or supervised by and acting as an agency or instrumentality of a government specified in clause (i) above the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by the such government, which, in either case (i) or (ii), 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 Foreign 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 Foreign Government Obligation which 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 Foreign Government Obligation or the specific payment of principal or interest evidenced by such depositary receipt.

"Global Security" means, with respect to any series of Securities, a Security executed by the Company and delivered by the Trustee to the Depositary or held by the Trustee as custodian for the Depositary pursuant to a safekeeping agreement with the Depositary, all in accordance with the Indenture, which shall be registered in global form without interest coupons in the name of the Depositary or its nominee.

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

"Indebtedness" means, with respect to any Person, and without duplication, whether absolute or contingent, secured or unsecured, due or to become due, (a) all indebtedness, obligations and other liabilities (contingent or otherwise) of such Person evidenced by a credit or loan agreement, note, bond, debenture, or other written obligation (whether or not the recourse of the lender is to the whole of the assets of such person or to only a portion thereof) or for money borrowed (including obligations of such Person in respect of overdrafts, foreign exchange contracts, currency exchange agreements, interest rate protection agreements, and any loans or advances from banks, whether or not evidenced by notes or similar instruments); (b) all obligations and liabilities (contingent or otherwise) of such Person evidenced by a note or similar instrument given in connection with the acquisition of any businesses, properties or assets of any kind; (c) all obligations and liabilities (contingent or otherwise) in respect of leases of such Person required, in conformity with generally accepted accounting principles, to be accounted for as capitalized lease obligations on the balance sheet of such Person and all obligations and other liabilities (contingent or otherwise) or as lessee under any leases or related documents for facilities, capital equipment or related assets, whether or not capitalized, entered into or leased for financing purposes; (d) all obligations of such Person (contingent or otherwise) with

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respect to interest rate and currency swaps, caps, floors, collars, hedge agreements, forward contracts or similar agreements or arrangements; (e) all obligations and other liabilities (contingent or otherwise) of such Person with respect to letters of credit, bankers' acceptances or similar facilities, including reimbursement obligations with respect to the foregoing; (f) all obligations and liabilities of such Person or assumed as the deferred purchase price of property or services, but excluding trade accounts payable and accrued liabilities arising in the ordinary course of business; (g) all obligations of the type referred to in (a) through (f) above of another Person the payment of which, in either case, such Person has assumed or guaranteed or for which such Person is responsible or liable directly or indirectly, jointly or severally, as obligor, guarantor or otherwise, or which are secured by a lien on such Person's property; and (h) any and all renewals, extensions, modifications, replacements, restatements and refundings of, or, any indebtedness or obligation issued in exchange for, any such indebtedness or obligation of the kind described in clauses (a) through (g) above.

"Indenture" means this instrument as originally executed and 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, for all purposes of this instrument and any such supplemental indenture, 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. The term "Indenture" shall also include the terms of particular series of Securities established as contemplated by Section 3.1; provided, however, that if at any time more than one Person is acting as Trustee under this Indenture due to the appointment of one or more separate Trustees for any one or more separate series of Securities, "Indenture" shall mean, with respect to such series of Securities for which any such Person is Trustee, 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 and shall include the terms of particular series of Securities for which such Person is Trustee established as contemplated by Section 3.1, exclusive, however, of any provisions or terms which relate solely to other series of Securities for which such Person is not Trustee, regardless of when such terms or provisions were adopted, and exclusive of any provisions or terms adopted by means of one or more indentures supplemental hereto executed and delivered after such Person had become such Trustee, but to which such person, as such Trustee, was not a party; provided, further that in the event that this Indenture is supplemented or amended by one or more indentures supplemental hereto which are only applicable to certain series of Securities, the term "Indenture" for a particular series of Securities shall only include the supplemental indentures applicable thereto.

"interest," when used with respect to an Original Issue Discount Security, which by its terms bears interest only at Maturity, means interest payable at Maturity.

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

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

"Maturity," when used with respect to any Security, means the date on which the principal of such Security or an installment of principal becomes due and payable as therein or herein provided, whether at the Stated Maturity or by declaration of acceleration, repurchase at the option of the Holder, upon redemption or otherwise.

"Non-Payment Default" has the meaning specified in Section 15.2.

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"Notice of Default" means a written notice of the kind specified in Section 5.1(4).

"Officers' Certificate" means a certificate signed by any two of the following in the name of the Company: the Chairman of the Board, a Vice Chairman of the Board, the Chief Executive Officer, the President, any executive officer, the principal financial officer, the principal accounting officer, the Treasurer, an Assistant Treasurer, the Secretary or an Assistant Secretary, of the Company, and delivered to the Trustee. One of the officers signing an Officers' Certificate given pursuant to Section 10.4 shall be the principal executive or principal financial officer of the Company.

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

"Original Issue Discount Security" means any 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 pursuant to Section 5.2.

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

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

(2) Securities 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; <u>provided</u> that, if such Securities are to be redeemed, notice of such redemption has been duly given pursuant to this Indenture or provision therefor satisfactory to the Trustee has been made;

(3) Securities as to which Defeasance has been effected pursuant to Section 13.2; and

(4) Securities which have been paid pursuant to Section 3.6 or in exchange for or in lieu of which other Securities have been authenticated and delivered pursuant to this Indenture, other than any such Securities in respect of which there shall have been presented to the Trustee proof satisfactory to it that such Securities are held by a bona fide purchaser in whose hands such Securities are valid obligations of the Company;

provided, however, that in determining whether the Holders of the requisite principal amount of the Outstanding Securities have given, made or taken any request, demand, authorization, direction, notice, consent, waiver or other action hereunder as of any date, (A) 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 5.2, (B) if, as of such date, the principal amount payable at the Stated Maturity of a Security is not determinable, the principal amount of such Security which shall be deemed to be Outstanding shall be the amount of a Security denominated in one or more non-U.S. dollar 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 3.1, of the principal amount of such Security described in clause (A) or (B) above, of the amount determined as provided in such clause), and (D) Securities owned

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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, waiver or other action, only Securities which 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 or any premium or interest on any Securities on behalf of the Company.

"Payment Blockage Notice" has the meaning specified in Section 15.2.

"Payment Default" has the meaning specified in Section 15.2.

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

"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 and interest on the Securities of that series are payable as specified as contemplated by Section 3.1.

"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 3.6 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.

(A) "Prospectus" means the prospectus (including any prospectus supplement) used with respect to the offer and sale of the Securities of any series.

"Record Date" means any Regular Record Date or Special Record Date.

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

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

"Regular Record Date" for the interest payable on any Interest Payment Date on the Securities of any series means the date specified for that purpose as contemplated by Section 3.1.

"Reporting Default" has the meaning specified in Section 5.2(b).

"Representative" means the (a) indenture trustee or other trustee, agent or representative for any Senior Debt or (b) with respect to any Senior Debt that does not have any such trustee, agent or other representative, (i) in the case of such Senior Debt issued pursuant to an agreement providing for voting arrangements as among the holders or owners of such Senior Debt, any holder or owner of such Senior Debt acting with the consent of the required persons necessary to bind such holders or owners of such Senior Debt and (ii) in the case of all other such Senior Debt, the holder or owner of such Senior Debt.

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"Responsible Officer" means, when used with respect to the Trustee, an officer of the Trustee in the Corporate Trust Office assigned and duly authorized by the Trustee to administer its corporate trust matters.

"Securities" has the meaning stated in the first recital of this Indenture and more particularly means any Securities authenticated and delivered under this Indenture.

"Securities Act" means the Securities Act of 1933 and any statute successor thereto, in each case as amended from time to time.

"Security Register" and "Security Registrar" have the respective meanings specified in Section 3.5.

"Senior Debt" means the principal of, premium, if any, interest (including all interest accruing subsequent to the commencement of any bankruptcy or similar proceeding, whether or not a claim for post-petition interest is allowable as a claim in any such proceeding) and rent payable on or in connection with, and all fees, costs, expenses and other amounts accrued or due on or in connection with, Indebtedness of the Company, whether outstanding on the date of this Indenture or thereafter created, incurred, assumed, guaranteed or in effect guaranteed by the Company (including all deferrals, renewals, extensions or refundings of, or amendments, modifications or supplements to, the foregoing), unless in the case of any particular Indebtedness the instrument creating or evidencing the same or the assumption or guarantee thereof expressly provides that such Indebtedness shall not be senior in right of payment to the Securities or expressly provides that such Indebtedness of the Company to any Subsidiary of the Company. If any payment made to any holder of any Senior Debt or its Representative with respect to such Senior Debt is rescinded or must otherwise be returned by such holder or Representative upon the insolvency, bankruptcy or reorganization of the Company or otherwise, the reinstated Indebtedness of the Company arising as a result of such rescission or return shall constitute Senior Debt effective as of the date of such rescission or return.

"Special Record Date" for the payment of any Defaulted Interest means a date fixed by the Trustee pursuant to Section 3.7.

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

"Subsidiary" means a Person of which at least a majority of the outstanding voting stock having the power to elect a majority of the board of directors of such Person (in the case of a corporation) is, or of which at least a majority of the equity interests (in the case of a Person which is not a corporation) are, at the time 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 or similar interests to the Company which ordinarily has or have voting power for the election of directors or persons performing similar functions, whether at all times or only so long as no senior class of stock or other interests has or have such voting power by reason of any contingency.

"Trust Indenture Act" means the Trust Indenture Act of 1939 as in force at the date as of which this instrument was executed; <u>provided</u>, <u>however</u>, 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.

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"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 or include each Person who is then a Trustee hereunder, and if at any time there is more than one such Person, "Trustee" as used with respect to the Securities of any series shall mean the Trustee with respect to Securities of that series.

"U.S. Government Obligation" means (x) any security which is (i) 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 (ii) 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 (i) or (ii), 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, <u>provided</u> 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.

Section 1.2 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, and shall comply with the requirements of the Trust Indenture Act and any other requirements set forth in this Indenture.

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

(1) a statement that each individual signing such certificate or opinion has read such covenant or condition and the definitions herein relating thereto;

(2) a brief statement as to the nature and scope of the examination or investigation upon which the statements or opinions contained in such certificate or opinion are based;

(3) a statement that, in the opinion of each such individual, he or she has made such examination or investigation as is necessary to enable him or her to express an informed opinion as to whether or not such covenant or condition has been complied with; and

(4) a statement as to whether, in the opinion of each such individual, such condition or covenant has been complied with.

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Section 1.3 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 or her 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.

(B) Any such certificate or opinion of an officer of the Company or of counsel may be based, insofar as it relates to accounting matters, upon a certificate or opinion of, or representations by, an accountant or firm of accountants in the employ of the Company, unless such officer or counsel, as the case may be, knows, that the certificate or opinion or representations with respect to the accounting matters upon which his or her certificate or opinion are based 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 1.4 Acts of Holders; Record Dates.

Any request, demand, authorization, direction, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made 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 an 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. The Trustee shall promptly deliver to the Company copies of any such instrument or instruments delivered to the Trustee. 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 6.1) conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section.

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 or her the execution thereof. Where such execution is by a signer acting in a capacity other than his or her individual capacity, such certificate or affidavit shall also constitute sufficient proof of his or her 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 that the Trustee deems sufficient.

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

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.

The Company may set any day as a record date for the purpose of determining the Holders of Outstanding Securities of any series entitled to give, make or take any request, demand, authorization, direction, vote, notice, consent, waiver or other action provided or permitted by this Indenture to be given, made or taken by Holders of Securities of such series. If any record date is set pursuant to this paragraph, the Holders of Outstanding Securities of the relevant series on such record date, and no other Holders, shall be entitled to take the relevant action, whether or not such Holders remain Holders after such record date; provided that no such action shall be effective hereunder unless taken on or prior to the applicable Expiration Date by Holders of the requisite principal amount of Outstanding Securities of such series on such record date. Nothing in this paragraph shall be construed to prevent the Company from setting a new record date for any action for which a record date has previously been set pursuant to this paragraph (whereupon the record date previously set shall automatically and with no action by any Person be canceled and of no effect), and nothing in this paragraph shall be construed to render ineffective any action taken by Holders of the requisite principal amount of Outstanding Securities of the relevant series on the date such action is taken. Promptly after any record date is set pursuant to this paragraph, the Company, at its own expense, shall cause notice of such record date, the proposed action by Holders and the applicable Expiration Date to be given to the Trustee in writing and to each Holder of Securities of the relevant series in the manner set forth in Section 1.6.

With respect to any record date set pursuant to this Section, the Company may designate any day as the "Expiration Date" and from time to time may change the Expiration Date to any earlier or later day; <u>provided</u> that no such change shall be effective unless notice of the proposed new Expiration Date is given to the Trustee in writing, and to each Holder of Securities of the relevant series in the manner set forth in Section 1.6, on or prior to the existing Expiration Date. If an Expiration Date is not designated with respect to any record date set pursuant to this Section, the Company shall be deemed to have initially designated the 180th day after such record date as the Expiration Date with respect thereto, subject to its right to change the Expiration Date as provided in this paragraph. Notwithstanding the foregoing, no Expiration Date shall be later than the 180th day after the applicable record date.

Without limiting the foregoing, a Holder entitled hereunder to take any action hereunder with regard to any particular Security may do so with regard to all or any part of the principal amount of such Security or by one or more duly appointed agents each of which may do so pursuant to such appointment with regard to all or any part of such principal amount.

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Section 1.5 Notices, etc., to Trustee and Company.

