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

FORM 8-K

CURRENT REPORT

Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934

Date of Report (Date of earliest event reported): **May 10, 2018**

Akoustis Technologies, Inc.
(Exact name of registrant as specified in its charter)

Delaware	**001-38029**	**33-1229046**
(State or Other Jurisdiction of Incorporation)	(Commission File Number)	(I.R.S. Employer Identification Number)

9805 Northcross Center Court, Suite A
Huntersville, NC 28078
(Address of principal executive offices, including zip code)

704-997-5735
(Registrant's telephone number, including area code)

Not Applicable
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions (see General Instruction A.2. below):

☐ Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)

☐ Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)

☐ Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))

☐ Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))

Indicate by check mark whether the registrant is an emerging growth company as defined in Rule 405 of the Securities Act of 1933 (§230.405 of this chapter) or Rule 12b-2 of the Securities Exchange Act of 1934 (§240.b-2 of this chapter)
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 13(a) of the Exchange Act. ☐

Item 1.01 Entry into a Material Definitive Agreement

Purchase Agreement and Private Placement

On May 10, 2018, Akoustis Technologies, Inc. (the "Company") and its wholly owned subsidiary, Akoustis, Inc. (the "Initial Guarantor"), entered into a Purchase Agreement (the "Purchase Agreement") with Oppenheimer & Co. Inc., as representative (the "Representative") of the several initial purchasers named in Schedule 1 thereto (the "Initial Purchasers"), relating to the sale of $15 million aggregate principal amount of the Company's 6.5% Convertible Senior Secured Notes due 2023 (the "Notes") guaranteed by the Initial Guarantor and any other future subsidiaries of the Company (the "Note Guarantee" and, collectively with the Notes, the "Securities") to the Initial Purchasers (the "Offering").

The Purchase Agreement includes customary representations, warranties and covenants. Under the terms of the Purchase Agreement, the Company and the Initial Guarantor have jointly and severally agreed to indemnify the Initial Purchasers against certain liabilities.

The foregoing description of the Purchase Agreement does not purport to be complete and is qualified in its entirety by reference to the Purchase Agreement, which is filed as Exhibit 10.1 to this Current Report on Form 8-K and is incorporated herein by reference.

Indenture and the Notes

The Securities were issued on May 14, 2018 pursuant to an Indenture, dated as of such date (the "Indenture"), among the Company, the Initial Guarantor and The Bank of New York Mellon Trust Company, N.A., as trustee and collateral agent (the "Trustee"). The Notes bear interest at a rate of 6.5% per year until maturity on May 31, 2023. Interest on the Notes accrues from the date of issuance or from the most recent date on which interest has been paid and will be payable quarterly in arrears on February 28, May 31, August 31 and November 30 of each year, beginning on August 31, 2018. At the Company's option, interest may be paid in cash and/or freely tradable shares of the Company's common stock, subject to certain limitations, valued at 95% of the volume weighted average price of the common stock for the ten trading days ending on and including the trading day immediately preceding the interest payment date. Subject to certain limitations, interest payments will be made all in shares of common stock unless the Company gives written notice to the Note holders that it intends to make future interest payments either all or partially in cash, which notice will be effective 15 trading days thereafter. The Company will settle conversions of the Notes through delivery of shares of common stock of the Company in accordance with the terms of the Indenture. The initial conversion rate for the Notes is 152.6718 shares of common stock (subject to adjustment as provided in the Indenture) per $1,000 principal amount of the Notes, which is equal to an initial conversion price of approximately $6.55 per share, representing a conversion premium of approximately 10.5% above the last closing price of the common stock prior to the parties' entry into the Purchase Agreement.

Holders of the Notes may convert all or any portion of their Notes, in multiples of $1,000 principal amount, at their option at any time prior to the close of business on the business day immediately preceding the stated maturity date.

Subject to certain exceptions, in the event that the Company issues, or is deemed to issue, shares of common stock for a consideration per share less than the conversion price then in effect (the "trigger price"), then the conversion rate will be adjusted to reduce the conversion price to the higher of (i) the trigger price and (ii) $5.00 (as adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction).

At any time on or after May 31, 2019, if the closing sale price per share of the Company's common stock is greater than 175% of the then-effective conversion price for each of 20 days of any 30 consecutive trading day period immediately preceding the Company's optional redemption notice, the Company may redeem the Notes at a redemption price equal to 100% of the principal amount thereof, plus accrued and unpaid interest, if any, up to the redemption date.

The holders of the Notes will have a one-time right effective on May 31, 2021 (the "put date"), exercisable prior thereto in the manner described in the Indenture, to require the Company to repurchase for cash all of such holder's Notes on the put date at a purchase price equal to 100% of the principal amount of the Notes to be repurchased, plus interest. If the holder elects to convert the Notes at any time on or after the date that is one year after the date of issuance and prior to the put date, the holder will also receive a make-whole payment equal to the remaining scheduled interest payments that would have been made had such converted Notes remained outstanding through the put date. At the Company's option, the make-whole payment may be paid in cash and/or freely tradable shares of the Company's common stock, subject to certain limitations, valued at 95% of the volume weighted average price of the common stock for the ten trading days ending on and including the trading day immediately preceding the make-whole payment date. Subject to certain limitations, make-whole payments will be made all in shares of common stock unless the Company gives written notice to the Note holders that it intends to make future make-whole payments either all or partially in cash, which notice will be effective 15 trading days thereafter.

If the Company undergoes a "qualifying fundamental change," as defined in the Indenture, under certain circumstances holders who convert their Notes in connection with such a qualifying fundamental change will be entitled to a "qualifying fundamental change payment" equal to $130 per $1,000 of aggregate principal of Notes converted, payable at the Company's option in cash and/or freely tradable shares of common stock, subject to certain limitations, valued as provided in the Indenture. Subject to certain limitations, qualifying fundamental change payments will be made all in shares of common stock unless the Company gives written notice to the Note holders that it intends to make qualifying fundamental change payments either all or partially in cash, which notice will be effective 15 trading days thereafter.

The Indenture provides for customary events of default. In the case of an event of default with respect to the Notes arising from specified defaults relating to bankruptcy laws, all outstanding Notes will become due and payable immediately without further action or notice. If any other event of default with respect to the Notes under the Indenture occurs or is continuing, the Trustee or holders of at least 25% in aggregate principal amount of the then outstanding Notes may declare the principal amount of the Notes to be immediately due and payable.

Under the Indenture, the Notes are fully, unconditionally and irrevocably guaranteed on a senior secured basis by the Initial Guarantor and any future subsidiaries of the Company, jointly and severally. The Notes are our senior secured obligations and, subject to certain exceptions, rank senior to all of our existing and future unsecured indebtedness to the extent of the value of the collateral.

The foregoing description of the Indenture and the Notes does not purport to be complete and is qualified in its entirety by reference to each of the Indenture and form of Note, which are filed as Exhibits 4.1 and 4.2 to this Current Report on Form 8-K and are incorporated herein by reference.

Registration Rights Agreement

Pursuant to the Purchase Agreement, the Company and the Initial Guarantor entered into a registration rights agreement (the "Registration Rights Agreement") with the Initial Purchasers for the benefit of the holders of the Securities pursuant to which we agreed to file a registration statement within 90 days of the closing date of the Offering covering the resale of the Securities and the shares of common stock issuable upon conversion of the Notes (collectively, the "Registrable Securities") and to use their respective best efforts to cause the registration statement to be declared effective within 180 days of the closing date of the Offering. If the Registrable Securities are not registered for resale within that time period, or if the Company and the Initial Guarantor fail to maintain the effectiveness and availability of the registration statement (subject to certain grace periods), the Company will pay additional interest on the Notes at a rate per annum of 0.50% for the first 90 day period following the occurrence of the relevant event and, thereafter, at a rate per annum of 1.0% until such event is cured. Pursuant to the Registration Rights Agreement, the Company and the Initial Guarantor have agreed to maintain the registration of the Registrable Securities until the earliest of the date that (i) all of the Registrable Securities have been sold either pursuant to the registration statement or Rule 144 or are no longer outstanding, (ii) the Registrable Securities may be sold without restriction by each holder pursuant to Rule 144 in a single transaction and certain other conditions have been satisfied, or (iii) is two years after the registration statement is declared effective.

The foregoing description of the Registration Rights Agreement does not purport to be complete and is qualified in its entirety by reference to the Registration Rights Agreement, which is filed as Exhibit 10.2 to this Current Report on Form 8-K and is incorporated herein by reference.

Security Agreements

In connection with the Offering, the Company and the Initial Guarantor entered into a Pledge and Security Agreement, dated as of May 14, 2018 with the Trustee, as collateral agent (in such capacity, the "Collateral Agent") (the "Pledge and Security Agreement") pursuant to which the Securities are secured by a first priority lien (subject to permitted liens or permitted encumbrances, as applicable) on substantially all of the Company's and the Company's existing and future subsidiaries' assets, including the Initial Guarantor's Canandaigua, New York manufacturing facility (the "NY Facility"), and a pledge of the Company's equity interests in the Initial Guarantor. In connection with the granting of such lien, the Company and/or the Initial Guarantor entered into a Collateral Agency Agreement, Patent Security Agreement, Trademark Security Agreement, and Mortgages relating to the NY Facility (collectively with the Pledge and Security Agreement, the "Security Agreements").

The Security Agreements provide the Collateral Agent, on behalf of the holders of the Securities, with significant remedies, including the foreclosure and sale of all or parts of the collateral. However, the rights of the collateral agent to exercise remedies upon a specific event of default may be limited by the terms of the Security Agreements and applicable law.