Any request, demand, authorization, direction, notice, consent, waiver or Act of Holders or other document provided or permitted by this Indenture to be made upon, given or furnished to, or filed with,

(1) the Trustee by any Holder or by the Company shall be sufficient for every purpose hereunder if made, given, furnished or filed in writing (or by facsimile transmissions, <u>provided</u> that oral confirmation of receipt shall have been received) to or with the Trustee at its Corporate Trust Office, Attention: Corporate Trust Department, or

(2) the Company by the Trustee or by any Holder shall be sufficient for every purpose hereunder (unless otherwise herein expressly provided) if in writing and mailed, first-class postage prepaid, personally delivered or sent via overnight courier 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: Chief Financial Officer.

Section 1.6 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 by first-class postage prepaid, or delivered by hand or overnight courier, to each Holder affected by such event, at its 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. Neither the failure to mail or deliver by hand or overnight courier any notice, nor any defect in any notice so mailed or delivered by hand or overnight courier, to any particular Holder shall affect the sufficiency of such notice with respect to other Holders. 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 1.7 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 the Trust Indenture 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, which 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 1.8 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 1.9 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 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 1.11 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 successors hereunder, the holders of Senior Debt and the Holders, any benefit or any legal or equitable right, remedy or claim under this Indenture.

Section 1.12 Governing Law.

THIS INDENTURE AND THE SECURITIES SHALL BE GOVERNED BY AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF NEW YORK.

Section 1.13 Legal Holidays.

In any case where any Interest Payment Date, Redemption Date or Stated Maturity of any Security or the last date on which a Holder has the right to convert a Security at a particular conversion price or conversion rate, as the case may be, shall not be a Business Day at any Place of Payment, then (notwithstanding any other provision of this Indenture or of the Securities (other than a provision of any Security which specifically states that such provision shall apply in lieu of this Section)) payment of interest or principal (and premium, if any) or, if applicable to a particular series of Securities, conversion 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 Redemption Date, at the Stated Maturity or on such last day for conversion, as the case may be.

Section 1.14 Indenture and Securities Solely Corporate Obligations.

No recourse for the payment of the principal of or premium, if any, or interest on any Security, or for any claim based thereon or otherwise in respect thereof, and no recourse under or upon any obligation, covenant or agreement of the Company in this Indenture or in any supplemental indenture or in any Security, or because of the creation of any indebtedness represented thereby, shall be had against any incorporator, stockholder, employee, agent, officer, or director or subsidiary, as such, past, present or future, of the Company or of any successor corporation, either directly or through the Company or any successor corporation, whether by virtue of any constitution, statute or rule of law, or by the enforcement of any assessment or penalty or otherwise; it being expressly understood that all such liability is hereby expressly waived and released as a condition of, and as a consideration for, the execution of this Indenture and the issue of the Securities.

Section 1.15 Indenture May be Executed in Counterparts.

This instrument may be executed in any number of counterparts, each of which shall be an original, but such counterparts shall together constitute but one and the same instrument.

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ARTICLE 2

SECURITY FORMS

Section 2.1 Forms Generally.

The Securities of each series shall be in substantially such form as shall be established by or pursuant to a Board Resolution and as set forth in such Board Resolution (including such terms as set forth in any form of Securities for each series approved by such Board Resolution) or, to the extent established pursuant to rather than set forth in a Board Resolution, in an Officers' Certificate detailing such establishment (including any exhibit attached thereto), or 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 or as may, consistently herewith, be determined by the officers executing such Securities, as evidenced by their execution thereof. If the form of Securities of any series is 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 Company Order contemplated by Section 3.3 for the authentication and delivery of such Securities. Any such Board Resolution or record of such action shall have attached thereto a true and correct copy of the form of Security referred to therein approved by or pursuant to such Board Resolution.

The definitive Securities shall be printed, lithographed or engraved on steel engraved borders or may be produced in any other manner, all as determined by the officers executing such Securities, as evidenced by their execution of such Securities.

Section 2.2 Reserved.

Section 2.3 Reserved.

Section 2.4 Form of Legend for Global Securities.

Unless otherwise specified as contemplated by Section 3.1 for the Securities evidenced thereby, every Global Security authenticated and delivered 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.

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Section 2.5 Form of Trustee's Certificate of Authentication.

The Trustee's certificates of authentication shall be in substantially the following form:

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

as Trustee

By:

Authorized Officer

ARTICLE 3

THE SECURITIES

Section 3.1 Amount Unlimited; Issuable in Series.

The aggregate principal amount of Securities that may be authenticated and delivered under this Indenture is unlimited.

The Securities may be issued in one or more series up to the aggregate principal amount of Securities of that series from time to time authorized by or pursuant to a Board Resolution of the Company, pursuant to one or more indentures supplemental hereto or pursuant to an Officers' Certificate pursuant to a uthority granted under a Board Resolution. Prior to the initial issuance of Securities of any series, there shall be established in or pursuant to a Board Resolution of the Company and set forth in an Officers' Certificate of the Company, established in one or more indentures supplemental hereto, or established in an Officers' Certificate pursuant to a Board Resolution with respect to the Securities of the series:

(1) the title of the Securities of the series (which shall distinguish the Securities of the series from Securities of any other series);

(2) 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 3.4, 3.5, 3.6, 9.6 or 11.7 and except for any Securities which, pursuant to Section 3.3, are deemed never to have been authenticated and delivered hereunder);

(3) the Person to whom any interest on a Security of the series shall be payable, if other than the Person in whose name that Security (or one or more Predecessor Securities) is registered at the close of business on the Regular Record Date for such interest;

(4) the date or dates on which the principal of any Securities of the series is payable;

(5) the rate or rates (which may be fixed or variable) at which any Securities of the series shall bear interest, if any, the date or dates from which any such interest shall accrue, the Interest Payment Dates on which any such interest shall be payable and the Regular Record Date for any such interest payable on any Interest Payment Date (or the method for determining the dates and rates);

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(6) the place or places where the principal of and any premium and interest on any Securities of the series shall be payable;

(7) the period or periods within which, the price or prices at which and the terms and conditions upon which any 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;

(8) the obligation, if any, of the Company to redeem or purchase any Securities of the series pursuant to any sinking fund or analogous provisions or any redemption or purchase at the option of the Holder thereof and the period or periods within which, the price or prices at which and the terms and conditions upon which any Securities of the series shall be redeemed or purchased, in whole or in part, pursuant to such obligation;

(9) if other than denominations of \$1,000 and any integral multiple thereof, the denominations in which any Securities of the series shall be issuable;

(10) if the amount of principal of or any premium or interest on any Securities of the series may be determined with reference to an index or pursuant to a formula, the manner in which such amounts shall be determined;

(11) if other than the currency of the United States of America, the currency, currencies or currency units in which the principal of or any premium or interest on any Securities of the series shall be payable and the manner of determining the equivalent thereof in the currency of the United States of America for any purpose, including for purposes of the definition of "Outstanding" in Section 1.1;

(12) 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);

(13) the percentage of the principal amount at which the Securities will be issued, and, if other than the entire principal amount thereof, the portion of the principal amount of any Securities of the series which shall be payable upon declaration of acceleration of the Maturity thereof pursuant to Section 5.2;

(14) 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);

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(15) if applicable, that the Securities of the series, in whole or any specified part, shall be defeasible pursuant to Section 13.2 or Section 13.3 or both such Sections, or any other defeasance provisions applicable to any Securities of the series, and, if other than by a Board Resolution, the manner in which any election by the Company to defease such Securities shall be evidenced;

(16) if applicable, the terms of any right to convert or exchange Securities of the series;

(17) if applicable, that any Securities of the series shall be issuable in whole or in part in the form of one or more Global Securities and, in such case, the respective Depositaries for such Global Securities, the form of any legend or legends which shall be borne by any such Global Security in addition to or in lieu of that set forth in Section 2.4 and any circumstances in addition to or in lieu of those set forth in clause (2) of the last paragraph of Section 3.5 in which any such Global Security may be exchanged in whole or in part for Securities registered, and any transfer of such Global Security in whole or in part may be registered, in the name or names of Persons other than the Depositary for such Global Security or a nominee thereof;

(18) any deletion of or 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 5.2;

(19) any addition to or change in or modification to the subordinated provisions of this Indenture relating to the Securities of that series (including the provisions of Article 15), or different subordination provisions, including a different definition of "Senior Debt" or "Designated Senior Debt," will apply to Securities of the series;

(20) any deletion of or addition to or change in the covenants set forth in Article 10 which applies to Securities of the series;

(21) any Authenticating Agents, Paying Agents, Security Registrars or such other agents necessary in connection with the issuance of the Securities of such series, including, without limitation, exchange rate agents and calculation agents;

(22) if applicable, the terms of any security that will be provided for a series of Securities, including provisions regarding the circumstances under which collateral may be released or substituted;

(23) if applicable, the terms of any guaranties for the Securities and any circumstances under which there may be additional obligors on the Securities;

(24) any provisions granting special rights to holders when a specified event occurs;

(25) any special tax provisions that apply to any series of Securities;

(26) with respect to any series of Securities that do not bear interest, the date for certain required reports to the Trustee;

(27) any special interest premium or other premium;

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(28) any and all additional, eliminated or changed terms that will apply to such series of Securities; and

(29) any other terms of the series of Securities (which terms shall not be inconsistent with the provisions of this Indenture, except as permitted by Section 9.1(5)).

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 3.3) set forth, or determined in the manner provided, in the Officers' Certificate (including any exhibit attached thereto) referred to above or in any such indenture supplemental hereto.

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 (including any exhibit attached thereto) setting forth the terms of the series.

The Securities shall be subordinated in right of payment to Senior Debt as provided in Article 15.

Section 3.2 Denominations.

The Securities of each series shall be issuable only in registered form without coupons and only in such denominations as shall be specified as contemplated by Section 3.1. In the absence of any such specified denomination with respect to the Securities of any series, the Securities of such series shall be issuable in denominations of \$1,000 and any integral multiple thereof.

Section 3.3 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 principal financial officer, its principal accounting officer, its President or one of its executive officers, and attested by its Treasurer, its Secretary or one of its Assistant Treasurers or 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 2.1 and 3.1, 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 6.1) shall be fully protected in relying upon, a certified copy of such Board Resolution, an Officers' Certificate setting forth the terms of the series or supplemental indenture hereto and an Opinion of Counsel (which Opinion of Counsel may contain customary qualifications and exceptions), with such Opinion of Counsel stating,

(1) if the form of such Securities has been established by or pursuant to Board Resolution as permitted by Section 2.1, that such form has been established in conformity with the provisions of this Indenture;

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(2) if the terms of such Securities have been established by or pursuant to Board Resolution as permitted by Section 3.1, that such terms have been established in conformity with the provisions of this Indenture; and

(3) 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 binding obligations of the Company enforceable in accordance with their terms, subject to bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and similar laws of general applicability relating to or affecting creditors' rights and to general equity principles.

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

Notwithstanding the provisions of Section 3.1 and of this Section 3.3, if all Securities of a series are not to be originally issued at one time, it shall not be necessary to deliver an Officers' Certificate or supplemental indenture hereto otherwise required pursuant to Section 3.1 or the Company Order and Opinion of Counsel otherwise required pursuant to this Section 3.3 at or prior to the authentication of each Security of such series if such documents are delivered at or prior to the 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. Notwithstanding the foregoing, 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 3.9, 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.

Neither the Company nor the Trustee shall have any responsibility for any defect in the CUSIP number that appears on any Security, check, advice of payment or redemption notice, and any such document may contain a statement to the effect that CUSIP numbers have been assigned by an independent service for convenience of reference and that neither the Company nor the Trustee shall be liable for any inaccuracy in such numbers.

Section 3.4 Temporary Securities.

Pending the preparation of definitive Securities of any series, the Company may execute, and upon Company Order the Trustee shall authenticate and deliver, temporary Securities which are printed, lithographed, typewritten, mimeographed or otherwise produced, in any authorized denomination,

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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 one or more definitive Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount. 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 and tenor.

Section 3.5 Registration; Registration of Transfer and Exchange.

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 of the Company 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" for the purpose of registering Securities and transfers of Securities as herein provided.

Upon surrender for registration of transfer of any Security of a series at the 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 like tenor and aggregate principal amount.

At the option of the Holder, Securities of any series may be exchanged for other Securities of the same series, of any authorized denominations and of like tenor and aggregate principal amount, 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 that 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 its attorney duly authorized in writing.

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 3.4, 9.6 or 11.7 not involving any transfer.

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If the Securities of any series (or of any series and specified tenor) are to be redeemed in part, the Company shall not be required (A) to issue, register the transfer of or exchange any Securities of that series (or of that series and specified tenor, as the case may be) during a period beginning at the opening of business 15 days before the day of the mailing of a notice of redemption of any such Securities selected for redemption under Section 11.3 and ending at the close of business on the day of such mailing, or (B) to register the transfer of or exchange any Security so selected for redemption in whole or in part, except the unredeemed portion of any Security being redeemed in part.

The provisions of clauses (1), (2), (3) and (4) below shall apply only to Global Securities:

(1) Each Global Security authenticated under this Indenture shall be registered in the name of the Depositary designated for such Global Security or a nominee thereof and delivered to such Depositary or a nominee thereof or custodian therefor, and each such Global Security shall constitute a single Security for all purposes of this Indenture.

(2) Notwithstanding any other provision in this Indenture, no Global Security may be exchanged in whole or in part for Securities registered, and no transfer of a Global Security in whole or in part may be registered, in the name of any Person other than the Depositary for such Global Security or a nominee thereof unless (A) such Depositary (i) has notified the Company that it 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, (B) there shall have occurred and be continuing an Event of Default with respect to such Global Security or (C) there shall exist such circumstances, if any, in addition to or in lieu of the foregoing as have been specified for this purpose as contemplated by Section 3.1.