The foregoing description of the Security Agreements does not purport to be complete and is qualified in its entirety by reference to the Pledge and Security Agreement, which is filed as Exhibit 10.3 to this Current Report on Form 8-K and is incorporated herein by reference.

Item 2.03 Creation of a Direct Financial Obligation or an Obligation under an Off-Balance Sheet Arrangement of a Registrant

The information set forth under Item 1.01 of this Current Report on Form 8-K under the heading "Indenture and the Notes" is incorporated herein by reference.

Item 3.02. Unregistered Sales of Equity Securities.

The information set forth under Item 1.01 of this Current Report on Form 8-K under the headings "Purchase Agreement and Private Placement," "Indenture and the Notes" and "Registration Rights Agreement" is incorporated herein by reference.

The Company and the Initial Guarantor offered and sold the Securities to the Initial Purchasers in reliance on the exemption from registration provided by Section 4(a)(2) of the Securities Act of 1933, as amended (the "Securities Act"), and the Initial Purchasers resold the Securities to "qualified institutional buyers" pursuant to the exemption from registration provided by Rule 144A under the Securities Act. The Company will settle conversions of the Notes by delivering shares of the Company's common stock. Neither the Securities nor the shares of common stock issuable upon conversion of the Notes have been registered under the Securities Act or may be offered or sold in the United States absent registration or an applicable exemption from registration requirements. Pursuant to the Registration Rights Agreement described in Item 1.01 of this Current Report on Form 8-K under the heading "Registration Rights Agreement," the Company and the Initial Guarantor have agreed to provide certain registration rights with respect to such securities.

Item 9.01 Financial Statements and Exhibits.

(d) Exhibits.

Exhibit Number	Description
4.1	Indenture, dated as of May 14, 2018, by and among the Company, the Initial Guarantor and The Bank of New York Mellon Trust Company, N.A.
4.2	Form of Note (included in Exhibit 4.1).
10.1	Purchase Agreement, dated as of May 10, 2018, by and among the Company, the Initial Guarantor and Oppenheimer & Co. Inc., as representative of the several Initial Purchasers named in Schedule 1 thereto.
10.2	Registration Rights Agreement, dated as of May 14, 2018, by and among the Company, the Initial Guarantor and Oppenheimer & Co. Inc. , as representative of the several Initial Purchasers named in Schedule 1 thereto.
10.3	Pledge and Security Agreement, dated as of May 14, 2018, by and among the Company, the Initial Guarantor and The Bank of New York Mellon Trust Company, N.A., as Collateral Agent.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

AKOUSTIS TECHNOLOGIES, INC.

Date: May 15, 2018

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

Exhibit 4.1

AKOUSTIS TECHNOLOGIES, INC.,

THE GUARANTORS LISTED HEREIN,

AND

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,

as Trustee and Collateral Agent

INDENTURE

Dated as of May 14, 2018

6.5% CONVERTIBLE SENIOR SECURED NOTES DUE 2023

TABLE OF CONTENTS

Exhibit 4.1

INDENTURE dated as of May 14, 2018, by and among Akoustis Technologies, Inc., a Delaware corporation (including any successors or assigns), the Guarantors (as defined below), The Bank of New York Mellon Trust Company, N.A., a national banking association, as Trustee and The Bank of New York Mellon Trust Company, N.A., a national banking association, as Collateral Agent.

The Company, the Guarantors, the Trustee and the Collateral Agent agree as follows for the benefit of each other and for the equal and ratable benefit of the Holders of the 6.5% Convertible Senior Secured Notes due 2023 (including all 6.5% Convertible Senior Secured Notes issued in exchange, transfer or replacement hereof, the "*Notes*"):

ARTICLE 1.
DEFINITIONS AND INCORPORATION BY REFERENCE

Section 1.01 Definitions.

"*Acquired Debt*" means, with respect to any specified Person, (i) Indebtedness of any other Person existing at the time such other Person is merged with or into or became a Subsidiary of such specified Person, and (ii) Indebtedness secured by a Lien encumbering any real property or fixed assets acquired by such specified Person.

"*Additional Interest*" means all liquidated damages then owing pursuant to Section 2(c) of the Registration Rights Agreement. References in this Indenture and in the Notes to the "interest" accrued or payable on the Notes shall be deemed to include any Additional Interest and Special Interest that may become accrued or payable thereon pursuant to the terms of this Indenture, the Notes and the Transaction Documents unless the context otherwise requires.

"*Additional Shares*" means any Freely Tradeable Common Stock issued pursuant to the terms of this Indenture, including those shares of Freely Tradeable Common Stock issued as Common Stock Interest, pursuant to an Interest Make-Whole Payment and/or pursuant to a Qualifying Fundamental Change Payment.

"*Affiliate*" of any specified Person means any other Person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified Person. For purposes of this Indenture, "control" (including, with correlative meanings, the terms "controlling", "controlled by" and "under common control with"), as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management or policies of such Person, whether through the ownership of voting securities, by agreement or otherwise; provided, that, solely for the purposes of this definition of "Affiliate," beneficial ownership of 10% or more of the Voting Stock of a Person shall be deemed to be control. Notwithstanding the foregoing, no Holder shall be deemed, for purposes of this Indenture, to be an Affiliate of the Company or any of its Subsidiaries solely by reason of holding the Notes.

"*After-Acquired Property*" means all assets and property acquired by the Company or any Guarantor after the date of this Indenture.

"*Agent*" means any Registrar, Paying Agent, Conversion Agent, Collateral Agent or co-registrar.

"*Applicable Procedures*" means, with respect to a Depositary, as to any matter at any time, the policies and procedures of such Depositary, if any, that are applicable to such matter at such time.

"*Bankruptcy Law*" means Title 11, U.S. Code or any similar federal or state law for the relief of debtors.

"*Beneficial Owner*" has the meaning assigned to such term in Rule 13d-3 and Rule 13d-5 under the Exchange Act, except that in calculating the beneficial ownership of any particular "person" (as that term is used in Section 13(d)(3) of the Exchange Act), such "person" will be deemed to have beneficial ownership of all securities that such "person" has the right to acquire by conversion or exercise of other securities, whether such right is currently exercisable or is exercisable only after the passage of time. For purposes of this definition, "Beneficially Owns" and "Beneficially Owned" shall have a correlative meaning.

"*Board of Directors*" means:

(i) with respect to a corporation, the board of directors of the corporation or any committee thereof duly authorized to act on behalf of such board;

(ii) with respect to a partnership, the Board of Directors of the general partner of the partnership;

(iii) with respect to a limited liability company, the managing member or members, the manager or any controlling committee or board of managers or managing members thereof; and

(iv) with respect to any other Person, the board or committee of such Person serving a similar function.

"*Business Day*" means any day other than a Legal Holiday.

"*Capital Lease Obligation*" means, at the time any determination thereof is to be made, the amount of the liability in respect of a capital lease that would at such time be required to be capitalized on a balance sheet prepared in accordance with GAAP, and the Stated Maturity thereof shall be the date of the last payment of rent or any other amount due under such lease prior to the first date upon which such lease may be prepaid by the lessee without payment of a penalty.

"*Capital Stock*" means:

(i) in the case of a corporation, corporate stock;

(ii) in the case of an association or business entity, any and all shares, interests, participations, rights or other equivalents (however designated) of corporate stock;

(iii) in the case of a partnership or limited liability company, partnership interests (whether general or limited) or membership interests; and

(iv) any other interest or participation that confers on a Person the right to receive a share of the profits and losses of, or distributions of assets of, the issuing Person, but excluding from all of the foregoing any debt securities convertible into Capital Stock, whether or not such debt securities include any right of participation with Capital Stock.

"*Cash Equivalents*" means and of the following types of property:

(i) United States dollars,

(ii) readily marketable direct obligations of the government of the United States or any agency or instrumentality thereof, or obligations the timely payment of principal and interest on which are fully and unconditionally guaranteed by the government of the United States or any state or municipality thereof, in each case so long as such obligation has an investment grade rating by S&P and Moody's;

(iii) commercial paper maturing no more than one year from the date of creation thereof and rated at least P-1 (or the then equivalent grade) by Moody's and A-1 (or the then equivalent grade) by S&P, or carrying an equivalent rating by a nationally recognized rating agency if at any time neither Moody's and S&P shall be rating such obligations;

(iv) insured certificates of deposit or bankers' acceptances of, or time deposits with any commercial bank that (i) is a member of the Federal Reserve System, (ii) issues (or the parent of which issues) commercial paper rated as described in clause (c) above, (iii) is organized under the laws of the United States or of any state thereof and (iv) has combined capital and surplus of at least $500,000,000;

(v) readily marketable general obligations of any corporation organized under the laws of any state of the United States, payable in the United States, expressed to mature not later than 12 months following the date of issuance thereof and rated A or better by S&P or A2 or better by Moody's; and

(vi) readily marketable shares of investment companies or money market funds that, in each case, invest solely in the foregoing Investments described in clauses (i) through (vi) above.

"*Closing Sale Price*" means, as determined by us, the closing sale price per share (or if no closing sale price is reported, the average of the bid and ask prices or, if more than one in either case, the average of the average bid and the average ask prices) on that date as reported in composite transactions for the principal U.S. national or regional securities exchange on which the Common Stock is traded. If the Common Stock is not listed for trading on a U.S. national or regional securities exchange on the relevant date, the "Closing Sale Price" will be the last quoted bid price for the Common Stock in the over-the-counter market on the relevant date as reported by OTC Markets Group Inc. or a similar organization. If the Common Stock is not so quoted, the "Closing Sale Price" will be the average of the mid-point of the last bid and ask prices for the Common Stock on the relevant date from each of at least three nationally recognized independent investment banking firms selected by the Company for this purpose.

"*Collateral*" shall have the same meaning as Pledged Collateral.

"*Collateral Agency Agreement*" means the Collateral Agency Agreement dated as of the date of this Indenture among the Company, the Guarantors, the Trustee and the Collateral Agent, as such agreement may be amended, modified or supplemented from time to time in accordance with its terms.

"*Collateral Agent*" shall have the meaning set forth in the Pledge and Security Agreement.

"*Collateral Documents*" means the Pledge and Security Agreement, the Collateral Agency Agreement, the Mortgage Documents, the IP Security Documents and other agreements, documents, or instruments, including any financing statements, and any amendments or supplements thereto, creating, perfecting, or evidencing any Liens securing the Notes, the Note Guarantees and any other Obligation under this Indenture or the Collateral Documents.

"*Common Equity*" of any Person means Capital Stock of such Person that is generally entitled (a) to vote in the election of directors of such Person or (b) if such Person is not a corporation, to vote or otherwise participate in the selection of the governing body, partners, managers or others that will control the management or policies of such Person.

"*Common Stock*" means the Common Stock of the Company, par value $0.001 per share, as it exists on the date of this Indenture and any shares of any class or classes of Capital Stock of the Company 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; provided, however, that if at any time there shall be more than one such resulting class, the shares of each such class then so issuable on conversion of the Notes 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 Akoustis Technologies, Inc., a Delaware corporation, and any and all successors thereto in accordance with this Indenture, and thereafter "Company" shall mean such successor Company.

"*Company Order*" means a written order of the Company, signed by one of its Officers, and delivered to the Trustee.

"*Consolidated Net Income*" means, with respect to any specified Person for any period, the aggregate of the Net Income of such Person and its Subsidiaries for such period, on a consolidated basis, determined in accordance with GAAP; *provided* that:

(1) the Net Income (but not loss) of any Person that is not a Subsidiary or that is accounted for by the equity method of accounting will be included only to the extent of the amount of dividends or similar distributions paid in cash to the specified Person or a Subsidiary of the Person;

(2) the Net Income of any Subsidiary will be excluded to the extent that the declaration or payment of dividends or similar distributions by that Subsidiary of that Net Income is not at the date of determination permitted without any prior governmental approval (that has not been obtained) or, directly or indirectly, by operation of the terms of its charter or any agreement, instrument, judgment, decree, order, statute, rule or governmental regulation applicable to that Subsidiary or its stockholders;

(3) the cumulative effect of a change in accounting principles will be excluded; and

(4) the Net Income of any Person acquired during the specified period for any period prior to the date of acquisition will be excluded.

"*Conversion Price*" means as of any time, $1,000, *divided by* the Conversion Rate as of such time.

"*Corporate Trust Office*" means (a) with respect to the Trustee, the office of the Trustee at which at any time its corporate trust business shall be administered, which office at the date hereof is located at 10161 Centurion Parkway N., Jacksonville, Florida 32256, Attention: Corporate Trust Administration, or such other address as the Trustee may designate from time to time by notice to the Holders and the Company, or the corporate trust office of any successor Trustee (or such other address as such successor Trustee may designate from time to time by notice to the Holders and the Company) and (b) with respect to the Paying Agent, the office of the Paying Agent at which at any time its business shall be administered, which office at the date hereof is located at 10161 Centurion Parkway N., Jacksonville, Florida 32256, Attention: Corporate Trust Administration, or such other address as the Paying Agent may designate from time to time by notice to the Holders and the Company, or the office of any successor Paying Agent (or such other address as such successor Paying Agent may designate from time to time by notice to the Holders and the Company).

"*Credit Facilities*" means, one or more debt facilities or commercial paper facilities, in each case, with banks or other institutional lenders providing for revolving credit loans, term loans, receivables financing (including through the sale of receivables to such lenders or to special purpose entities formed to borrow from such lenders against such receivables) or letters of credit, in each case, as amended, restated, modified, renewed, refunded, replaced (whether upon or after termination or otherwise) or refinanced (including by means of sales of debt securities to institutional investors) in whole or in part from time to time.

"*Credit Parties*" means collectively, the Company and each Guarantor.

"*Daily VWAP*" means for each Trading Day during any calculation period under this Indenture, the per share volume-weighted average price of the Common Stock as displayed under the heading ""Bloomberg VWAP"" on Bloomberg page "AKTS <equity> AQR" (or its equivalent successor if such page is not available) in respect of the period from the scheduled open of trading until the scheduled close of trading of the primary trading session on such Trading Day (or if such volume-weighted average price is unavailable, the market value of one share of the Common Stock on such Trading Day determined, using a volume-weighted average method, by a nationally recognized independent investment banking firm retained for this purpose by the Company). The "Daily VWAP" will be determined without regard to after-hours trading or any other trading outside of the regular trading session trading hours.

"*Default*" or "*default*" means any event that is, or with the passage of time or the giving of notice or both would be, an Event of Default.

"*Depositary*" means The Depository Trust Company until a successor Depositary shall have become such pursuant to the applicable provisions of this Indenture, and thereafter "Depositary" shall mean such successor Depositary.

"*Disqualified Stock*" means any Capital Stock that, by its terms (or by the terms of any security into which it is convertible or for which it is exchangeable, in each case, at the option of the holder of the Capital Stock), or upon the happening of any event, matures or is mandatorily redeemable, pursuant to a sinking fund obligation or otherwise, or redeemable at the option of the holder thereof, in whole or in part, on or prior to the date that is 91 days after the date on which the Notes mature. Notwithstanding the preceding sentence, any Capital Stock that would constitute Disqualified Stock solely because the holders of the Capital Stock have the right to require the Company to repurchase such Capital Stock upon the occurrence of a Fundamental Change or an Asset Sale will not constitute Disqualified Stock if the terms of such Capital Stock provide that the Company may not repurchase or redeem any such Capital Stock pursuant to such provisions unless such repurchase or redemption complies with Section 5.07 of this Indenture. The amount of Disqualified Stock deemed to be outstanding at any time for purposes of hereof shall be the maximum amount that the Company and its Subsidiaries may become obligated to pay upon the maturity of, or pursuant to any mandatory redemption provisions of, such Disqualified Stock, exclusive of accrued dividends.

"*Effective Date*" means the date on which any Fundamental Change, Qualifying Fundamental Change, Share Exchange Event, or any of the transactions described in Section 9.04 occurs or becomes effective.

"*Eligible Market*" means The New York Stock Exchange, Inc., The NASDAQ Global Market, The NASDAQ Global Select Market or The NASDAQ Capital Market.

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

"*Event of Loss*" means any loss of, destruction of or damage to, or any condemnation or other governmental taking of any property of the Company or any of its Subsidiaries in any single occurrence or series of related occurrences that involves assets having a Fair Market Value of at least $1.0 million in the aggregate.

"*Ex-Dividend Date*" means the first date on which shares of the Common Stock trade on the applicable exchange or in the applicable market, regular way, without the right to receive the issuance, dividend or distribution in question, from the Company or, if applicable, from the seller of Common Stock on such exchange or market (in the form of due bills or otherwise) as determined by such exchange or market. For the avoidance of doubt, any alternative trading convention on the applicable exchange or market in respect of shares of the Common Stock under a separate ticker symbol or CUSIP number will not be considered "regular way" for this purpose.

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended.

"*Excluded Securities*" means

(i) capital stock, rights, warrants or options to subscribe for or purchase Common Stock or Convertible Securities (as hereinafter defined) ("Options") issued to directors, officers, employees or consultants of the Company or a Guarantor in connection with their service as directors of the Company or a Guarantor, their employment by the Company or a Guarantor or their retention as consultants by the Company or a Guarantor pursuant to an employee benefit plan approved by the Board of Directors of the Company or the compensation committee of the Board of Directors of the Company,

(ii) shares of Common Stock issued upon the conversion or exercise of Options or any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of Common Stock ("Convertible Securities") that were issued and outstanding immediately preceding the execution and delivery of the Purchase Agreement (the "Effective Time"), provided such securities are not amended after the Effective Time to increase the number of shares of Common Stock issuable thereunder, lower the exercise or conversion price thereof or extend the term thereof,

(iii) securities issued pursuant to the Purchase Agreement and shares of Common Stock issued in respect of such securities,

(iv) shares of Common Stock issued or issuable by reason of a dividend, stock split or other distribution on shares of Common Stock (but only to the extent that such a dividend, stock split or distribution results in an adjustment in the Conversion Rate pursuant to the other provisions hereof), and

(v) Capital Stock, Options or Convertible Securities issued as consideration for an acquisition or strategic transaction (including a joint venture, technology license agreement or other similar strategic arrangement relating to the Company's business and operations) approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be a person or entity (or to the equityholders of an entity) which is, itself or through its subsidiaries, an operating company in a business which the Board of Directors of the Company in the good faith exercise of its business judgement believes is synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not, for the purposes of this clause (v), include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

"*Existing Indebtedness*" means Indebtedness of the Company and its Subsidiaries in existence on the date of this Indenture.

"*Fair Market Value*" means the value that would be paid by a willing buyer to an unaffiliated willing seller in a transaction not involving distress or necessity of either party, determined in good faith by the Board of Directors of the Company (unless otherwise provided in this Indenture).

"*Freely Tradeable*" means, with respect to any shares of Common Stock, shares of Common Stock which, at the time of issuance thereof, (i) are duly authorized, validly issued, fully paid and non-assessable; (ii) are eligible for resale by the recipient without limitation or restriction, including any volume limitations, under state or Federal securities laws or pursuant to an effective Registration Statement; and (iii) do not bear, and are not subject to, any restrictive legend, stop transfer or similar restriction.