(3) Subject to clause (2) above, any exchange of a Global Security for other Securities may be made in whole or in part, and all Securities issued in exchange for a Global Security or any portion thereof shall be registered in such names as the Depositary for such Global Security shall direct.

(4) Every Security authenticated and delivered upon registration of transfer of, or in exchange for or in lieu of, a Global Security or any portion thereof, whether pursuant to this Section, Section 3.4, 3.6, 9.6 or 11.7 or otherwise, shall be authenticated and delivered in the form of, and shall be, a Global Security, unless such Security is registered in the name of a Person other than the Depositary for such Global Security or a nominee thereof.

Section 3.6 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 bona fide 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 a number not contemporaneously outstanding.

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In case any such mutilated, destroyed, lost or stolen Security has become or is about to become due and payable, 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 of any series 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 of that series 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 3.7 Payment of Interest; Interest Rights Preserved.

Except as otherwise provided as contemplated by Section 3.1 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 (1) or (2) below:

(1) 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. 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 given to each Holder of Securities of such series in the manner set forth in Section 1.6, not less than 10 days

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prior to such Special Record Date. Notice of the proposed payment of such Defaulted Interest and the Special Record Date therefor having been so given, 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 (2).

(2) The Company may make payment of any Defaulted Interest on the Securities of any series in any other lawful manner not inconsistent with the requirements of any securities exchange on which such 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 3.8 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 any premium and (subject to Section 3.7) any 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 3.9 Cancellation.

All Securities surrendered for payment, redemption, registration of transfer or exchange or for credit against any sinking fund payment shall, if surrendered to any Person other than the Trustee, be delivered to the Trustee and shall be promptly canceled by it. The Company may at any time deliver to the Trustee for cancellation any Securities previously authenticated and delivered hereunder which the Company may have acquired in any manner whatsoever, and may deliver to the Trustee (or to any other Person for delivery to the Trustee) for cancellation any Securities previously authenticated hereunder which the Company has not issued and sold, and all Securities so delivered shall be promptly canceled by the Trustee. No Securities shall be authenticated in lieu of or in exchange for any Securities canceled as provided in this Section, except as expressly permitted by this Indenture. All canceled Securities held by the Trustee shall be disposed of in accordance with its customary procedures.

Section 3.10 Computation of Interest.

Except as otherwise specified as contemplated by Section 3.1 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.

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ARTICLE 4

SATISFACTION AND DISCHARGE

Section 4.1 Satisfaction and Discharge of Indenture.

This Indenture shall upon Company Request 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, at the expense of the Company, shall execute proper instruments acknowledging satisfaction and discharge of this Indenture, when

(1) either

(A) all Securities theretofore authenticated and delivered (other than (i) Securities which have been destroyed, lost or stolen and which have been replaced or paid as provided in Section 3.6 and (ii) Securities for whose payment money has theretofore been deposited in trust or segregated and held in trust by the Trustee or the Company and thereafter repaid to the Company or discharged from such trust, as provided in Section 10.3) have been delivered to the Trustee for cancellation; or

(B) all such Securities not theretofore delivered to the Trustee for cancellation

(i) have become due and payable, or

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

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

(C) and the Company, in the case of (i), (ii) or (iii) above, has deposited or caused to be deposited with the Trustee as trust funds in trust for the purpose money in an amount sufficient to pay and discharge the entire indebtedness on such Securities not theretofore delivered to the Trustee for cancellation, for principal and any premium and interest to the date of such deposit (in the case of Securities which have become due and payable) or to the Stated Maturity or Redemption Date, as the case may be;

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

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

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 6.7, the obligations of the Trustee to any Authenticating Agent under Section 6.14 and, if money shall have been deposited with the Trustee pursuant to subclause (B) of clause (1) of this Section, the obligations of the Trustee under Section 4.2 and the last paragraph of Section 10.3 shall survive.

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Section 4.2 Application of Trust Money.

Subject to the provisions of the last paragraph of Section 10.3, all money deposited with the Trustee pursuant to Section 4.1 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 any premium and interest for whose payment such money has been deposited with the Trustee.

ARTICLE 5 REMEDIES

Section 5.1 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 occasioned by the provisions of Article 15 or 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), unless in the Board Resolution (or an Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing such series, it is provided that such series shall not have the benefit of said Event of Default:

(1) default in the payment of the principal or the Redemption Price of or any premium on any Security of that series at its Maturity; or

(2) 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

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

(4) default in the performance, or breach, of any covenant or warranty of the Company in this Indenture (other than a covenant or warranty a default in whose performance or whose breach is elsewhere in this Section specifically dealt with or which has expressly been included in this Indenture solely for the benefit of series of Securities other than that series), and continuance of such default or breach for a period of 90 days after there has been given, by registered or certified mail, to the Company by the Trustee or to the Company and the Trustee by the Holders of at least 25% in principal amount of the Outstanding Securities of that series a written notice specifying such default or breach and requiring it to be remedied and stating that such notice is a "Notice of Default" hereunder; or

(5) the entry by a court having jurisdiction in the premises of (A) 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 (B) 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 90 consecutive days; or

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(6) 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

(7) any other Event of Default provided with respect to Securities of that series in the Board Resolution (or in an Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing that series.

Section 5.2 Acceleration of Maturity; Rescission and Annulment.

(a) Unless the Board Resolution (or Officers' Certificate detailing such establishment pursuant to such Board Resolution) or supplemental indenture establishing such series provides otherwise, if an Event of Default (other than an Event of Default specified in Section 5.1(5) or 5.1(6)) with respect to Securities of any series at the time Outstanding occurs and is continuing, then in every such case the Trustee or the Holders of not less than 25% in principal amount of the Outstanding Securities of that series may declare the principal amount of all the Securities of that series (or, if any Securities of that series are Original Issue Discount Securities, such portion of the principal amount of such Securities as may be specified by the terms thereof), and premium, if any, together with accrued and unpaid interest, if any, thereon, to be due and payable immediately, by a notice in writing to the Company (and to the Trustee if given by the Holders), and upon any such declaration such principal amount (or specified amount), and premium, if any, together with accrued and unpaid interest, if any, thereon and payable. If an Event of Default specified in Section 5.1(5) or 5.1(6) with respect to Securities of any series at the time Outstanding occurs, the principal amount of all the Securities of that series (or, if any Securities of that series are Original Issue Discount Securities, such portion of the principal amount of all the Securities of that series of that series are Original Issue Discount Securities, such portion of the principal amount of such Securities as may be specified by the terms thereof), and premium, if any, together with accrued and unpaid interest, if any, thereon, shall automatically, and without any declaration or other action on the part of the Trustee or any Holder, become immediately due and payable. Any payments by the Company on the Securities following any such acceleration will be subject to the subordination provisions of Article 15 to the extent provided therein.

(b) Notwithstanding the foregoing, at the election of the Company, the sole remedy with respect to an Event of Default for the failure by the Company to comply with its obligations under Section 314(a)(1) of the Trust Indenture Act relating to the Company's failure to file any documents or reports that the Company is required to file with the SEC pursuant to Section 13 or 15(d) of the Exchange Act or of its covenants set forth in Section 7.4 (any such Event of Default, a "Reporting Default"), shall for the first 360 calendar days after the occurrence of such Reporting Default consist exclusively of the right to receive additional interest (the "Additional Interest") on the Securities at an annual rate equal to (i) 0.25% of the

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principal amount of the Securities for the first 180 calendar days after the occurrence of such Reporting Default and (ii) 0.50% of the principal amount of the Securities from the 181st day to, and including, the 360th day after the occurrence of such Reporting Default. If the Company so elects, the Additional Interest shall accrue on all Outstanding Securities from and including the date on which such Reporting Default first occurs until such violation is cured or waived and shall be payable as provided in Section 3.7. On the 361st day after such Reporting Default (if such violation is not cured or waived prior to such 361st calendar day), then the Trustee or the Holders of not less than 25% in principal amount of the Outstanding securities may declare the principal of, and premium, if any, together with accrued and unpaid interest, if any, on all such Securities to be due and payable immediately.

If the Company elects to pay the Additional Interest as the sole remedy for the Reporting Default, the Company shall notify in writing, by a certificate, the Holders, the Paying Agent and the Trustee of such election at any time on or before the close of business on the first Business Day following the date on which such Event of Default first occurs. Unless and until a Responsible Officer of the Trustee receives at the Corporate Trust Office such a certificate, the Trustee may assume without inquiry that Additional Interest is not payable. The Company shall pay the Additional Interest semi-annually in arrears, with the first semi-annual payment due on the first Interest Payment Date following the date of such Reporting Default, in the same manner as described on the face of the Security.

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

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

(A) all overdue interest on all Securities of that series,

(B) the principal of (and premium, if any, on) any Securities of that series which have become due otherwise than by such declaration of acceleration and any interest thereon at the rate or rates prescribed therefor in such Securities,

(C) to the extent that payment of such interest is lawful, interest upon overdue interest at the rate or rates prescribed therefor in such Securities, and

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

(2) all Events of Default with respect to Securities of that series, other than the non-payment of the principal of Securities of that series that 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.

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Section 5.3 Collection of Indebtedness and Suits for Enforcement by Trustee.

The Company covenants that if

(1) default is made in the payment of the principal or the Redemption Price of (or premium, if any, on) any Security at the Maturity thereof, or

(2) 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.

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 any premium and interest and, to the extent that payment of such interest shall be legally enforceable, interest on any overdue principal and premium and on any overdue interest, at the rate or rates prescribed therefor in such Securities, and, in addition thereto, such further amount as shall be sufficient to cover the costs and expenses of collection, including the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel.

If an Event of Default with respect to Securities of any series occurs and is continuing, the Trustee may in its discretion proceed to protect and enforce its rights and the rights of the Holders of Securities of such series 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 5.4 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 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; provided, however, that the Trustee may, on behalf of the Holders, vote for the election of a trustee in bankruptcy or similar official and be a member of a creditors' or other similar committee.

Section 5.5 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, be for the ratable benefit of the Holders of the Securities in respect of which such judgment has been recovered.

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Section 5.6 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 any premium 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 6.7;

SECOND: Subject to Article 15, to the payment of the amounts then due and unpaid for principal of and any premium, if any, 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 any premium, if any, and interest, respectively; and

THIRD: The balance, if any, to the Company or any other Person or Persons entitled thereto.

Section 5.7 Limitation on Suits.

No Holder of any Security of any series shall have any right to institute any proceeding, judicial or otherwise, with respect to this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder, unless

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

(2) the Holders of at least 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;

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

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

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

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

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Section 5.8 Unconditional Right of Holders to Receive Principal, Premium and Interest and to Convert.

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 any premium and (subject to Section 3.7) interest on such Security on the respective Stated Maturities expressed in such Security (or, in the case of redemption, on the Redemption Date), to convert such Securities in accordance with Article 14 to the extent that such right to convert is applicable to 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 5.9 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 3.6, 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 Securities 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 (subject to the limitations contained in this Indenture) 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, <u>provided</u> that

(1) such direction shall not be in conflict with any rule of law or with this Indenture and the Trustee shall not have determined that the action so directed would be unjustly prejudicial to Holders of Securities of that series, or any other series, not taking part in such direction; and

(2) the Trustee may take any other action deemed proper by the Trustee that is not inconsistent with such direction or this Indenture.

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Section 5.13 Waiver of Past Defaults.

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

(1) a default in the payment of the principal of or any premium or interest on any Security of such series as and when the same shall become due and payable by the terms thereof, otherwise than by acceleration (unless such default has been cured and a sum sufficient to pay all matured installments of interest, principal and premium, if any, has been deposited with the Trustee), or

(2) to the extent such right is applicable to such Security, a failure by the Company on request to convert any Security into Common Stock; or

(3) in respect of a covenant or provision hereof which under Article 9 cannot be modified or amended without the consent of the Holder of each Outstanding Security of such series 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, suffered or omitted by it as Trustee, a court may require any party litigant in such suit to file an undertaking to pay the costs of such suit, and may assess costs against any such party litigant, in the manner and to the extent provided in the Trust Indenture Act; <u>provided</u> that neither this Section nor the Trust Indenture Act shall be deemed to authorize any court to require such an undertaking or to make such an assessment in any suit instituted by the Company.

This Section does not apply to a suit by a Holder to enforce payment of principal of or interest on any Security on the respective due dates, a suit by a Holder to enforce the right to convert in any suit for the enforcement of the right to convert any Security in accordance with Article 14 to the extent such right to convert is applicable to such Security, or a suit by Holders of more than 10% in principal amount of the Outstanding Securities.

Section 5.15 Waiver of Usury, Stay or Extension Laws.

The Company covenants (to the extent that it may lawfully do so) that it will not at any time insist upon, or plead, or in any manner whatsoever claim or take the benefit or advantage of, any usury, stay or extension law wherever enacted, now or at any time hereafter in force, which may affect the covenants or the performance of this Indenture; and the Company (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law and covenants that it will not hinder, delay or impede the execution of any power herein granted to the Trustee, but will suffer and permit the execution of every such power as though no such law had been enacted.

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ARTICLE 6

THE TRUSTEE

Section 6.1 Certain Duties and Responsibilities.

The duties and responsibilities of the Trustee shall be as provided by the Trust Indenture Act and as set forth herein. 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 6.2 Notice of Defaults.

If a default occurs hereunder with respect to Securities of any series, the Trustee shall give the Holders of Securities of such series notice of such default as and to the extent provided by the Trust Indenture Act; <u>provided</u>, <u>however</u>, that except in the case of a default in the payment of principal or Redemption Price of (or premium, if any) or interest on any Securities of such series or in the payment of any sinking fund installment or any conversion right applicable to Securities of such series, the Trustee shall be protected in withholding such notice if and so long as a trust committee of directors and/or Responsible Officers of the Trustee in good faith determine that the withholding of such notice is in the interests of the holders of Securities of such series; <u>provided</u>, <u>further</u>, <u>however</u>, that in the case of any default of the character specified in Section 5.1(4) with respect to Securities of such series, no such notice to Holders shall be given until at least 60 days after the occurrence thereof. For the purpose of this Section, the term "default" means any event that is, or after notice or lapse of time or both would become, an Event of Default with respect to Securities of such series.

Except with respect to Section 10.1, the Trustee shall have no duty to inquire as to the performance of the Company with respect to the covenants contained in Article 10. In addition, the Trustee shall not be deemed to have knowledge of an Event of Default except (i) any Default or Event of Default occurring pursuant to Sections 5.1(1), 5.1(2) and 5.1(3) (defaults in payments on the Securities) or (ii) any Default or Event of Default of which a Responsible Officer the Trustee shall have received written notification or obtained actual knowledge.

Delivery of reports, information and documents to the Trustee under Section 7.4 is for informational purposes only and the Trustee's receipt of the foregoing shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of their covenants hereunder (as to which the Trustee is entitled to rely conclusively on Officers' Certificates).

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Section 6.3 Certain Rights of Trustee.

Subject to the provisions of Section 6.1:

(1) in the absence of bad faith on the part of the Trustee, the Trustee may rely and shall be 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;

(2) 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 shall be sufficiently evidenced by a Board Resolution;

(3) whenever in the administration of this Indenture the Trustee shall deem it desirable that a matter be proved or established prior to taking, suffering or omitting any action hereunder, the Trustee (unless other evidence be herein specifically prescribed) is entitled to and may, in the absence of bad faith on its part, rely upon an Officers' Certificate;

(4) the Trustee may consult with counsel and the written advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon;

(5) the Trustee shall be under no obligation to exercise any of the rights or powers vested in it by this Indenture at the request or direction of any of the Holders 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;

(6) the Trustee shall not be bound to make any investigation into the facts or matters stated in any resolution, certificate, statement, instrument, opinion, report, notice, request, direction, consent, order, bond, debenture, note, 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, and, if the Trustee shall determine to make such further inquiry or investigation, it shall be entitled to examine the books, records and premises of the Company, personally or by agent or attorney; and

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

Section 6.4 Not Responsible for Recitals or Issuance of Securities.

The recitals contained herein and in the Securities, except the Trustee's certificates of authentication, shall be taken as the statements of the Company, and neither the Trustee nor any Authenticating Agent assumes any responsibility for their correctness. The Trustee makes no representations as to the validity, sufficiency or priority of this Indenture or of the Securities. Neither the Trustee nor any Authenticating Agent shall be accountable for the use or application by the Company of Securities or the proceeds thereof.

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Section 6.5 May Hold Securities and Act as Trustee under Other Indentures.

The Trustee, any Authenticating Agent, 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 6.8 and 6.13, may otherwise deal with the Company with the same rights it would have if it were not Trustee, Authenticating Agent, Paying Agent, Security Registrar or such other agent.

Subject to the limitations imposed by the Trust Indenture Act, nothing in this Indenture shall prohibit the Trustee from becoming and acting as trustee under other indentures under which other securities, or certificates of interest of participation in other securities, of the Company are outstanding in the same manner as if it were not Trustee hereunder.

Section 6.6 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 with the Company.

Section 6.7 Compensation and Reimbursement.

The Company agrees:

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

(2) except as otherwise expressly provided herein, to reimburse 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

(3) to indemnify the Trustee 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 the trust or trusts hereunder, including the costs and expenses of defending itself against any claim or liability in connection with the exercise or performance of any of its powers or duties hereunder.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 5.1(5) or Section 5.1(6) 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 any applicable bankruptcy, insolvency, reorganization or similar law.

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Section 6.8 Conflicting Interests.

If the Trustee has or shall acquire a conflicting interest within the meaning of the Trust Indenture Act and there is an Event of Default under the Securities of that series, 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. To the extent permitted by the Trust Indenture Act, the Trustee shall not be deemed to have a conflicting interest by virtue of being a trustee under this Indenture with respect to Securities of more than one series.

Section 6.9 Corporate Trustee Required; Eligibility.

There shall at all times be one (and only one) Trustee hereunder with respect to the Securities of each series, which may be Trustee hereunder for Securities of one or more other series. Each Trustee shall be a Person that is eligible pursuant to the Trust Indenture Act to act as such and has (or if the Trustee is a member of a bank holding company system, its bank holding company has) a combined capital and surplus of at least \$50,000,000. If any such Person or bank holding company publishes reports of condition at least annually, pursuant to law or to the requirements of its supervising or examining authority, then for the purposes of this Section and to the extent permitted by the Trust Indenture Act, the combined capital and surplus of such Person or bank holding company 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 with respect to the Securities of any series 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.

No resignation or removal of the Trustee and no appointment of a successor Trustee pursuant to this Article shall become effective until the acceptance of appointment by the successor Trustee in accordance with the applicable requirements of Section 6.11. 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 the instrument of acceptance by a successor Trustee required by Section 6.11 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.

The Trustee may be removed at any time with respect to the Securities of any series by Act of the Holders of a majority in principal amount of the Outstanding Securities of such series, delivered to the Trustee and to the Company.

If at any time:

(1) the Trustee shall fail to comply with Section 6.8 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

(2) the Trustee shall cease to be eligible under Section 6.9 and shall fail to resign after written request therefor by the Company or by any such Holder, or

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

then, in any such case, (A) the Company by a Board Resolution may remove the Trustee with respect to all Securities, or (B) subject to Section 5.14, 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 removal of the Trustee with respect to all Securities and the appointment of a successor Trustee or Trustees.

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 Board Resolution, shall promptly appoint a successor Trustee or Trustees with respect to the Securities of that or those series (it being understood that any such successor Trustee may be appointed with respect to the Securities of one or more or all of such series and that at any time there shall be only one Trustee with respect to the Securities of any particular series) and shall comply with the applicable requirements of Section 6.11. 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 in accordance with the applicable requirements of Section 6.11, become the successor Trustee with respect to the Securities of any series and to that extent supersede the successor Trustee appointed by the Company. If no successor Trustee with respect to the Securities of any series shall have been so appointed by the Company or the Holders and accepted appointment in the manner required by Section 6.11, the retiring Trustee may petition, or any Holder who has been a bona fide Holder of a Security of such series for at least six months may petition, on behalf of himself and all others similarly situated, any court of competent jurisdiction for the appointment of a successor Trustee with respect to the Securities of such series.

The Company shall give notice of each resignation and each removal of the Trustee with respect to the Securities of any series and each appointment of a successor Trustee with respect to the Securities of any series to all Holders of Securities of such series in the manner provided in Section 1.6. Each notice shall include the name of the successor Trustee with respect to the Securities of such series and the address of its Corporate Trust Office.

Section 6.11 Acceptance of Appointment by Successor.

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.

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

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

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 the first or second preceding paragraph, as the case may be.

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

Section 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 (including the administration of the trust created by this Indenture), shall be the successor of the Trustee hereunder, <u>provided</u> 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 authenticate such Securities in either its own name or that of a predecessor Trustee, with the full force and effect which this Indenture provides for the certificate of authentication of the Trustee.

Section 6.13 Preferential Collection of Claims Against Company.

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).

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Section 6.14 Appointment of Authenticating Agent.

The Trustee may appoint an Authenticating Agent or Agents with respect to one or more series of Securities which shall be authorized to act on behalf of the Trustee to authenticate Securities of such series issued upon original issue and upon exchange, registration of transfer or partial redemption thereof or pursuant to Section 3.6, and Securities so authenticated shall be entitled to the benefits of this Indenture and shall be valid and obligatory for all purposes as if authenticated by the Trustee hereunder. Wherever reference is made in this Indenture to the authentication and delivery of Securities by the Trustee or the Trustee's certificate of authentication executed on behalf of the Trustee by an Authenticating Agent. Each Authenticating Agent shall be acceptable to the Company and shall at all times be a corporation organized and doing business under the laws of the United States of America, any State thereof or the District of Columbia, authorized under such laws to act as Authenticating Agent, having (or if the Authenticating Agent is a member of a bank holding company system, its bank holding company has) a combined capital and surplus of not less than \$50,000,000 and subject to supervision or examination by Federal or State authority. If such Authenticating Agent 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 Authenticating Agent 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 an Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, such Authenticating Agent shall resign immediately in the manner and with the effect specified in this Section.

Any corporation into which an Authenticating Agent may be merged or converted or with which it may be consolidated, or any corporation resulting from any merger, conversion or consolidation to which such Authenticating Agent shall be a party, or any corporation succeeding to the corporate agency or corporate trust business of an Authenticating Agent, shall continue to be an Authenticating Agent, <u>provided</u> such corporation shall be otherwise eligible under this Section, without the execution or filing of any paper or any further act on the part of the Trustee or the Authenticating Agent.

An Authenticating Agent may resign at any time by giving written notice thereof to the Trustee and to the Company. The Trustee may at any time terminate the agency of an Authenticating Agent by giving written notice thereof to such Authenticating Agent and to the Company. Upon receiving such a notice of resignation or upon such a termination, or in case at any time such Authenticating Agent shall cease to be eligible in accordance with the provisions of this Section, the Trustee may appoint a successor Authenticating Agent which shall be acceptable to the Company and shall give notice of such appointment in the manner provided in Section 1.6 to all Holders of Securities of the series with respect to which such Authenticating Agent will serve. Any successor Authenticating Agent upon acceptance of its appointment hereunder shall become vested with all the rights, powers and duties of its predecessor hereunder, with like effect as if originally named as an Authenticating Agent. No successor Authenticating Agent shall be appointed unless eligible under the provisions of this Section.

The Trustee agrees to pay to each Authenticating Agent from time to time reasonable compensation for its services under this Section, and the Trustee shall be entitled to be reimbursed for such payments, subject to the provisions of Section 6.7.

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If an appointment with respect to one or more series is made pursuant to this Section 6.14, the Securities of such series may have endorsed thereon, in lieu of the Trustee's certificate of authentication, an alternative certificate of authentication in the following form:

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

By:

As Authenticating Agent

By:

Authorized Officer

ARTICLE 7

HOLDERS' LISTS AND REPORTS BY TRUSTEE AND COMPANY

Section 7.1 Company to Furnish Trustee Names and Addresses of Holders.

The Company will furnish or cause to be furnished to the Trustee

(1) semi-annually, not later than 15 days after the Regular Record Date for each respective series of Securities, a list, in such form as the Trustee may reasonably require, of the names and addresses of the Holders of Securities of each series as of such Regular Record Date, as the case may be, or if there is no Regular Record Date for such series of Securities, semi-annually, and

(2) 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;

(3) provided that no such list need be furnished by the Company to the Trustee so long as the Trustee is acting as Security Registrar.

Section 7.2 Preservation of Information; Communications to Holders.

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 7.1 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 7.1 upon receipt of a new list so furnished.

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 privileges of the Trustee, shall be as provided by the Trust Indenture Act. 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.

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Section 7.3 Reports by Trustee.

The Trustee shall transmit to Holders such 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.

Reports so required to be transmitted at stated intervals of not more than 12 months shall be transmitted no later than July 15 in each calendar year, commencing with the first July 15 after the first issuance of Securities pursuant to this Indenture.

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 any Securities are listed with the Commission and with the Company. The Company will notify the Trustee when any Securities are listed on any stock exchange.

Section 7.4 Reports by Company.

Any information, documents or other reports that the Company shall file 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; <u>provided</u> that any such information, documents or reports filed or furnished with the Commission pursuant to its Electronic Data Gathering, Analysis and Retrieval (or EDGAR) system shall be deemed to be filed with the Trustee as of the time such information, documents or reports are filed or furnished via EDGAR.

ARTICLE 8

CONSOLIDATION, MERGER, CONVEYANCE, TRANSFER OR LEASE

Section 8.1 Company May Consolidate, etc., Only on Certain Terms.

The Company shall not consolidate with or merge into any other Person (other than a Subsidiary of the Company) (in a transaction in which the Company is not the surviving corporation) or convey, transfer or lease its properties and assets substantially as an entirety to any Person (other than a Subsidiary of the Company), unless:

(1) in case the Company shall consolidate with or merge into another Person (in a transaction in which the Company is not the surviving corporation) or convey, transfer or lease its properties and assets substantially as an entirety 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 substantially as an entirety shall be a corporation, limited liability company, partnership, trust or other business entity, 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 any premium and interest on all the Securities and the performance or observance of every covenant of this Indenture on the part of the Company to be performed or observed and the conversion rights shall be provided for in accordance with Article 14, if applicable, or as otherwise specified pursuant to Section 3.1, by supplemental indenture satisfactory in form to the Trustee, executed and delivered to the Trustee, by the Person (if other than the Company) formed by such consolidation or into which the Company shall have been merged or by the Person which shall have acquired the Company's assets;

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(2) immediately after giving effect to 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 occurred and be continuing; and

(3) 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 and that all conditions precedent herein provided for relating to such transaction have been complied with.

Section 8.2 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 the properties and assets of the Company substantially as an entirety in accordance with Section 8.1, 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 9.1 Supplemental Indentures Without Consent of Holders.