"*Fundamental Change*" shall be deemed to have occurred at the time after the Notes are originally issued if any of the following occurs:

(a) a "person" or "group" within the meaning of Section 13(d) of the Exchange Act, other than the Company, its wholly owned Subsidiaries and the employee benefit plans of the Company and its wholly owned Subsidiaries, files a Schedule TO (or any successor schedule, form or report) or any schedule, form or report under the Exchange Act that discloses that such person or group has become the direct or indirect Beneficial Owner of Common Stock representing more than 50% of the voting power of the Common Stock, unless such beneficial ownership arises solely as a result of a revocable proxy delivered in response to a public proxy or consent solicitation made pursuant to the applicable rules and regulations under the Exchange Act; *provided* that no person or group shall be deemed to be the Beneficial Owner of any securities tendered pursuant to a tender or exchange offer made by or on behalf of such person or group until such tendered securities are accepted for purchase or exchange under such offer;

(b) the consummation of (A) any recapitalization, reclassification or change of the Common Stock (other than changes resulting from a subdivision or combination or solely a change in par value) as a result of which the Common Stock would be converted into, or exchanged for, stock, other securities, other property or assets; (B) any share exchange, consolidation or merger of the Company pursuant to which the Common Stock will be converted into cash, securities or other property or assets; or (C) any sale, lease or other transfer in one transaction or a series of transactions of all or substantially all of the consolidated assets of the Company and its Subsidiaries, taken as a whole, to any person other than one or more of the Company's direct or indirect wholly owned Subsidiaries; *provided, however*, that a transaction described in clauses (A) or (B) in which the holders of all classes of the Company's Common Equity immediately prior to such transaction own, directly or indirectly, more than 50% of all classes of Common Equity of the continuing or surviving corporation or transferee or the parent thereof immediately after such transaction in substantially the same proportions (relative to each other) as such ownership immediately prior to such transaction shall not be a Fundamental Change pursuant to this clause (b);

(c) the stockholders of the Company approve any plan or proposal for the liquidation or dissolution of the Company; or

(d) the Common Stock (or other common stock, American depository receipts, original shares or other Common Equity interests underlying the Notes) ceases to be listed or quoted on any Eligible Market (or any of their respective successors) or an established over-the-counter trading market in the United States;

provided, *however*, that (i) any event, transaction or series of transactions that constitute a Fundamental Change under both clause (a) and (b) above (determined without regard to the proviso in clause (b) above) will be deemed to be a Fundamental Change solely under clause (b) above; and (ii) a transaction or transactions described in clause (a) or clause (b) above shall not constitute a Fundamental Change if at least 90% of the consideration received or to be received by the common stockholders of the Company, excluding cash payments for fractional shares and cash payments made pursuant to of dissenters' appraisal rights, in connection with such transaction or transactions consists of shares of common stock, American depository receipts, original shares or other Common Equity interests that are listed or quoted on any of Eligible Markets (or any of their respective successors) or an established over-the-counter trading market in the United States or will be so listed or quoted when issued or exchanged in connection with such transaction or transactions and as a result of such transaction or transactions such consideration becomes Reference Property, excluding cash payments for fractional shares and cash payments made pursuant to dissenters' appraisal rights (subject to the provisions of Section 9.02(a)). If any transaction in which the Common Stock is replaced by the securities of another entity occurs, following completion of any related Qualifying Fundamental Change Period (or, in the case of a transaction that would have been a Fundamental Change or a Qualifying Fundamental Change but for the clause (ii) of the proviso immediately following clause (d) of the definition thereof, following the effective date of such transaction) references to the Company in this definition shall instead be references to such other entity.

"*GAAP*" means generally accepted accounting principles in the United States of America as in effect as of the date of this Indenture, including those set forth in (1) the opinions and pronouncements of the Accounting Principles Board of the American Institute of Certified Public Accountants, (2) the statements and pronouncements of the Financial Accounting Standards Board, (3) such other statements by such other entity as approved by a significant segment of the accounting profession and (4) the rules and regulations of the SEC governing the inclusion of financial statements (including pro forma financial statements) in Registration Statements and periodic reports required to be filed pursuant to Section 13 of the Exchange Act, including opinions and pronouncements in staff accounting bulletins and similar written statements from the accounting staff of the SEC.

"*Global Notes*" means one or more Notes in global form registered in the register in the name of a Depositary or a nominee thereof.

"*Government Securities*" means securities that are direct obligations of, or obligations guaranteed by, the United States of America, and the payment for which the United States pledges its full faith and credit.

"*Guarantee*" means a guarantee (other than by endorsement of negotiable instruments for collection in the ordinary course of business), direct or indirect, in any manner (including, without limitation, by way of a pledge of assets or through letters of credit or reimbursement agreements in respect thereof), of all or any part of any Indebtedness (whether arising by virtue of partnership arrangements, or by agreements to keep-well, to purchase assets, goods, securities, or services, to take or pay or to maintain financial statement conditions or otherwise).

"*Guarantors*" means Akoustis, Inc., and any other Subsidiary of the Company that executes a Note Guarantee in accordance with the provisions of this Indenture, in each case, together with their respective successors and assigns, unless and until the Note Guarantee of such Person has been released in accordance with the provisions of this Indenture.

"*Hedging Obligations*" means, with respect to any specified Person, the obligations of such Person under (i) interest rate swap agreements (whether from fixed to floating or from floating to fixed), interest rate cap agreements and interest rate collar agreements, (ii) other agreements or arrangements designed to manage interest rates or interest rate risk, and (iii) other agreements or arrangements designed to protect such Person against fluctuations in currency exchange rates or commodity prices.

"*Holder*" means a Person in whose name a Note is registered.

"*Indebtedness*" means with respect to any specified Person, any indebtedness of such Person (excluding accrued expenses and trade payables that are not yet overdue by 30 days), whether or not contingent:

(i) in respect of borrowed money;

(ii) evidenced by bonds, notes, debentures or similar instruments or letters of credit (or reimbursement agreements in respect thereof);

(iii) in respect of banker's acceptances;

(iv) representing Capital Lease Obligations;

(v) representing the balance deferred and unpaid of the purchase price of any property or services due more than six months after such property is acquired or such services are completed;

(vi) representing any Hedging Obligations; if and to the extent any of the preceding items (other than letters of credit and Hedging Obligations) would appear as a liability upon a balance sheet of the specified Person prepared in accordance with GAAP; or

(vii) all Disqualified Stock.

In addition, the term "Indebtedness" includes all Indebtedness of others secured by a Lien on any asset of the specified Person (whether or not such Indebtedness is assumed by the specified Person) and, to the extent not otherwise included, the Guarantee by or other contingent obligation of the specified Person of any Indebtedness of or relating to or arising from any other Person.

"*Indenture*" means this Indenture, as amended or supplemented from time to time in accordance with its terms.

"*Interest*" or "*interest*" means, when used with reference to the Notes, the sum of (i) any interest accrued and unpaid at the Interest Rate pursuant to Section 16.02(a) hereof, (ii) accrued and unpaid Additional Interest, if any, payable under the terms of the Registration Rights Agreement and (iii) accrued and unpaid Special Interest, if any, pursuant to Section 7.03 hereof.

"*Interest Payment Date*" means February 28, May 31, August 31 and November 30 of each year until the Stated Maturity with the first Interest Payment Date being August 31, 2018.

"*Interest Rate*" means a rate per annum equal to 6.5%.

"*Investments*" means, with respect to any Person, all direct or indirect investments by such Person in other Persons (including Affiliates) in the forms of loans (including Guarantees or other obligations), advances or capital contributions (excluding commission, travel and similar advances to officers and employees made in the ordinary course of business), purchases or other acquisitions for consideration of Indebtedness, Equity Interests or other securities, together with all items that are or would be classified as investments on a balance sheet prepared in accordance with GAAP.

"*IP Security Documents*" means the Copyright Security Agreement, Patent Security Agreement, and Trademark Security Agreement, each dated as of the date of this Indenture, given by the Akoustis, Inc. for the benefit of the Collateral Agent and any additional documents or supplements required to be delivered pursuant to Section 4.7(b) of the Pledge and Security Agreement.

"*Issue Date*" means the date of the first issuance of Notes under this Indenture.

"*Legal Holiday*" means a Saturday, a Sunday or a day on which the Federal Reserve Bank of New York or at a place of payment under this Indenture are authorized by law, regulation or executive order to remain closed. If a payment date is a Legal Holiday at a place of payment under this Indenture, payment may be made at that place on the next succeeding day that is not a Legal Holiday, and no interest shall accrue on such payment for the intervening period, as more fully described at Section 17.04. If a record date is a Legal Holiday, the record date shall not be affected.

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

"*Majority Holders*" means the Holders of at least 50.01% in aggregate Principal Amount of the Notes at the time then outstanding.

"*Market Disruption Event*" means (i) a failure by the Relevant Stock Exchange to open for trading during its regular trading session or (ii) the occurrence or existence prior to 1:00 p.m., New York City time, on any Scheduled Trading Day for the Common Stock, for more than one half-hour period in the aggregate during regular trading hours, of any suspension or limitation imposed on trading (by reason of movements in price exceeding limits permitted by the Relevant Stock Exchange or otherwise) in the Common Stock or in any options contracts or futures contracts relating to the Common Stock.

"*Material Adverse Effect*" means (a) a material adverse change in, or a material adverse effect upon, the operations, business, properties or condition (financial or otherwise) of the Company and its Subsidiaries, taken as a whole; (b) a material impairment of the ability of the Company or any of its Subsidiaries to perform in any material respect its obligations under any Transaction Document; or (c) a material adverse effect upon the legality, validity, binding effect or enforceability of any material provision of any Transaction Document.