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

(1) to evidence the succession of another Person to the Company, or successive successions, and the assumption by any such successor of the covenants of the Company herein and in the Securities in compliance with Article 8; or

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

(3) to add any additional Events of Default for the benefit of the Holders of all or any series of Securities (and if such additional Events of Default are to be for the benefit of less than all series of Securities, stating that such additional Events of Default are expressly being included solely for the benefit of such series); or

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(4) to add to or change any of the provisions of this Indenture to such extent as shall be necessary to permit or facilitate the issuance of Securities in bearer form, registrable or not registrable as to principal, and with or without interest coupons, or to permit or facilitate the issuance of Securities in uncertificated form; or

(5) to add to, change or eliminate any of the provisions of this Indenture in respect of one or more series of Securities, <u>provided</u> that any such addition, change or elimination (A) shall neither (i) apply to any Security of any series created prior to the execution of such supplemental indenture and entitled to the benefit of such provision nor (ii) modify the rights of the Holder of any such Security with respect to such provision or (B) shall become effective only when there is no such Security Outstanding; or

(6) to secure the Securities, including provisions regarding the circumstances under which Collateral may be released or substituted; or

(7) to add or provide for a guaranty of the Securities or additional obligors on the Securities; or

(8) to establish the form or terms of Securities of any series as permitted by Sections 2.1 and 3.1; or

(9) to evidence and provide for the acceptance of appointment hereunder by a successor Trustee with respect to the Securities of one or more series and to add to or change any of the provisions of this Indenture as shall be necessary to provide for or facilitate the administration of the trusts hereunder by more than one Trustee, pursuant to the requirements of Section 6.11; or

(10) to conform this Indenture to the description of the Securities set forth in the Prospectus for such series of Securities; or

(11) to cure any ambiguity, to correct or supplement any provision herein which may be defective or inconsistent with any other provision herein, or to make any other provisions with respect to matters or questions arising under this Indenture, <u>provided</u> that such action pursuant to this clause (11) shall not adversely affect the interests of the Holders of Securities of any series in any material respect; or

(12) to supplement any of the provisions of the Indenture to such extent as shall be necessary to permit or facilitate the defeasance and discharge of any series of Securities pursuant to Articles 4 and 13, provided that any such action shall not adversely affect the interests of the Holders of Securities of such series or any other series of Securities in any material respect; or

(13) make such other provisions in regards to matters or questions arising under the Indenture or any supplemental indenture hereto as the Board of Directors may deem necessary or desirable, and which does not in each case adversely affect the interest of the Holders of Securities of any series; or

(14) comply with the requirements of the Commission in order to effect or maintain the qualification of the Indenture under the Trust Indenture Act.

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Section 9.2 Supplemental Indentures with Consent of Holders.

With the consent of the Holders of a majority in principal amount of the Outstanding Securities of each series affected by such supplemental indenture, by Act of said Holders delivered to the Company and the Trustee, the Company, when authorized by a Board Resolution, and the Trustee may enter into an indenture or indentures supplemental hereto for the purpose of adding any provisions to or changing in any manner or eliminating any of the provisions of this Indenture or of modifying in any manner the rights of the Holders of Securities of such series under this Indenture; <u>provided</u>, <u>however</u>, that no such supplemental indenture shall, without the consent of the Holder of each Outstanding Security affected thereby,

(1) change the Stated Maturity of the principal of, or any installment of principal of or interest on, any Security, or reduce the principal amount thereof or the rate of interest thereon or any premium payable upon the redemption or repurchase thereof, whether at the option of the Holder, or reduce the amount of any sinking fund payments, or reduce the amount of the principal of an Original Issue Discount Security or any other Security which would be due and payable upon a declaration of acceleration of the Maturity thereof pursuant to Section 5.2 of the Indenture, or change the Place of Payment or currency in which, any Security or any premium or interest thereon is payable, or impair the right to institute suit for the enforcement of any such payment on or after the Stated Maturity thereof (or, in the case of redemption, on or after the Redemption Date), or

(2) modify the provisions of this Indenture with respect to the subordination of such series of Securities in a manner materially adverse to the Holders of Securities of such series or,

(3) in the case of Securities of any series that are convertible into Common Stock or other securities of the Company pursuant to Article 14 and any supplemental indenture hereto, adversely affect the rights of the Holders to convert any of the Securities of such series other than as provided in or pursuant to this Indenture or any supplemental indenture, or

(4) reduce the percentage in principal amount of the Outstanding Securities of any series, the consent of whose Holders is required for any such supplemental indenture, or the consent of whose Holders is required for any waiver (of compliance with certain provisions of this Indenture or certain defaults hereunder and their consequences) provided for in this Indenture, or

(5) modify any of the provisions of this Section or Section 5.13, except to increase any such percentage or to provide that certain other provisions of this Indenture cannot be modified or waived without the consent of the Holder of each Outstanding Security affected thereby; <u>provided</u>, <u>however</u>, that this clause shall not be deemed to require the consent of any Holder with respect to changes in the references to "the Trustee" and concomitant changes in this Section, or the deletion of this proviso, in accordance with the requirements of Sections 6.11 and 9.1(9).

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

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

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Section 9.3 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 Sections 6.1 and 6.3) shall be fully protected in relying upon, an Opinion of Counsel stating that the execution of such supplemental indenture is authorized or permitted by this Indenture. The Trustee may, but shall not be obligated to, enter into any such supplemental indenture which affects the Trustee's own rights, duties or immunities under this Indenture or otherwise.

Section 9.4 Effect of Supplemental Indentures.

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

Section 9.5 Conformity with Trust Indenture Act.

The Indenture shall incorporate and be governed by the provisions of the Trust Indenture Act that are required to be part of and to govern indentures qualified under the Trust Indenture Act.

Section 9.6 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 9.7 Subordination Unimpaired.

No provision in any supplemental indenture that affects the superior position of the holders of Senior Debt shall be effective against holders of Senior Debt.

ARTICLE 10

COVENANTS

Section 10.1 Payment of Principal, Premium 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 and interest on the Securities of that series in accordance with the terms of the Securities and this Indenture.

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Section 10.2 Maintenance of Office or Agency.

The Company will maintain in each Place of Payment for any series of Securities an office or agency where Securities of that series may be presented or surrendered for payment, where Securities of that series may be surrendered for registration of transfer or exchange, where Securities of that series may be surrendered for conversion to the extent that such right to convert is applicable to such Security and where notices and demands to or upon the Company in respect of the Securities of that series and this Indenture may be served. The Company will give prompt written notice to the Trustee of the location, and any change in the location, of 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. Unless otherwise provided in a supplemental indenture or pursuant to Section 3.1 hereof, the Place of Payment for any series of Securities shall be the Corporate Trust Office of the Trustee.

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 designations; <u>provided</u>, <u>however</u>, 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 of any such designation or rescission and of any change in the location of any such other office or agency.

Section 10.3 Money for Securities Payments to be Held in Trust.

If the Company shall at any time act as its own Paying Agent with respect to any series of Securities, it will, on or before each due date of the principal of or any premium 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 and any premium and interest so becoming due until such sums shall be paid to such Persons or otherwise disposed of as herein provided and will promptly notify the Trustee of its action or failure so to act.

Whenever the Company shall have one or more Paying Agents for any series of Securities, it will, on or prior to each due date of the principal of or any premium 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 will cause each Paying Agent for any series of Securities other than the Trustee to execute and deliver to the Trustee an instrument in which such Paying Agent shall agree with the Trustee, subject to the provisions of this Section, that such Paying Agent will (1) comply with the provisions of the Trust Indenture Act applicable to it as a Paying Agent and (2) 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 for payment in respect of the Securities of that series.

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.

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Any amounts deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of or any premium or interest on any Security of any series and remaining unclaimed for a period ending on the earlier of the date that is ten Business Days prior to the date such money would escheat to the State or two years after such principal, premium 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 Business Day and of general circulation in each Place of Payment, notice that such money remains unclaimed and that, after a date specified therein, which shall not be less than 30 days from the date of such publication, any unclaimed balance of such money then remaining will be repaid to the Company.

Section 10.4 Statement by Officers as to Default.

The Company will deliver to the Trustee, within 120 days after the end of each fiscal year of the Company ending after the date hereof, an Officers' Certificate, stating whether or not to the best knowledge of the signers thereof the Company is in default in the performance and observance of any of the terms, provisions and conditions of this Indenture (without regard to any period of grace or requirement of notice provided hereunder) and, if the Company shall be in default, specifying all such defaults and the nature and status thereof of which they may have knowledge. The fiscal year of the Company currently ends on December 31; and the Company will give the Trustee prompt written notice of any change of its fiscal year.

Section 10.5 Existence.

Subject to Article 8, the Company will do or cause to be done all things necessary to preserve and keep in full force and effect its existence.

Section 10.6 Reserved.

Section 10.7 Reserved.

Section 10.8 Waiver of Certain Covenants.

Except as otherwise specified as contemplated by Section 3.1 for Securities of such series, the Company may, with respect to the Securities of any series, omit in any particular instance to comply with any term, provision or condition set forth in any covenant provided pursuant to Section 3.1(19), 9.1(2) or 9.1(7) for the benefit of the Holders of such series if before the time for such compliance the Holders of at least a majority in principal amount of the Outstanding Securities of such series shall, by Act of such Holders, either waive such compliance in such instance or generally waive compliance with such term, provision or condition, but no such waiver shall extend to or affect such term, provision or condition except to the extent so expressly waived, and, until such waiver shall become effective, the obligations of the Company and the duties of the Trustee in respect of any such term, provision or condition shall remain in full force and effect.

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ARTICLE 11 REDEMPTION OF SECURITIES

Section 11.1 Applicability of Article.

Securities of any series that are redeemable before their Stated Maturity shall be redeemable in accordance with their terms and (except as otherwise specified as contemplated by Section 3.1 for such Securities) in accordance with this Article.

Section 11.2 Election to Redeem; Notice to Trustee.

The election of the Company to redeem any Securities shall be evidenced by a Board Resolution or in another manner specified as contemplated by Section 3.1 for such Securities. In case of any redemption at the election of the Company of less than all the Securities of any series (including any such redemption affecting only a single Security), the Company shall, at least 45 days prior to the Redemption Date fixed by the Company (unless a shorter notice shall be satisfactory to the Trustee or is specified in the Board Resolution (or in an Officers' Certificate pursuant to such Board Resolution detailing such establishment) or supplemental indenture establishing such series), notify the Trustee of such Redemption Date, of the principal amount of Securities of such series to be redeemed and, if applicable, of the tenor of the Securities to be redeemed.

Section 11.3 Selection by Trustee of Securities to Be Redeemed.

If less than all the Securities of any series are to be redeemed (unless all the Securities of such series and of a specified tenor are to be redeemed or unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 45 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series not previously called for redemption, by lot, or in the Trustee's discretion, on a pro-rata basis, <u>provided</u> that the unredeemed portion of the principal amount of any Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security. If less than all the Securities of such series and of a specified tenor are to be redeemed (unless such redemption affects only a single Security), the particular Securities to be redeemed shall be selected not more than 45 days prior to the Redemption Date by the Trustee, from the Outstanding Securities of such series and specified tenor not previously called for redemption in accordance with the preceding sentence.

If any Security selected for partial redemption is converted in part before termination of the conversion right with respect to the portion of the Security so selected, the converted portion of such Security shall be deemed (so far as may be) to be the portion selected for redemption. Securities that have been converted during a selection of Securities to be redeemed shall be treated by the Trustee as Outstanding for the purpose of such selection.

The Trustee shall promptly notify the Company in writing of the Securities selected for redemption as aforesaid and, in case of any Securities selected for partial redemption as aforesaid, the principal amount thereof to be redeemed.

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The provisions of the two preceding paragraphs shall not apply with respect to any redemption affecting only a single Security, whether such Security is to be redeemed in whole or in part. In the case of any such redemption in part, the unredeemed portion of the principal amount of the Security shall be in an authorized denomination (which shall not be less than the minimum authorized denomination) for such Security.

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 11.4 Notice of Redemption.

Notice of redemption shall be given in the manner provided in Section 1.6, not fewer than 30 nor more than 60 days prior to the Redemption Date, unless a shorter period is specified in the Securities to be redeemed, to each Holder of Securities to be redeemed, at its address appearing in the Security Register or, if the securities are held in book-entry form, sent by electronic transmission.

All notices of redemption shall state:

(1) the Redemption Date,

(2) the Redemption Price (including accrued interest, if any),

(3) if less than all the Outstanding Securities of any series consisting of more than a single Security are to be redeemed, the identification (and, in the case of partial redemption of any such Securities, the principal amounts) of the particular Securities to be redeemed and, if less than all the Outstanding Securities of any series consisting of a single Security are to be redeemed, the principal amount of the particular Security to be redeemed,

(4) in case any Security is to be redeemed in part only, that on and after the Redemption Date, upon surrender of such Security, the Holder of such Security will receive, without charge, a new Security or Securities of authorized denominations for the principal amount thereof remaining unredeemed,

(5) that on the Redemption Date the Redemption Price 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,

(6) the place or places where each such Security is to be surrendered for payment of the Redemption Price,

(7) if applicable, the conversion price or conversion rate, as the case may be, the date on which the right to convert the principal of the Securities or the portions thereof to be redeemed will terminate, and the place or places where such Securities may be surrendered for conversion,

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

(9) the CUSIP number or numbers and/or common codes of the Security being redeemed.

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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.

Section 11.5 Deposit of Redemption Price.

On or prior to any Redemption Date, the Company shall deposit with the Trustee or with a Paying Agent (or, if the Company is acting as its own Paying Agent, segregate and hold in trust as provided in Section 10.3) 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, if any, on, all the Securities which are to be redeemed on that date.

To the extent such Security of a series is convertible pursuant to Article 14, upon conversion of any such Security called for redemption, any money deposited with the Trustee or with a Paying Agent or so segregated and held in trust for the redemption of such Security shall (subject to the right of any Holder of such Security to receive interest as provided in the last paragraph of Section 3.7) be paid to the Company on Company Request, or if then held by the Company, shall be discharged from such trust.

Section 11.6 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, if any) 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, if any, to the Redemption Date; <u>provided</u>, <u>however</u>, that, unless otherwise specified as contemplated by Section 3.1, installments of interest whose Stated Maturity is on or prior to the Redemption Date will 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 3.7.

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 11.7 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 its attorney duly authorized in writing), and the Company shall execute, and the Trustee shall authenticate and deliver to the Holder of such Security without service charge, a new Security or Securities of the same series 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.

SINKING FUNDS

Section 12.1 Applicability of Article.

The provisions of this Article shall be applicable to any sinking fund for the retirement of Securities of any series except as otherwise specified as contemplated by Section 3.1 for such Securities.

The minimum amount of any sinking fund payment provided for by the terms of any Securities is herein referred to as a "mandatory sinking fund payment," and any payment in excess of such minimum amount provided for by the terms of such Securities is herein referred to as an "optional sinking fund payment." If provided for by the terms of any Securities, the cash amount of any sinking fund payment may be subject to reduction as provided in Section 12.2. Each sinking fund payment shall be applied to the redemption of Securities as provided for by the terms of such Securities.

Section 12.2 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 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 any Securities of such series required to be made pursuant to the terms of such Securities as and to the extent provided for by the terms of such Securities; <u>provided</u> that the Securities to be so credited have not been previously so credited. The Securities to be so credited shall be received and credited for such purpose by the Trustee at the Redemption Price, as specified in the Securities so to be redeemed, for redemption through operation of the sinking fund and the amount of such sinking fund payment shall be reduced accordingly.

Section 12.3 Redemption of Securities for Sinking Fund.

Not fewer than 60 days prior to each sinking fund payment date for any Securities, the Company will deliver to the Trustee an Officers' Certificate specifying the amount of the next ensuing sinking fund payment for such Securities 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 pursuant to Section 12.2 and will also deliver to the Trustee any Securities to be so delivered. Not fewer than 30 days prior to 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 11.3 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 11.4. Such notice having been duly given, the redemption of such Securities shall be made upon the terms and in the manner stated in Sections 11.6 and 11.7.

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ARTICLE 13

DEFEASANCE AND COVENANT DEFEASANCE

Section 13.1 Company's Option to Effect Defeasance or Covenant Defeasance.

The Company may elect, at its option at any time, to have Section 13.2 or Section 13.3 applied to any Securities or any series of Securities, as the case may be, designated pursuant to Section 3.1 as being defeasible pursuant to such Section 13.2 or 13.3, in accordance with any applicable requirements provided pursuant to Section 3.1 and upon compliance with the conditions set forth below in this Article. Any such election shall be evidenced by a Board Resolution or in another manner specified as contemplated by Section 3.1 for such Securities.

Section 13.2 Defeasance and Discharge.

Upon the Company's exercise of its option (if any) to have this Section applied to any Securities or any series of Securities, as the case may be, the Company shall be deemed to have been discharged from its obligations, and the provisions of Article 15 shall cease to be effective, with respect to such Securities as provided in this Section on and after the date the conditions set forth in Section 13.4 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 such Securities and to have satisfied all its other obligations under such Securities and this Indenture insofar as such 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:

(1) the rights of Holders of such Securities to receive, solely from the trust fund described in Section 13.4 and as more fully set forth in such Section, payments in respect of the principal of and any premium and interest on such Securities when payments are due,

(2) the Company's obligations with respect to such Securities under Sections 3.4, 3.5, 3.6, 10.2 and 10.3, and, if applicable, Article 14,

- (3) the rights, powers, trusts, duties and immunities of the Trustee hereunder, and
- (4) this Article.

Subject to compliance with this Article, the Company may exercise its option (if any) to have this Section applied to any Securities notwithstanding the prior exercise of its option (if any) to have Section 13.3 applied to such Securities.

Section 13.3 Covenant Defeasance.

Upon the Company's exercise of its option (if any) to have this Section applied to any Securities or any series of Securities, as the case may be,

(1) the Company shall be released from any covenants provided pursuant to Sections 3.1(20) or 9.1(2) for the benefit of the Holders of such Securities,

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(2) the occurrence of any event specified in Sections 5.1(4) (with respect to any such covenants provided pursuant to Section 3.1(20) or 9.1(2)) and the occurrence of any Event of Default specified pursuant to Section 3.1, shall be deemed not to be or result in an Event of Default, and

(3) the provisions of Article 15 shall cease to be effective,

in each case with respect to such Securities or series of Securities as provided in this Section on and after the date the conditions set forth in Section 13.4 are satisfied (hereinafter called "Covenant Defeasance"). For this purpose, such Covenant Defeasance means that, with respect to such 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 5.1(4) and the occurrence of any Event of Default specified pursuant to Section 3.1) or Article 15, whether directly or indirectly by reason of any reference elsewhere herein to any such Section or Article or by reason of any reference in any such Section or Article to any other provision herein or in any other document, but the remainder of this Indenture and such Securities shall be unaffected thereby.

Section 13.4 Conditions to Defeasance or Covenant Defeasance.

The following shall be the conditions to the application of Section 13.2 or Section 13.3 to any Securities or any series of Securities, as the case may be:

(1) The Company shall irrevocably have deposited or caused to be deposited with the Trustee (or another trustee which satisfies the requirements contemplated by Section 6.9 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 Securities,

(A) in the case of Securities of a series denominated in currency of the United States of America,

(i) cash in currency of the United States of America 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, an amount in cash, or

(iii) a combination thereof, or

(B) in the case of Securities of a series denominated in currency other than that of the United States of America,

(i) cash in the currency in which such series of Securities is denominated in an amount, or

(ii) Foreign 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, an amount in cash, or

(iii) a combination thereof,

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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 any premium and interest on such Securities on the respective Stated Maturities, in accordance with the terms of this Indenture and such Securities.

(2) In the event of an election to have Section 13.2 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel stating that

(A) the Company has received from, or there has been published by, the Internal Revenue Service a ruling or

(B) since the date of this instrument, there has been a change in the applicable Federal income tax law,

(C) in either case (A) or (B) to the effect that, and based thereon such opinion shall confirm that, the Holders of such 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 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.

(3) In the event of an election to have Section 13.3 apply to any Securities or any series of Securities, as the case may be, the Company shall have delivered to the Trustee an Opinion of Counsel to the effect that the Holders of such 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 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.

(4) The Company shall have delivered to the Trustee an Officers' Certificate to the effect that neither such Securities nor any other Securities of the same series, if then listed on any securities exchange, will be delisted as a result of such deposit.

(5) No event which is, or after notice or lapse of time or both would become, an Event of Default with respect to such Securities or any other Securities shall have occurred and be continuing at the time of such deposit or, with regard to any such event specified in Sections 5.1(5) and (6), 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).

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(6) 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).

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

(8) 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.

(9) At the time of such deposit,

(A) no default in the payment of any principal of or premium or interest on any Senior Debt shall have occurred and be continuing,

(B) no event of default with respect to any Senior Debt shall have resulted in such Senior Debt becoming, and continuing to be, due and payable prior to the date on which it would otherwise have become due and payable (unless payment of such Senior Debt has been made or duly provided for), and

(C) no other event of default with respect to any Senior Debt shall have occurred and be continuing permitting (after notice or lapse of time or both) the holders of such Senior Debt (or a trustee on behalf of such holders) to declare such Senior Debt due and payable prior to the date on which it would otherwise have become due and payable.

(10) 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 13.5 Deposited Money, U.S. Government Obligations and Foreign Government Obligations to be Held in Trust; Miscellaneous Provisions.

Subject to the provisions of the last paragraph of Section 10.3, all money, U.S. Government Obligations and Foreign Government Obligations (including the proceeds thereof) deposited with the Trustee or other qualifying trustee (solely for purposes of this Section and Section 13.6, the Trustee and any such other trustee are referred to collectively as the "Trustee") pursuant to Section 13.4 in respect of any Securities shall be held in trust and applied by the Trustee, in accordance with the provisions of such 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 Securities, of all sums due and to become due thereon in respect of principal and any premium and interest, but money so held in trust need not be segregated from other funds except to the extent required by law. Money, U.S. Government Obligations and Foreign Government Obligations so held in trust shall not be subject to the provisions of Article 15.

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 or Foreign Government Obligations deposited pursuant to Section 13.4 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.

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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, U.S. Government Obligations or Foreign Government Obligations held by it as provided in Section 13.4 with respect to any Securities 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 Securities.

Section 13.6 Reinstatement.

If the Trustee or the Paying Agent is unable to apply any money in accordance with this Article with respect to any Securities 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 Securities from which the Company has been discharged or released pursuant to Section 13.2 or 13.3 shall be revived and reinstated as though no deposit had occurred pursuant to this Article with respect to such Securities, until such time as the Trustee or Paying Agent is permitted to apply all money held in trust pursuant to Section 13.5 with respect to such Securities in accordance with this Article; <u>provided</u>, <u>however</u>, that if the Company makes any payment of principal of or any premium or interest on any such Security following such reinstatement of its obligations, the Company shall be subrogated to the rights (if any) of the Holders of such Securities to receive such payment from the money so held in trust.

ARTICLE 14

CONVERSION OF SECURITIES

Section 14.1 Conversion.

The terms of any conversion provision that shall be applicable to the Securities of any series shall be set forth in one or more indentures supplemental hereto for the Securities of such series.

ARTICLE 15

SUBORDINATION OF SECURITIES

Section 15.1 Agreement of Subordination.

Except as otherwise provided in a supplemental indenture or pursuant to Section 3.1, the Company covenants and agrees, and each Holder of Securities issued hereunder by its acceptance thereof likewise covenants and agrees, that all Securities shall be issued subject to the provisions of this Article 15; and each Person holding any Security, whether upon original issue or upon transfer, assignment or exchange thereof, accepts and agrees to be bound by such provisions.

The payment of the principal of, premium, if any, and interest on all Securities (including, but not limited to, the redemption price with respect to the Securities called for redemption in accordance with Article 11 as provided in the Indenture) issued hereunder shall, to the extent and in the manner hereinafter set forth, be subordinated and subject in right of payment to the prior payment in full of all Senior Debt, whether outstanding at the date of this Indenture or thereafter incurred.

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No provision of this Article 15 shall prevent the occurrence of any default or Event of Default hereunder.

Section 15.2 Payments to Holders.

No payment shall be made with respect to the principal of, or premium, if any, or interest on the Securities (including, but not limited to, the redemption price with respect to the Securities to be called for redemption in accordance with Article 11 as provided in the Indenture), except payments and distributions made by the Trustee as permitted by the first or second paragraph of Section 15.5, if:

(i) a default in the payment of principal, premium, if any, interest, rent or other obligations due on any Senior Debt occurs and is continuing (or, in the case of Senior Debt for which there is a period of grace, in the event of such a default that continues beyond the period of grace, if any, specified in the instrument or lease evidencing such Senior Debt) (a "Payment Default"), unless and until such default shall have been cured or waived or shall have ceased to exist; or

(ii) a default, other than a Payment Default, on any Designated Senior Debt occurs and is continuing that then permits holders of such Designated Senior Debt to accelerate its maturity and the Trustee receives a notice of the default (a "Payment Blockage Notice") from a holder of Designated Senior Debt, a Representative of Designated Senior Debt or the Company (a "Non-Payment Default").

If the Trustee receives any Payment Blockage Notice pursuant to clause (ii) above, no subsequent Payment Blockage Notice shall be effective for purposes of this Section unless and until at least 365 days shall have elapsed since the initial effectiveness of the immediately prior Payment Blockage Notice. No Non-Payment Default that existed or was continuing on the date of delivery of any Payment Blockage Notice to the Trustee shall be, or be made, the basis for a subsequent Payment Blockage Notice.

The Company may and shall resume payments on and distributions in respect of the Securities upon the earlier of:

(2) in the case of any Payment Default, the date upon which the Payment Default is cured or waived or ceases to exist, or

(3) in the case of a Non-Payment Default, the earlier of (a) the date upon which such Non-Payment Default is cured, waived or ceases to exist or (b) 179 days after the date on which the applicable Payment Blockage Notice is received by the Trustee,

unless this Article 15 otherwise prohibits the payment or distribution at such time.

Upon any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities, to creditors upon any dissolution or winding-up or liquidation or reorganization of the Company, whether voluntary or involuntary or in bankruptcy, insolvency, reorganization, liquidation, receivership or other proceedings, or upon an assignment for the benefit of creditors or any marshalling of the assets and liabilities of the Company, or otherwise, all amounts due or to become due upon all Senior Debt shall first be paid in full in cash or other payment satisfactory to the holders of such Senior Debt, or payment thereof in accordance with its terms provided for in cash or other payment satisfactory to the holders of such

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Senior Debt, before any payment is made on account of the principal of, premium, if any, or interest on the Securities (except payments made pursuant to Article 4 from monies deposited with the Trustee pursuant thereto prior to commencement of proceedings for such dissolution, winding-up, liquidation, reorganization, assignment for the benefit of creditors or the marshalling of assets and liabilities of the Company); and upon any such dissolution, winding-up, liquidation, reorganization, assignment for the benefit of creditors or marshalling of assets and liabilities of the Company or bankruptcy, insolvency, receivership or other proceeding, any payment by the Company, or distribution of assets of the Company of any kind or character, whether in cash, property or securities, to which the Holders of the Securities or the Trustee would be entitled, except for the provision of this Article 15, shall (except as aforesaid) be paid by the Company or by any receiver, trustee in bankruptcy, liquidating trustee, agent or other Person making such payment or distribution, or by the Holders of the Securities or by the Trustee under this Indenture if received by them or it, directly to the holders of Senior Debt (pro rata to such holders on the basis of the respective amounts of Senior Debt held by such holders, or as otherwise required by law or a court order) or their Representative or Representatives, or to the trustee or trustees under any indenture pursuant to which any instruments evidencing any Senior Debt may have been issued, as their respective interests may appear, to the extent necessary to pay all Senior Debt in full, in cash or other payment satisfactory to the holders of such Senior Debt, before any payment or distribution or provision therefor is made to the Holders of the Securities or to the Trustee.