"*Material Real Estate Asset*" shall have the meaning set forth in the Pledge and Security Agreement.

"*Moody's*" means Moody's Investors Services, Inc.

"*Mortgage Documents*" means (a) the Fee and Leasehold Mortgage, Assignment, Security Agreement and Fixture Filing dated as of May 14, 2018 given by Akoustis, Inc., a Delaware corporation, and The Ontario County Industrial Development Agency, a public benefit corporation of the State of New York, for the benefit of The Bank of New York Mellon Trust Company, N.A., as Collateral Agent and (b) the Supplemental Fee and Leasehold Mortgage, Assignment, Security Agreement and Fixture Filing dated as of May 14, 2018 given by Akoustis, Inc., a Delaware corporation, for the benefit of The Bank of New York Mellon Trust Company, N.A., as Collateral Agent and (c) any additional real property mortgages required to be delivered pursuant to Section 4.10 of the Pledge and Security Agreement.

"*Net Income*" means, with respect to any specified Person, the Net Income (loss) of such Person, determined in accordance with GAAP and before any reduction in respect of preferred stock dividends, excluding, however:

(1) any gain (but not loss), together with any related provision for taxes on such gain (but not loss), realized in connection with (a) any Asset Sale or (b) the disposition of any securities by such Person or any of its Subsidiaries or the extinguishment of any Indebtedness of such Person or any of its Subsidiaries; and

(2) any extraordinary gain (but not loss), together with any related provision for taxes on such extraordinary gain (but not loss).

"*Net Proceeds*" means the aggregate cash proceeds received by the Company or any of its Subsidiaries in respect of any Asset Sale (including, without limitation, any cash received upon the sale or other disposition of any non-cash consideration received in any Asset Sale) or any Event of Loss (including, without limitation, any insurance proceeds in respect thereof), net of

(i) the direct costs relating to such Asset Sale or Event of Loss, including, without limitation, legal, accounting and investment banking fees, sales commissions, relocation expenses incurred as a result of the Asset Sale or Event of Loss, and taxes paid or payable as a result of the Asset Sale or Event of Loss after taking into account any available tax credits or deductions and any tax sharing arrangements,

(ii) amounts required to be applied to the repayment of Indebtedness, secured by a Lien on the asset or assets of higher priority than the Lien securing the Notes or the Note Guarantees that were the subject of such Asset Sale or Event of Loss, and

(iii) any reserve for adjustment in respect of the sale price of such asset or assets established in accordance with GAAP.

"*Non-Material Real Estate Asset*" shall mean any Real Estate Asset that is not a Material Real Estate Asset.

"*Note Custodian*" means the Trustee, as custodian for the Depositary, with respect to the Global Notes, or any successor entity thereto.

"*Note Guarantee*" means the Guarantee by each Guarantor of the Company's payment obligations under this Indenture.

"*Notes*" has the meaning assigned to it in the preamble to this Indenture.

"*Obligations*" means any principal, interest, penalties, fees, indemnifications, reimbursements, damages and other liabilities payable under the documentation governing any Indebtedness.

"*Officer*" means, with respect to any Person, the Chair of the Board, the Vice Chair of the Board, the Chief Executive Officer, the President, the Chief Operating Officer, the Chief Financial Officer, the Treasurer, any Assistant Treasurer, the Controller, the Secretary or any Vice-President of such Person.

"*Officers' Certificate*" means a certificate signed on behalf of the Company by two Officers of the Company, one of whom must be the Chief Executive Officer, the Chief Financial Officer or the Treasurer, that meets the requirements of Section 17.06 and Section 17.07 hereof.

"*Opinion of Counsel*" means an opinion from legal counsel who is reasonably acceptable to the Trustee, that meets the requirements of Section 17.06 and Section 17.07 hereof. The counsel may be internal or external counsel to the Company or counsel to the Trustee.

"*Permitted Business*" means any business similar in nature to any business conducted by the Company or any of its Subsidiaries as of the date of this Indenture and any business reasonably ancillary, incidental, complimentary or related thereto or a reasonable extension, development or expansion thereof, in each case, as determined in good faith by the Board of Directors of the Company.

"*Permitted Investments*" means:

(i) any Investment in the Company or in a Subsidiary of the Company;

(ii) any Investment in Cash Equivalents;

(iii) any Investment by the Company or any Subsidiary of the Company in a Person, if as a result of such Investment: (a) such Person becomes a Subsidiary of the Company; or (b) such Person is merged, consolidated or amalgamated with or into, or transfers or conveys substantially all of its assets to, or is liquidated into, the Company or a Subsidiary of the Company;

(iv) any Investment made as a result of the receipt of non-cash consideration from an Asset Sale that was made pursuant to and in compliance with Section 5.10 hereof;

(v) any acquisition of assets or Capital Stock solely in exchange for the issuance of Equity Interests (other than Disqualified Stock) of the Company;

(vi) any Investments received in compromise or resolution of litigation, arbitration or other disputes;

(vii) Investments represented by Hedging Obligations; and

(viii) repurchases of the Notes, including the related Note Guarantees in accordance with the terms of this Indenture.

"*Permitted Liens*" means, other than with respect to any Real Estate Assets (except under clause (xii) below):

(i) Liens securing Existing Indebtedness permitted to be incurred pursuant to clause (i) of the definition of "Permitted Debt";

(ii) Liens securing or to secure in the future Indebtedness and other Obligations under this Indenture, the Notes and the Note Guarantees, permitted to be incurred pursuant to clause (ii) of the definition of "Permitted Debt";

(iii) Liens on property, plant or equipment securing Indebtedness represented by Capital Lease Obligations, mortgage financings or purchase money obligations permitted to be incurred pursuant to clause (iii) of the definition of "Permitted Debt";

(iv) Liens in favor of the Company or any Guarantor;

(v) Liens to secure the performance of statutory obligations, performance bonds or other obligations of a like nature incurred in the ordinary course of business;

(vi) Liens for taxes, assessments or charges, claims or other obligations owed to governmental or quasi-governmental authorities that are not yet delinquent or that are being contested in good faith by appropriate proceedings promptly instituted and diligently concluded; *provided* that any reserve or other appropriate provision as is required in conformity with GAAP has been made therefor;

(vii) Liens consisting of judgment or judicial attachment liens not constituting an Event of Default hereunder;

(viii) Licenses of intellectual property granted in accordance with industry practice in the ordinary course of the Company's business which (a) do not interfere in any material respect with the ordinary conduct of the business of the Company or any Subsidiaries and (b) do not secure any Indebtedness;

(ix) leases, subleases, licenses or sublicenses in the ordinary course of business to third Persons not interfering in any material respect with the ordinary conduct of the business of the Company or any Subsidiaries and do not secure any Indebtedness;

(x) Liens in favor of collecting banks arising under Section 4-210 of the Uniform Commercial Code;

(xi) Liens imposed by law, such as carriers', warehousemen's, materialmans', landlord's and mechanics' Liens, in each case, incurred in the ordinary course of business and securing obligations that are not yet delinquent or that are being contested in good faith by appropriate proceedings promptly instituted and diligently concluded; provided that any reserve or other appropriate provision as if required in conformity with GAAP has been made therefor; and

(xii) with respect to any Material Real Estate Assets, Permitted Encumbrances (as defined in the applicable Mortgage Documents), and, with respect to any Non-Material Real Estate Assets, (x) Liens that would otherwise be permissible under clause (ii), (iii) or (vi) of this definition and (y) easements and restrictions of record and other Liens that do not impair or otherwise interfere with, in any material respect, the ability of the Company or any Subsidiary to use such property to operate its business on such property.

"*Permitted Refinancing Indebtedness*" means any Indebtedness of the Company or any of its Subsidiaries issued in exchange for, or the net proceeds of which are used to renew, refund, refinance, replace, defease or discharge other Permitted Debt of the Company or any of its Subsidiaries (other than intercompany Indebtedness); provided that

(i) the principal amount (or accreted value, if applicable) of such Permitted Refinancing Indebtedness does not exceed the principal amount (or accreted value, if applicable) of the Indebtedness renewed, refunded, refinanced, replaced, defeased or discharged (plus all accrued interest on the Indebtedness and the amount of all fees and expenses, including premiums, incurred in connection therewith);

(ii) such Permitted Refinancing Indebtedness has a final maturity date later than the final maturity date of, and has a Weighted Average Life to Maturity equal to or greater than the Weighted Average Life to Maturity of, the Indebtedness being renewed, refunded, refinanced, replaced, defeased or discharged;

(iii) if the Indebtedness being renewed, refunded, refinanced, replaced, defeased or discharged is subordinated in right of payment to the Notes, such Permitted Refinancing Indebtedness has a final maturity date later than the final maturity date of, and is subordinated in right of payment to, the Notes on terms at least as favorable to the Holders as those contained in the documentation governing the Indebtedness being renewed, refunded, refinanced, replaced, defeased or discharged; and

(iv) such Indebtedness is incurred either by the Company or by the Subsidiary who is the obligor on the Indebtedness being renewed, refunded, refinanced, replaced, defeased or discharged.

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

"*Physical Note*" means permanent certificated Note in registered form issued in denomination of $1,000 Principal Amount and integral multiples thereof.

"*Pledge and Security Agreement*" means the Pledge and Security Agreement dated as of the date of this Indenture by and among the Company, the Guarantors and the Collateral Agent, as such agreement may be amended, modified or supplemented from time to time in accordance with its terms and with this Indenture.

"*Pledged Collateral*" means any assets of the Company or any Guarantor or any other Person defined as "Pledged Collateral" or "Collateral" in any Collateral Document.