For purposes of this Article 15, the words, "cash, property or securities" shall not be deemed to include shares of stock of the Company as reorganized or readjusted, or securities of the Company or any other corporation provided for by a plan of reorganization or readjustment, the payment of which is subordinated at least to the extent provided in this Article 15 with respect to the Securities to the payment of all Senior Debt which may at the time be outstanding; <u>provided</u> that (i) the Senior Debt is assumed by the new corporation, if any, resulting from any reorganization or readjustment, and (ii) the rights of the holders of Senior Debt (other than leases which are not assumed by the Company or the new corporation, as the case may be) are not, without the consent of such holders, altered by such reorganization or readjustment. The consolidation of the Company with, or the merger of the Company into, another corporation or the liquidation or dissolution of the Company following the conveyance or transfer of its property as an entirety, or substantially as an entirety, to another corporation upon the terms and conditions provided for in Article 8 shall not be deemed a dissolution, winding-up, liquidation or reorganization for the purposes of this Section 15.2 if such other corporation shall, as a part of such consolidation, merger, conveyance or transfer, comply with the conditions stated in Article 8.

In the event of the acceleration of the Securities because of an Event of Default, no payment or distribution shall be made to the Trustee or any Holder of Securities in respect of the principal of, premium, if any, or interest on the Securities (including, but not limited to, the redemption price with respect to the Securities called for redemption in accordance with Article 11 as provided in the Indenture), except payments and distributions made by the Trustee as permitted by the first or second paragraph of Section 15.5, until all Senior Debt has been paid in full in cash or other payment satisfactory to the holders of Senior Debt or such acceleration is rescinded in accordance with the terms of this Indenture. If payment of the Securities is accelerated because of an Event of Default, the Company shall promptly notify holders of Senior Debt of the acceleration.

In the event that, notwithstanding the foregoing provisions, any payment or distribution of assets of the Company of any kind or character, whether in cash, property or securities (including, without limitation, by way of setoff or otherwise), prohibited by the foregoing, shall be received by the Trustee or the Holders of the Securities before all Senior Debt is paid in full in cash or other payment satisfactory to the holders of such

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Senior Debt, or provision is made for such payment thereof in accordance with its terms in cash or other payment satisfactory to the holders of such Senior Debt, such payment or distribution shall be held in trust for the benefit of and shall be paid over or delivered to the holders of Senior Debt or their Representative or Representatives, or to the trustee or trustees under any indenture pursuant to which any instruments evidencing any Senior Debt may have been issued, as their respective interests may appear, as calculated by the Company, for application to the payment of all Senior Debt remaining unpaid to the extent necessary to pay all Senior Debt in full in cash or other payment satisfactory to the holders of such Senior Debt, after giving effect to any concurrent payment or distribution to or for the holders of such Senior Debt.

Nothing in this Section 15.2 shall apply to claims of, or payments to, the Trustee under or pursuant to Section 6.7. This Section 15.2 shall be subject to the further provisions of Section 15.5.

Section 15.3 Subrogation of Securities.

Subject to the payment in full of all Senior Debt, the rights of the Holders of the Securities shall be subrogated to the extent of the payments or distributions made to the holders of such Senior Debt pursuant to the provisions of this Article 15 (equally and ratably with the holders of all indebtedness of the Company which by its express terms is subordinated to other indebtedness of the Company to substantially the same extent as the Securities are subordinated and is entitled to like rights of subrogation) to the rights of the holders of Senior Debt to receive payments or distributions of cash, property or securities of the Company applicable to the Senior Debt until the principal, premium, if any, and interest on the Securities shall be paid in full; and, for the purposes of such subrogation, no payments or distributions to the holders of the Senior Debt of any cash, property or securities to which the Holders of the Securities or the Trustee would be entitled except for the provisions of this Article 15, and no payment over pursuant to the provisions of this Article 15, to or for the benefit of the holders of the Securities or the Trustee, shall, as between the Company, its creditors other than holders of Senior Debt, and the Holders of the Securities to or for the benefit of the Holders of the Securities or the Trustee payments or distributions of cash, property or securities to or for the benefit of the Holders of the Securities pursuant to the subrogation provisions of this Article 15, which would otherwise have been paid to the holders of Senior Debt shall be deemed to be a payment by the Company to or for the account of the Securities. It is understood that the provisions of this Article 15 are and are intended solely for the purposes of defining the relative rights of the Holders of the Securities, on the one hand, and the holders of the Senior Debt, on the other hand.

Nothing contained in this Article 15 or elsewhere in this Indenture or in the Securities is intended to or shall impair, as among the Company, its creditors other than the holders of Senior Debt, and the Holders of the Securities, the obligation of the Company, which is absolute and unconditional, to pay to the Holders of the Securities the principal of (and premium, if any) and interest on the Securities as and when the same shall become due and payable in accordance with their terms, or is intended to or shall affect the relative rights of the Holders of the Securities and creditors of the Company other than the holders of the Senior Debt, nor shall anything herein or therein prevent the Trustee or the Holder of any Security from exercising all remedies otherwise permitted by applicable law upon default under this Indenture, subject to the rights, if any, under this Article 15 of the holders of Senior Debt in respect of cash, property or securities of the Company received upon the exercise of any such remedy.

Upon any payment or distribution of assets of the Company referred to in this Article 15, the Trustee, subject to the provisions of Section 6.1, and the Holders of the Securities shall be entitled to rely upon any order or decree made by any court of competent jurisdiction in which such bankruptcy, dissolution, winding-up, liquidation or reorganization proceedings are pending, or a certificate of the receiver, trustee in

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bankruptcy, liquidating trustee, agent or other person making such payment or distribution, delivered to the Trustee or to the Holders of the Securities, for the purpose of ascertaining the persons entitled to participate in such distribution, the holders of the Senior Debt and other indebtedness of the Company, the amount thereof or payable thereon and all other facts pertinent thereto or to this Article 15.

Section 15.4 Authorization to Effect Subordination.

Each Holder of a Security by the holder's acceptance thereof authorizes and directs the Trustee on the holder's behalf to take such action as may be necessary or appropriate to effectuate the subordination as provided in this Article 15 and appoints the Trustee to act as the holder's attorney-in-fact for any and all such purposes. If the Trustee does not file a proper proof of claim or proof of debt in the form required in any proceeding referred to in Section 5.4 hereof at least 30 days before the expiration of the time to file such claim, the holders of any Senior Debt or their representatives are hereby authorized to file an appropriate claim for and on behalf of the Holders of the Securities.

Section 15.5 Notice to Trustee.

The Company shall give prompt written notice in the form of an Officers' Certificate to a Responsible Officer of the Trustee and to any Paying Agent of any fact known to the Company which would prohibit the making of any payment of monies to or by the Trustee or any Paying Agent in respect of the Securities pursuant to the provisions of this Article 15. Notwithstanding the provisions of this Article 15 or any other provision of this Indenture, the Trustee shall not be charged with knowledge of the existence of any facts which would prohibit the making of any payment of monies to or by the Trustee in respect of the Securities pursuant to the provisions of this Article 15, unless and until a Responsible Officer of the Trustee shall have received written notice thereof at the Corporate Trust Office from the Company (in the form of an Officers' Certificate) or a Representative or a holder or holders of Senior Debt or from any trustee therefor; and before the receipt of any such written notice, the Trustee, subject to the provisions of Section 6.1, shall be entitled in all respects to assume that no such facts exist; <u>provided</u> that if on a date not fewer than two Business Days prior to the date upon which by the terms hereof any such monies may become payable for any purpose (including, without limitation, the payment of the principal of, or premium, if any, or interest on any Security) the Trustee shall not have received, with respect to such monies, the notice provided for in this Section 15.5, then, anything herein contained to the contrary notwithstanding, the Trustee shall have full power and authority to receive such monies and to apply the same to the purpose for which they were received, and shall not be affected by any notice to the contrary which may be received by it on or after such prior date.

Notwithstanding anything in this Article 15 to the contrary, nothing shall prevent any payment by the Trustee to the Holders of monies deposited with it pursuant to Section 4.1, and any such payment shall not be subject to the provisions of Section 15.1 or 15.2.

The Trustee, subject to the provisions of Section 6.1, shall be entitled to rely on the delivery to it of a written notice by a Representative or a person representing himself to be a holder of Senior Debt (or a trustee on behalf of such holder) to establish that such notice has been given by a Representative or a holder of Senior Debt or a trustee on behalf of any such holder or holders. The Trustee shall not be required to make any payment or distribution to or on behalf of a holder of Senior Debt pursuant to this Article 15 unless it has received satisfactory evidence as to the amount of Senior Debt held by such person, the extent to which such person is entitled to participate in such payment or distribution and any other facts pertinent to the rights of such person under this Article 15.

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Section 15.6 Trustee's Relation to Senior Debt.

The Trustee in its individual capacity shall be entitled to all the rights set forth in this Article 15 in respect of any Senior Debt at any time held by it, to the same extent as any other holder of Senior Debt, and nothing in this Indenture shall deprive the Trustee of any of its rights as such holder.

With respect to the holders of Senior Debt, the Trustee undertakes to perform or to observe only such of its covenants and obligations as are specifically set forth in this Article 15, and no implied covenants or obligations with respect to the holders of Senior Debt shall be read into this Indenture against the Trustee. The Trustee shall not be deemed to owe any fiduciary duty to the holders of Senior Debt and, subject to the provisions of Section 6.1, the Trustee shall not be liable to any holder of Senior Debt (i) for any failure to make any payments or distributions to such holders or (ii) if it shall pay over or deliver to Holders of Securities, the Company or any other Person money or assets to which any holder of Senior Debt shall be entitled by virtue of this Article 15 or otherwise.

Section 15.7 No Impairment of Subordination.

No right of any present or future holder of any Senior Debt to enforce subordination as herein provided shall at any time in any way be prejudiced or impaired by any act or failure to act on the part of the Company or by any act or failure to act, in good faith, by any such holder, or by any noncompliance by the Company, the Trustee or any Holder of Securities with the terms, provisions and covenants of this Indenture, regardless of any knowledge thereof which any such holder may have or otherwise be charged with.

Section 15.8 Certain Conversions/Exchanges Deemed Payment.

For the purposes of this Article 15 only, (1) the issuance and delivery of junior securities upon conversion or exchange of Securities in accordance with Article 14 or any supplemental indenture with respect to such series of securities or otherwise (except upon conversion of the Securities in accordance with their terms) shall not be deemed to constitute a payment or distribution on account of the principal of (or premium, if any) or interest on Securities or on account of the purchase or other acquisition of Securities, and (2) the payment, issuance or delivery of cash (except in satisfaction of fractional shares upon conversion, if applicable), property or securities (other than junior securities) upon conversion or exchange of a Security shall be deemed to constitute payment on account of the principal of such Security. For the purposes of this Section 15.8, the term "junior securities" means (a) shares of any stock of any class of the Company, or (b) securities of the Company which are subordinated in right of payment to all Senior Debt which may be outstanding at the time of issuance or delivery of such securities to substantially the same extent as, or to a greater extent than, the Securities are so subordinated as provided in this Article. Nothing contained in this Article 15 or elsewhere in this Indenture or in the Securities is intended to or shall impair, as among the Company, its creditors other than holders of Senior Debt and the Holders of Securities, the right, which is absolute and unconditional, of the Holder of any Security to convert such Security in accordance with Article 14.

Section 15.9 Article Applicable to Paying Agents.

If at any time any Paying Agent other than the Trustee shall have been appointed by the Company and be then acting hereunder, the term "Trustee" as used in this Article shall (unless the context otherwise requires) be construed as extending to and including such Paying Agent within its meaning as fully for all intents and purposes as if such Paying Agent were named in this Article in addition to or in place of the Trustee; <u>provided</u>, <u>however</u>, that the first paragraph of Section 15.5 shall not apply to the Company or any Affiliate of the Company if the Company or such Affiliate acts as Paying Agent.

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The Trustee shall not be responsible for the actions or inactions of any other Paying Agents (including the Company if acting as its own Paying Agent) and shall have no control of any funds held by such other Paying Agents.

Section 15.10 Senior Debt Entitled to Rely.

The holders of Senior Debt (including, without limitation, Designated Senior Debt) shall have the right to rely upon this Article 15, and no amendment or modification of the provisions contained herein shall diminish the rights of such holders unless such holders shall have agreed in writing thereto.

Section 15.11 Reliance on Judicial Order or Certificate of Liquidating Agent.

Upon any payment or distribution of assets of the Company referred to in this Article, the Trustee and the Holders shall be entitled to rely upon any order or decree entered by any court of competent jurisdiction in which such dissolution, winding up, liquidation, reorganization, assignment for the benefit of creditors or marshalling of assets and liabilities of the Company or bankruptcy, insolvency, receivership or other like proceeding is pending, or a certificate of the trustee in bankruptcy, liquidating trustee, custodian, receiver, assignee for the benefit of creditors, agent or other person making such payment or distribution, delivered to the Trustee or to the Holders, for the purpose of ascertaining the persons entitled to participate in such payment or distribution, the holders of Senior Debt and other indebtedness of the Company, the amount thereof or payable thereon, the amount or amounts paid or distributed thereon and all other facts pertinent thereto or to this Article.

Section 15.12 Trust Monies Not Subordinated.

Notwithstanding anything contained herein to the contrary, payments from money, U.S. Government Obligations and/or Foreign Government Obligations held in trust under Article 4 or Article 13 by the Trustee for the payment of the principal of, premium, if any, and interest on the Securities shall not be subordinated to the prior payment in full of any Senior Debt of the Company or subject to the restrictions set forth in this Article 15, and none of the Holders shall be obligated to pay over any such amount to the Company or any holder of Senior Debt of the Company or any other creditor of the Company.

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

Pacific Biosciences of California, Inc.

By:_____

_____,

Title:_____

as Trustee

By:_____ Title:_____ Pacific Biosciences of California, Inc. 1305 O'Brien Drive Menlo Park, California 94025

Re: Registration Statement on Form S-3

Ladies and Gentlemen:

At your request, we have examined the Registration Statement on Form S-3 (the "Registration Statement"), filed by Pacific Biosciences of California, Inc., a Delaware corporation (the "Company"), with the Securities and Exchange Commission (the "Commission") in connection with the registration pursuant to the Securities Act of 1933, as amended (the "Act"), of the Securities (as defined below).

The Registration Statement relates to the proposed issuance and sale by the Company, from time to time, pursuant to Rule 415 under the Act, as set forth in the Registration Statement, the prospectus contained therein (the "Prospectus") and the supplements to the prospectus referred to therein (each a "Prospectus Supplement"), of up to an aggregate offering price of \$150,000,000 or the equivalent thereof, of shares of the Company's common stock, \$0.001 par value per share (the "Common Stock"), shares of the Company's preferred stock, \$0.001 par value per share (the "Preferred Stock"), the Company's senior and subordinated debt securities (the "Debt Securities"), warrants to purchase any of the securities described above (the "Warrants"), depositary shares (the "Depositary Shares") of the Company representing a fractional interest in a share of Preferred Stock of the Company, and units consisting of Common Stock, Preferred Stock, Debt Securities, Warrants and/or Depositary Shares in any combination (the "Units") (the Common Stock, the Preferred Stock, the Debt Securities, the Warrants, the Depositary Shares and the Units are collectively referred to herein as the "Securities").

The Securities are to be sold from time to time as set forth in the Registration Statement, the Prospectus contained therein and the Prospectus Supplements. The Debt Securities are to be issued pursuant to a senior debt securities indenture (the "Senior Indenture") and a subordinated debt securities indenture (the "Subordinated Indenture" and taken with the Senior Indenture, the "Indentures"), as applicable, both of which have been filed as exhibits to the Registration Statement and are to be entered into, in each case, between the Company and a trustee to be named in a Prospectus Supplement to the Registration Statement (the "Trustee"). The Securities are to be sold pursuant to a purchase, underwriting, subscription or similar agreement in substantially the form to be filed under a Current Report on Form 8-K. The Debt Securities are to be issued in the forms set forth in the Indentures. Each Indenture may be supplemented, as applicable, in connection with the issuance of each such series of Debt Securities, by a supplemental indenture or other appropriate action of the Company creating such series of Debt Securities.

We have examined instruments, documents, certificates and records that we have deemed relevant and necessary for the basis of our opinions hereinafter expressed. In such examination, we have assumed: (i) the authenticity of original documents and the genuineness of all signatures; (ii) the conformity to the originals of all documents submitted to us as copies; (iii) the truth, accuracy and completeness of the information, representations and warranties contained in the instruments, documents, certificates and records we have reviewed; (iv) that the Registration Statement, and any amendments thereto (including post-effective amendments), will have become effective under the Act; (v) that a Prospectus Supplement will have been filed with the Commission describing the Securities offered thereby; (vi) that the Securities will be issued and sold in compliance with applicable U.S. federal and state securities laws and in the manner stated in the Pacific Biosciences of California, Inc. Registration Statement on Form S-3 August 2, 2017

Registration Statement and the applicable Prospectus Supplement; (vii) that a definitive purchase, underwriting or similar agreement with respect to any Securities offered will have been duly authorized and validly executed and delivered by the Company and the other parties thereto; (viii) that any Securities issuable upon conversion, exchange, redemption or exercise of any Securities being offered will be duly authorized, created and, if appropriate, reserved for issuance upon such conversion, exchange, redemption or exercise; (ix) with respect to shares of Common Stock or Preferred Stock offered, that there will be sufficient shares of Common Stock or Preferred Stock authorized under the Company's organizational documents that are not otherwise reserved for issuance; and (x) the legal capacity of all natural persons. As to any facts material to the opinions expressed herein that were not independently established or verified, we have relied upon oral or written statements and representations of officers and other representatives of the Company.

Based on such examination, we are of the opinion that:

1. With respect to shares of the Common Stock to be sold by the Company, when both: (a) the Board of Directors of the Company or a duly constituted and acting committee thereof (such Board of Directors or committee being hereinafter referred to as the "Board") has taken all necessary corporate action to approve the issuance and the terms of the offering of the shares of Common Stock and related matters; and (b) the shares of Common Stock have been delivered either (i) in accordance with the applicable definitive purchase, underwriting, subscription or similar agreement approved by the Board, or upon the exercise of Warrants to purchase Common Stock, upon payment of the consideration therefor (not less than the par value of the Common Stock) provided for therein or (ii) upon conversion or exercise of any other Security, in accordance with the terms of such Security or the instrument governing such Security providing for such conversion or exercise as approved by the Board, for the consideration approved by the Board, then the shares of Common Stock will be validly issued, fully paid and nonassessable;

2. With respect to any particular series of shares of Preferred Stock, when both: (a) the Board has taken all necessary corporate action to approve the issuance and terms of the shares of Preferred Stock, the terms of the offering thereof, and related matters, including the adoption of a certificate of designation relating to such Preferred Stock conforming to the General Corporation Law of the State of Delaware (a "Certificate") and the filing of the Certificate with the Secretary of State of the State of Delaware; and (b) the shares of Preferred Stock have been delivered either (i) in accordance with the applicable definitive purchase, underwriting, subscription or similar agreement approved by the Board, or upon the exercise of Warrants to purchase Preferred Stock, upon payment of the consideration therefor (not less than the par value of the Preferred Stock) provided for therein or (ii) upon conversion or exercise of such Security or the instrument governing such Security providing for such conversion or exercise as approved by the Board, for the consideration approved by the Board, then the shares of Preferred Stock will be validly issued, fully paid and nonassessable;

3. With respect to Debt Securities to be issued under either the Senior Indenture or Subordinated Indenture, when: (a) the Trustee is qualified to act as Trustee under the Senior Indenture or Subordinated Indenture, as applicable, and the Company has filed respective Form T-1s for the Trustee with the Commission; (b) the Trustee has duly executed and delivered the Senior Indenture or Subordinated Indenture, as applicable; (c) the Senior Indenture or Subordinated Indenture, as applicable; (d) the Senior Indenture or Subordinated Indenture, as applicable; has been duly authorized and validly executed and delivered by the Company to the Trustee; (d) the Senior Indenture or Subordinated Indenture, as applicable, has been duly qualified under the Trust Indenture Act of 1939, as amended; (e) the

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Pacific Biosciences of California, Inc. Registration Statement on Form S-3 August 2, 2017

Board has taken all necessary corporate action to approve the issuance and terms of such Debt Securities, the terms of the offering thereof and related matters; and (f) such Debt Securities have been duly executed, authenticated, issued and delivered in accordance with the provisions of the Senior Indenture or Subordinated Indenture, as applicable, and the applicable definitive purchase, underwriting, subscription or similar agreement approved by the Board, or upon the exercise of Warrants to purchase Debt Securities, upon payment of the consideration therefor provided for therein, such Debt Securities will be validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms, and entitled to the benefits of the Senior Indenture or Subordinated Indenture, as applicable;

4. With respect to the Warrants, when both: (a) the Board has taken all necessary corporate action to approve the issuance and terms of the Warrants and related matters; and (b) the Warrants have been duly executed and delivered against payment therefor, pursuant to the applicable definitive purchase, underwriting, subscription, warrant or similar agreement duly authorized, executed and delivered by the Company and a warrant agent, as applicable, and the certificates for the Warrants have been duly executed and delivered by the Company and such warrant agent, then the Warrants will be validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms;

5. With respect to Depositary Shares, when: (a) the Board has taken all necessary corporate action to approve the issuance and terms of the Depositary Shares, the terms of the offering thereof, and related matters, including the adoption of a Certificate relating to the Preferred Stock underlying such Depositary Shares and the filing of the Certificate with the Secretary of State of the State of Delaware; (b) the Deposit Agreement (the "Deposit Agreement") or agreements relating to the Depositary Shares and the related Depositary Receipts (the "Depositary Receipts") have been duly authorized and validly executed and delivered by the Company and the depositary appointed by the Company; (c) the shares of Preferred Stock underlying such Depositary Shares have been deposited with a bank or trust company (which meets the requirements for the depositary set forth in the Registration Statement) under the applicable Deposit Agreement; and (d) the Deposit Agreement and the applicable definitive purchase, underwriting, subscription or similar agreement approved by the Board upon payment of the consideration therefor provided for therein, the Depositary Shares will be validly issued, fully paid and nonassessable, and entitled to the rights specified in the Deposit Agreement; and

6. With respect to the Units, when both: (a) the Board has taken all necessary corporate action to approve the issuance and terms of the Units (including the Securities underlying the Units) and related matters; and (b) the Units (and the Securities underlying the Units) have been duly executed and delivered against payment therefor, pursuant to the applicable definitive purchase, underwriting, or similar agreement duly authorized, executed and delivered by the Company and any applicable unit or other agents, and the certificates for the Units (including any Securities underlying the Units) have been duly executed and delivered by the Company and any applicable unit or other agents, then the Units will be validly issued and will constitute valid and binding obligations of the Company, enforceable against the Company in accordance with their terms.

Our opinion that any document is legal, valid and binding is qualified as to:

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Pacific Biosciences of California, Inc. Registration Statement on Form S-3 August 2, 2017

(a) limitations imposed by bankruptcy, insolvency, reorganization, arrangement, fraudulent conveyance, moratorium or other laws relating to or affecting the rights of creditors generally;

(b) rights to indemnification and contribution, which may be limited by applicable law or equitable principles; and

(c) general principles of equity, including without limitation concepts of materiality, reasonableness, good faith and fair dealing, and the possible unavailability of specific performance or injunctive relief and limitation of rights of acceleration, regardless of whether such enforceability is considered in a proceeding in equity or at law.

We express no opinion as to the laws of any other jurisdiction, other than the federal laws of the United States of America, the State of New York as to the enforceability of the Debt Securities and the General Corporation Law of the State of Delaware.

We hereby consent to the filing of this opinion as an exhibit to the above-referenced Registration Statement and to the reference to our name under the caption "Legal Matters" in the Prospectus forming a part of the Registration Statement. In giving such consent, we do not believe that we are "experts" within the meaning of such term as used in the Act or the rules and regulations of the Commission issued thereunder with respect to any part of the Registration Statement, including this opinion as an exhibit.

Sincerely,

/s/ Wilson Sonsini Goodrich & Rosati WILSON SONSINI GOODRICH & ROSATI Professional Corporation

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COMPUTATION OF RATION OF EARNINGS TO FIXED CHARGES

Our earnings are inadequate to cover fixed charges. The following table sets forth the dollar amount of the coverage deficiency for each of the threemonths ended June 30, 2017 and 2016, the each of the years ended December 31, 2016, 2015, 2014, 2013 and 2012. We have not included a ratio of earnings to combined fixed charges and preferred stock dividends because we do not have earnings. We have derived the deficiency of earnings to cover fixed charges from our historical financial statements. The following should be read in conjunction with our consolidated financial statements, including the notes thereto, and the other financial information included or incorporated by reference herein.

	Three Months	Ended June 30,	Year Ended December 31,				
	2017	2016	2016	2015	2014	2013	2012
(dollars in thousands)	(in thousands)			(in thousands)			
Net loss	\$ (25,507)	\$ (18,499)	\$(74,375)	\$(31,696)	\$(66,160)	\$(79,293)	\$(94,465)
Add back: Fixed charges	982	799	3,252	3,017	3,011	2,668	471
Total adjusted net loss	(24,525)	(17,700)	\$(71,123)	\$(28,679)	\$(63,149)	\$(76,625)	\$(93,994)
Fixed charges:							
Interest expense	853	795	3,234	2,926	2,828	2,478	275
Interest portion of rental expense	129	4	18	91	183	190	196
Total fixed charges	982	799	3,252	3,017	3,011	2,668	471
Deficiency of earnings available to fixed charges (1)	\$ (25,507)	\$ (18,499)	\$(74,375)	\$(31,696)	\$(66,160)	\$(79,293)	\$(94,465)

(1) Because of the deficiency of earnings available to cover fixed charges, the ratio information is not applicable.

CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the reference to our firm under the caption "Experts" in the Registration Statement (Form S-3) and related Prospectus of Pacific Biosciences of California, Inc. for the registration of up to \$150,000,000 of any combination of Common Stock, Preferred Stock, Depositary Shares, Warrants, Debt Securities, and Units, and to the incorporation by reference therein of our reports dated March 6, 2017, with respect to the consolidated financial statements of Pacific Biosciences of California, Inc., and the effectiveness of internal control over financial reporting of Pacific Biosciences of California, Inc., included in its Annual Report (Form 10-K) for the year ended December 31, 2016, filed with the Securities and Exchange Commission.

/s/ Ernst & Young LLP

Redwood City, California August 2, 2017