"*Principal*" or "*Principal Amount*" means, when referring to the principal or principal amounts of any Note, as set forth on the face of the Note as such amount may be reduced by any conversions, redemptions or otherwise pursuant hereto.

"*Prospectus*" means the prospectus included in a Registration Statement (including, without limitation, a prospectus that includes any information previously omitted from a prospectus filed as part of an effective Registration Statement in reliance upon Rule 430A or 430B promulgated under the Securities Act), as amended or supplemented by any prospectus supplement, and all other amendments and supplements to the Prospectus, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference in such Prospectus.

"*Purchase Agreement*" means the Purchase Agreement dated as of the date of this Indenture among the Company and the purchasers of the Notes identified therein, as such agreements may be amended, modified or supplemented from time to time in accordance with their terms.

"*Qualified Institutional Buyer*" or "*QIB*" shall have the meaning specified in Rule 144A.

"*Qualifying Fundamental Change*" means any transaction or event that constitutes a Fundamental Change in clause (a), (b) or (d) of the definition of Fundamental Change (determined after giving effect to any exceptions to or exclusions from such definition, but without regard to the proviso in clause (b) of the definition thereof).

"*Real Estate Asset*" shall have the meaning set forth in the Pledge and Security Agreement.

"*Record Date*" means, with respect to any dividend, distribution or other transaction or event in which the holders of the Common Stock (or other applicable security) have the right to receive any cash, securities or other property or in which the Common Stock (or such other security) is exchanged for or converted into any combination of cash, securities or other property, the date fixed for determination of holders of Common Stock (or such other security) entitled to receive such cash, securities or other property (whether such date is fixed by the Board of Directors, by statute, by contract or otherwise).

"*Redemption Dates*" means, collectively, the Event of Default Redemption Date, Fundamental Change Repurchase Date, the Holder Optional Redemption Date and the Optional Redemption Date, each of the foregoing, individually, a Redemption Date.

"*Redemption Prices*" means, collectively, the Event of Default Redemption Price, Fundamental Change Repurchase Price, Holder Optional Redemption Price, and the Optional Redemption Price, each of the foregoing, individually, a Redemption Price.

"*Registration Rights Agreement*" means the Registration Rights Agreement dated as of the date of this Indenture among the Company and the purchasers of the Notes identified therein, as such agreement may be amended, modified or supplemented from time to time in accordance with its terms.

"*Registration Statement*" means any registration statement of the Company and any other entity required to be a registrant with respect to such registration statement pursuant to the requirements of the Securities Act on an appropriate form, and including, in each case, the Prospectus, amendments and supplements to each such registration statement or Prospectus, including pre- and post-effective amendments, all exhibits thereto, and all material incorporated by reference or deemed to be incorporated by reference in such registration statement.

"*Regular Record Date*" and "*regular record date*" with respect to any Interest Payment Date, means the February 15, May 15, August 15 or November 15 (whether or not such day is a Business Day) immediately preceding the applicable Interest Payment Date.

"*Regulation S*" means Regulation S promulgated under the Securities Act (or any successor provision promulgated by the SEC).

"*Relevant Stock Exchange*" means the NASDAQ Capital Market or, if the Common Stock is not then listed on the NASDAQ Capital Market, the principal other national or regional securities exchange or market on which the Common Stock is listed or admitted for trading.

"*Responsible Officer*" means, when used with respect to the Trustee, any officer within the corporate trust department of the Trustee, including any vice president, assistant vice president, assistant secretary, senior associate, associate, trust officer or any other officer of the Trustee who customarily performs functions similar to those performed by the Persons who at the time shall be such officers, respectively, or to whom any corporate trust matter is referred because of such person's knowledge of and familiarity with the particular subject and who shall have direct responsibility for the administration of this Indenture.

"*Restricted Investment*" means any Investment other than a Permitted Investment.

"*Rule 144*" means Rule 144 promulgated under the Securities Act (or any successor provision promulgated by the SEC).

"*Rule 144A*" means Rule 144A promulgated under the Securities Act (or any successor provision promulgated by the SEC).

"*Scheduled Trading Day*" means a day that is scheduled to be a Trading Day on the Relevant Stock Exchange, or if the Common Stock is not then listed on any Relevant Stock Exchange, a Business Day.

"*SEC*" means the Securities and Exchange Commission.

"*Secured Indebtedness*" means any Permitted Debt secured by assets of the Company other than the Collateral.

"*Securities Act*" means the Securities Act of 1933, as amended.

"*Significant Subsidiary*" means any Subsidiary that would be a "significant subsidiary" as defined in Article I, Rule 1-02 of Regulation S-X, promulgated pursuant to the Securities Act, as such Regulation is in effect on the date of this Indenture.

"*Stated Maturity*" when used in respect of any Note, means the date specified in such Note as the fixed date on which an amount equal to the Principal of such Note together with accrued and unpaid Interest, and any other amounts accrued and unpaid hereunder if any, is due and payable.

"*Stockholder Approval*" means the affirmative vote of a majority of the voting power of the issued and outstanding Capital Stock of the Company voting in accordance with the provisions of the Company's certificate of incorporation and by-laws as in effect on the date of such vote.

"*Subsidiary*" means, with respect to any specified Person:

(i) any corporation, association or other business entity of which more than 50% of the total voting power of shares of Capital Stock entitled (without regard to the occurrence of any contingency and after giving effect to any voting agreement or stockholders' agreement that effectively transfers voting power) to vote in the election of directors, managers or trustees of the corporation, association or other business entity is at the time owned or controlled, directly or indirectly, by that Person or one or more of the other Subsidiaries of that Person (or a combination thereof); and

(ii) any partnership (a) the sole general partner or the managing general partner of which is such Person or a Subsidiary of such Person or (b) the only general partners of which are that Person or one or more Subsidiaries of that Person (or any combination thereof).

"*TIA*" means the Trust Indenture Act of 1939 (15 U.S.C. §§ 77aaa-77bbbb) as in effect on the date on which this Indenture is qualified under the TIA.

"*Trading Day*" means a day on which (i) trading in the Common Stock (or other security for which a closing sale price must be determined) generally occurs on the Relevant Stock Exchange, or, if the Common Stock (or such other security) is not then listed on a Relevant Stock Exchange, on the principal other market on which the Common Stock (or such other security) is then traded, and (ii) a last reported sale price for the Common Stock (or closing sale price for such other security) is available on such securities exchange or market. If the Common Stock (or such other security) is not so listed or traded "Trading Day" means a "Business Day." For purposes of any calculation under this Indenture based upon the Daily VWAP, "Trading Day" means a scheduled trading day on which (i) there is no Market Disruption Event and (ii) trading in the Common Stock generally occurs on the Relevant Stock Exchange or, if the Common Stock is not then listed on a Relevant Stock Exchange, on the principal other market on which the Common Stock is then listed or admitted for trading. If the Common Stock is not so listed or admitted for trading, "Trading Day" means a "Business Day."

"*Transaction Documents*" means this Indenture, the Notes, the Note Guarantees, the Collateral Documents, the Purchase Agreement and the Registration Rights Agreement.

"*Trustee*" means The Bank of New York Mellon Trust Company, N.A., until a successor replaces it in accordance with the applicable provisions of this Indenture and thereafter means the successor serving hereunder.

"*UCC*" means the Uniform Commercial Code as in effect in the State of New York or any other applicable jurisdiction.

"*Voting Stock*" of any specified Person as of any date means the Capital Stock of such Person that is at the time entitled to vote in the election of the Board of Directors of such Person.

"*Weighted Average Life to Maturity*" means, when applied to any Indebtedness at any date, the number of years obtained by dividing: (a) the sum of the products obtained by multiplying (x) the amount of each then remaining installment, sinking fund, serial maturity or other required payments of principal, including payment at final maturity, in respect of the Indebtedness, by (y) the number of years (calculated to the nearest one-twelfth) that will elapse between such date and the making of such payment, by (b) the then outstanding principal amount of such Indebtedness.

Section 1.02 Other Definitions.

Term	Defined in Section
1% Provision	*9.04*
Act	*2.05*
Affiliate Transaction	*5.11*
Agent Members	*2.15*
Applicable Law	*17.19*
Asset Sale	*5.10*
Authentication Order	*2.02*
Cash Interest	*16.02*
Clause A Distribution	*9.04*
Clause B Distribution	*9.04*
Clause C Distribution	*9.04*
Common Stock Interest	*16.02*
Common Stock Interest Share Amount	*16.02*
Conversion Agent	*2.03*
Conversion Date	*9.02*
Conversion Limitation	*9.02*
Conversion Obligation	*9.01*
Conversion Rate	*9.01*
Covenant Defeasance	*11.02*
Dilutive Issuance	*9.04*
Distributed Property	*9.04*
Event of Default	*7.01*
Event of Default Redemption Price	*7.02*
Form of Note	*2.01*
Fundamental Change Company Notice	*10.01*
Fundamental Change Repurchase Date	*10.01*
Fundamental Change Repurchase Notice	*10.01*
Fundamental Change Repurchase Price	*10.01*
Expiration Date	*9.04*
Holder Optional Redemption	*3.08*
Holder Optional Redemption Date	*3.08*
Holder Optional Redemption Notice	*3.08*
Holder Optional Redemption Price	*3.08*
incur	*5.09*
indenture securities	*1.03*
indenture security Holder	*1.03*
indenture to be qualified	*1.03*
indenture trustee	*1.03*
institutional trustee	*1.03*
Interest Make-Whole Payment	*9.01*
Legend	*2.13*
Maximum Additional Share Reserve	*9.06*
Maximum Conversion Share Reserve	*9.06*
Maximum Share Reserve	*9.06*
Notice of Conversion	*9.02*
obligor	*1.03*
Optional Redemption Date	*3.03*
Optional Redemption Notice	*3.03*
Optional Redemption Price	*3.07*
Optional Redemption Right	*3.07*
Paying Agent	*2.03*
Payment Default	*7.01*
Permitted Asset Sale	*5.10*
Permitted Debt	*5.09*
Qualifying Fundamental Change Company Notice	*9.03*
Qualifying Fundamental Change Payment	*9.03*
Qualifying Fundamental Change Period	*9.03*
Reference Property	*9.07*
Registrar	*2.03*
Repurchase Notice	*3.08*
Restricted Payments	*5.07*
Securities Register	*2.03*
Share Exchange Event	*9.07*
Special Interest	*7.03*
Spinoff	*9.04*
Stock Price	*9.03*
Surviving Entity	*6.01*
transfer	*2.13*

Trigger Event	*9.04*
Trigger Price	*9.04*
unit of Reference Property	*9.07*
Valuation Period	*9.04*

Section 1.03 Incorporation by Reference of Trust Indenture Act.

Whenever this Indenture refers to a provision of the TIA, the provision is incorporated by reference in and made a part of this Indenture.

The following TIA terms used in this Indenture have the following meanings:

"*indenture securities"* means the Notes and the Note Guarantees;

"*indenture security Holder"* means a Holder of a Note;

"*indenture to be qualified"* means this Indenture;

"*indenture trustee"* or "*institutional trustee"* means the Trustee; and

"*obligor"* on the Notes and the Note Guarantees means the Company and the Guarantors, respectively, and any successor obligor upon the Notes and the Note Guarantees, respectively.

All other terms used in this Indenture that are defined by the TIA, defined by TIA reference to another statute or defined by SEC rule under the TIA have the meanings so assigned to them.

Section 1.04 Rules of Construction.

Unless the context otherwise requires:

(a) a term has the meaning assigned to it;

(b) an accounting term not otherwise defined has the meaning assigned to it in accordance with GAAP;

(c) "or" is not exclusive;

(d) words in the singular include the plural, and in the plural include the singular;

(e) provisions apply to successive events and transactions; and

(f) references to sections of or rules under the TIA, the Securities Act or the Exchange Act shall be deemed to include substitute, replacement of successor sections or rules adopted by the SEC from time to time.

ARTICLE 2.
THE NOTES

Section 2.01 Title, Terms, Form and Dating.

The Notes shall be known and designated as the "6.5% Convertible Senior Secured Notes Due 2023" of the Company. The Principal Amount shall be payable on the Stated Maturity or on an applicable Redemption Date or as otherwise provided under this Indenture.

The Notes and the Trustee's certificate of authentication shall be substantially in the form of Exhibit A hereto (the " *Form of Note"*). The Notes may have notations, legends or endorsements required by law, stock exchange rule or usage. Each Note shall be dated the date of its authentication. The Notes shall be in denominations of $1,000 and integral multiples thereof.

The terms and provisions contained in the Notes shall constitute, and are hereby expressly made, a part of this Indenture and the Company, the Guarantors, the Trustee and the Collateral Agent, by their execution and delivery of this Indenture, expressly agree to such terms and provisions and to be bound thereby. However, to the extent any provision of any Note conflicts with the express provisions of this Indenture, the provisions of this Indenture shall govern and be controlling.

Section 2.02 Execution and Authentication.

Two Officers shall sign the Notes for the Company by manual or facsimile signature.

If an Officer whose signature is on a Note no longer holds that office at the time a Note is authenticated, the Note shall nevertheless be valid.

A Note shall not be valid until authenticated by the manual signature of the Trustee. The signature shall be conclusive evidence that the Note has been authenticated under this Indenture.

The Trustee shall, upon a written order of the Company signed by two Officers (an "*Authentication Order"*) accompanied by an Officers' Certificate, authenticate Notes for original issue up to the aggregate Principal Amount of $15.0 million.

The Trustee may appoint an authenticating agent acceptable to the Company to authenticate Notes. An authenticating agent may authenticate Notes whenever the Trustee may do so. Each reference in this Indenture to authentication by the Trustee includes authentication by such agent. An authenticating agent has the same rights as an Agent to deal with Holders or an Affiliate of the Company.

Section 2.03 Registrar, Paying Agent and Conversion Agent

The Company shall maintain an office or agency in The City of New York where Notes may be presented for registration of transfer or for exchange ("*Registrar"*), an office or agency where Notes may be presented for payment ("*Paying Agent" or "paying agent"*) and an office or agency where the Notes may be presented for conversion ("*Conversion Agent"*). The Registrar shall keep a register of the Notes and of their transfer and exchange (the "*Securities Register*"). The Company may appoint one or more co-registrars and one or more additional paying agents and conversion agents. The term "Registrar" includes any co-registrar, the term "Paying Agent" includes any additional paying agent, and the term "Conversion Agent" includes any additional conversion agent. The Company may change any Paying Agent, Registrar or Conversion Agent without notice to any Holder. The Company shall notify the Trustee in writing of the name and address of any Agent not a party to this Indenture. If the Company fails to appoint or maintain another entity as Registrar or Paying Agent, the Trustee shall act as such. The Company or any of its Subsidiaries may act as Paying Agent or Registrar.

The Company initially appoints the Trustee to act as the Registrar, Paying Agent and Conversion Agent.

Section 2.04 Paying Agent to Hold Money in Trust

The Company shall require each Paying Agent other than the Trustee to agree in writing that the Paying Agent will hold in trust for the benefit of Holders or the Trustee all money held by the Paying Agent for the payment of Principal, premium, if any, Interest or any other amounts due on the Notes, and will notify the Trustee, in writing, of any default by the Company in making any such payment. While any such default continues, the Trustee may require a Paying Agent to pay all money held by it to the Trustee. The Company at any time may require a Paying Agent to pay all money held by it to the Trustee. Upon payment over to the Trustee, the Paying Agent (if other than the Company or a Subsidiary) shall have no further liability for the money. If the Company or a Subsidiary acts as Paying Agent, it shall segregate and hold in a separate trust fund for the benefit of the Holders all money held by it as Paying Agent. Upon any bankruptcy or reorganization proceedings relating to the Company, the Trustee shall serve as Paying Agent for the Notes.

Section 2.05 Holder Lists; Acts.

(a) The Trustee shall preserve in as current a form as is reasonably practicable the most recent list available to it of the names and addresses of all Holders and shall otherwise comply with TIA § 312(a). If the Trustee is not the Registrar, the Company shall furnish to the Trustee at least seven Business Days before each Interest Payment Date and at such other times as the Trustee may request in writing, a list in such form and as of such date as the Trustee may reasonably require of the names and addresses of the Holders of Notes and the Company shall otherwise comply with TIA § 312(a).

(b) Any request, demand, authorization, direction, notice, consent, waiver or other action provided by this Indenture to be given or taken by Holders may be embodied in and evidenced by one or more instruments of substantially similar tenor signed by such Holders in person or by agent duly appointed in writing; and, except as herein otherwise expressly provided, such action shall become effective when such instrument or instruments are delivered to the Trustee and, where it is hereby expressly required, to the Company. Such instrument or instruments (and the action embodied therein and evidenced thereby) are herein sometimes referred to as the "Act" of 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 conclusive in favor of the Trustee and the Company, if made in the manner provided in this Section.

(c) 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 such officer the execution thereof. Where such execution is by a signer acting in a capacity other than such signer's individual capacity, such certificate or affidavit shall also constitute sufficient proof of such signer's authority. The fact and date of the execution of any such instrument or writing, or the authority of the Person executing the same, may also be proved in any other manner which the Trustee deems sufficient.

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

(e) Any request, demand, authorization, direction, notice, consent, waiver or other Act of the Holder of any Note shall bind every future Holder of the same Note and the holder of every Note 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 Note.

(f) If the Company shall solicit from the Holders any request, demand, authorization, direction, notice, consent, waiver or other Act, the Company may, at its option, by or pursuant to a resolution of its Board of Directors, fix in advance a record date for the determination of Holders entitled to give such request, demand, authorization, direction, notice, consent, waiver or other Act, but the Company shall have no obligation to do so. If such a record date is fixed, such request, demand, authorization, direction, notice, consent, waiver or other Act may be given before or after such record date, but only the Holders of record at the close of business on such record date shall be deemed to be Holders for the purposes of determining whether Holders of the requisite proportion of the then outstanding Notes have authorized or agreed or consented to such request, demand, authorization, direction, notice, consent, waiver or other Act, and for that purpose the then outstanding Notes shall be computed as of such record date; provided that no such authorization, agreement or consent by the Holders on such record date shall be deemed effective unless it shall become effective pursuant to the provisions of this Indenture not later than six months after the record date.

Section 2.06 Transfer and Exchange.

(a) Subject to compliance with any applicable additional requirements contained in Section 2.13, when a Note is presented to a Registrar, at the office of the Registrar, with a request to register a transfer thereof or to exchange such Note for an equal Principal Amount of Notes of other authorized denominations, the Registrar shall register the transfer or make the exchange as requested; *provided, however,* that every Note presented or surrendered for registration of transfer or exchange shall be duly endorsed or accompanied by an assignment form and, if applicable, an appropriately completed certificate of transfer in the form set forth in Attachment 5 to the Form of Note attached hereto as Exhibit A, and in form satisfactory to the Registrar duly executed by the Holder thereof or its attorney duly authorized in writing. To permit registration of transfers and exchanges, upon surrender of any Note for registration of transfer or exchange at an office or agency maintained pursuant to Section 2.03, the Company shall execute and the Trustee shall authenticate Notes of a like aggregate Principal Amount at the Registrar's request. Any exchange or transfer shall be without charge, except that the Company or the Registrar may require payment of a sum sufficient to cover any tax or other governmental charge that may be imposed in relation thereto other than any tax or other governmental charge payable upon any exchange or transfer pursuant to Section 2.10, Section 2.13(a), Section 3.07, ARTICLE 10 and Section 12.05.

(b) The Company shall not be required (A) to issue, to register the transfer of or to exchange any Notes during a period beginning at the opening of business 15 days before the day of any selection of Notes for repurchase under Section 3.07 hereof and ending at the close of business on the day of selection, (B) to register the transfer of or to exchange any Note so selected for repurchase in whole or in part, except the unpurchased portion of any Note being redeemed in part or (C) to register the transfer of or to exchange a Note between a Regular Record Date and the next succeeding Interest Payment Date set forth on the face of such Note.

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

(d) Any Registrar appointed pursuant to Section 2.03 hereof shall provide to the Trustee such information as the Trustee may reasonably require in connection with the delivery by such Registrar of Notes upon transfer or exchange of Notes.

(e) Each Holder agrees to indemnify the Company and the Trustee against any liability that may result from the transfer, exchange or assignment of such Holder's Notes in violation of any provision of this Indenture and/or applicable United States Federal or state securities law.

(f) The Trustee shall have no obligation or duty to monitor, determine or inquire as to compliance with any restrictions on transfer imposed under this Indenture or under applicable law with respect to any transfer of any interest in any Note (including any transfers between or among Agent Members or book-entry interests) other than to require delivery of such certificates and other documentation or evidence as are expressly required by, and to do so if and when expressly required by the terms of, this Indenture, and to examine the same to determine substantial compliance as to form with the express requirements hereof.

(g) Prior to due presentment for the registration of a transfer of any Note, the Trustee, any Agent and the Company may deem and treat the Person in whose name any Note is registered as the absolute owner of such Note for the purpose of receiving payment of Principal of and Interest and any other amounts due on such Notes and for all other purposes, and none of the Trustee, any Agent or the Company shall be affected by notice to the contrary.

(h) All certifications, certificates and Opinions of Counsel required to be submitted to the Registrar pursuant to this Section 2.06 to effect a registration of transfer or exchange may be submitted by facsimile.

Section 2.07 Replacement Notes.

If any mutilated Note is surrendered to the Trustee or the Company and the Trustee receives evidence to its satisfaction of the destruction, loss or theft of any Note, the Company shall issue and the Trustee, upon receipt of an Authentication Order, shall authenticate a replacement Note if the Trustee's requirements are met. If required by the Trustee or the Company, an indemnity bond must be supplied by the Holder that is sufficient in the judgment of the Trustee and the Company to protect the Company, the Trustee, any Agent and any authenticating agent from any loss that any of them may suffer if a Note is replaced. The Company may charge for its expenses in replacing a Note.

Every replacement Note is an additional obligation of the Company and shall be entitled to all of the benefits of this Indenture equally and proportionately with all other Notes duly issued hereunder.

Section 2.08 Outstanding Notes.

The Notes outstanding at any time are all the Notes authenticated by the Trustee, except for those canceled by it, those converted pursuant to ARTICLE 9, those delivered to it for cancellation, and those described in this Section as not outstanding. Except as set forth in Section 2.09 hereof, a Note does not cease to be outstanding because the Company or an Affiliate of the Company holds the Note.

If a Note is replaced pursuant to Section 2.07 hereof, it ceases to be outstanding unless the Trustee receives proof satisfactory to it that the replaced Note is held by a *bona fide* purchaser.

If the entire Principal, accrued and unpaid Interest on such Principal and any other amounts due on any Note is considered paid under Section 5.01 hereof, such Note ceases to be outstanding and Interest on it ceases to accrue.

If the Paying Agent (other than the Company, a Subsidiary or an Affiliate of any thereof) holds, on a Redemption Date or Stated Maturity, money sufficient to pay all Notes payable on that date, then on and after that date such Notes shall be deemed to be no longer outstanding and shall cease to accrue Interest.

Section 2.09 Treasury Notes.

In determining whether the Holders of the requisite Principal Amount of outstanding Notes are present at a meeting of Holders of Notes for quorum purposes or have consented to or voted in favor of any request, demand, authorization, direction, notice, consent, waiver, amendment or modification hereunder, Notes held for the account of the Company, or for any Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company, shall be disregarded and deemed not to be outstanding, except that in determining whether the Trustee shall be protected in making such a determination or relying upon any such quorum, consent or vote, only Notes which a Responsible Officer of the Trustee actually knows to be so owned shall be so disregarded.

Section 2.10 Temporary Notes.

Until certificates representing Notes are ready for delivery, the Company may prepare and the Trustee, upon receipt of an Authentication Order, shall authenticate temporary Notes. Temporary Notes shall be substantially in the form of certificated Notes but may have variations that the Company considers appropriate for temporary Notes and as shall be reasonably acceptable to the Trustee. Without unreasonable delay, the Company shall prepare and the Trustee shall authenticate definitive Notes in exchange for temporary Notes without charge to the Holders.

Holders of temporary Notes shall be entitled to all of the benefits of this Indenture as Physical Notes.

Section 2.11 Cancellation.

The Company shall cause all Notes surrendered for the purpose of payment, repurchase, registration of transfer or exchange or conversion, if surrendered to the Company or any of the Company's agents, Subsidiaries or Affiliates, including the Registrar, Paying Agent and Conversion Agent, to be surrendered to the Trustee for cancellation. All Notes delivered to the Trustee shall, upon receipt of a written request in a Company Order, be canceled promptly by it. Except for any Notes surrendered for registration of transfer or exchange, or as otherwise expressly permitted by any of the provisions of this Indenture, no Notes shall be authenticated in exchange for any Notes surrendered to the Trustee for cancellation. The Trustee shall cancel Notes in accordance with its customary procedures and, after such cancellation, shall deliver evidence of such cancellation to the Company, at the Company's written request in a Company Order. Except as otherwise provided in this Indenture, the Company may not issue new Notes to replace Notes that it has paid or that have been delivered to the Trustee for cancellation, or that any Holder has converted pursuant to ARTICLE 9 hereof.

Section 2.12 Repurchases.

The Company may, to the extent permitted by law, and directly or indirectly (regardless of whether such Notes are surrendered to the Company), repurchase Notes in the open market or otherwise, whether by the Company or its Subsidiaries or through a privately negotiated transaction or public tender or exchange offer or through counterparties to private agreements, including by cash-settled swaps or other derivatives, in each case, without prior notice to the Holders. The Company shall cause any Notes so repurchased (other than Notes repurchased pursuant to cash-settled swaps or other derivatives) to be surrendered to the Trustee for cancellation in accordance with Section 2.11 and such Notes shall no longer be considered outstanding under this Indenture upon their repurchase.

Section 2.13 Legend; Additional Transfer and Exchange Requirements.

(a) If Notes are issued upon the transfer, exchange or replacement of Notes subject to restrictions on transfer and bearing the legends set forth on the Form of Note (collectively, the "*Legend*"), or if a request is made to remove the Legend on a Note, (i) the Notes so issued shall bear the Legend, or (ii) the Legend shall not be removed, as the case may be, unless in the case of clause (ii) there is delivered to the Company and the Registrar such satisfactory evidence, which shall include an Opinion of Counsel if requested by the Company or such Registrar, as may be reasonably required by the Company and the Registrar, that neither the Legend nor the restrictions on transfer set forth therein are required to ensure that transfers thereof comply with the provisions of Rule 144A, Rule 144 or Regulation S under the Securities Act or that such Notes are not "restricted" within the meaning of Rule 144 under the Securities Act; *provided* that no such evidence need be supplied in connection with the sale of such Note pursuant to a Registration Statement that is effective at the time of such sale. Upon (1) provision of such satisfactory evidence if requested, or (2) notification by the Company to the Trustee and Registrar of the sale of such Note pursuant to a Registration Statement that is effective at the time of such sale, the Trustee, at the written direction of the Company, shall authenticate and deliver a Note that does not bear the Legend. If the Legend is removed from the face of a Note and the Note is subsequently held by an Affiliate of the Company, the Legend shall be reinstated.

(b) No transfer of a Note to any Person shall be effective under this Indenture or the Notes unless and until such Note has been registered in the name of such Person.

(c) Subject to the succeeding paragraph, every Note shall be subject to the restrictions on transfer provided in the Legend. Whenever any restricted Note is presented or surrendered for registration of transfer or for exchange for a Note registered in a name other than that of the Holder, such Note must be accompanied by a certificate of transfer in the form set forth in Attachment 5 to the Form of Note attached hereto as Exhibit A, dated the date of such surrender and signed by the Holder of such Note, as to compliance with any applicable restrictions on transfer. The Registrar shall not be required to accept for such registration of transfer or exchange any Note not so accompanied by a properly completed certificate.

(d) The restrictions imposed by the Legend upon the transferability of any Note shall cease and terminate when such Note has been sold pursuant to an effective Registration Statement or transferred in compliance with Rule 144 under the Securities Act (or any successor provision thereto) or, if earlier, upon the expiration of the holding period applicable to sales thereof under Rule 144(k) under the Securities Act (or any successor provision). Any Note as to which such restrictions on transfer shall have expired in accordance with their terms or shall have terminated may, upon a surrender of such Note for exchange to the Registrar in accordance with the provisions of this Section 2.13 (accompanied, in the event that such restrictions on transfer have terminated by reason of a transfer in compliance with Rule 144 or any successor provision, by, if requested by the Company or the Registrar, an Opinion of Counsel reasonably acceptable to the Company and addressed to the Company in form acceptable to the Company, to the effect that the transfer of such Note has been made in compliance with Rule 144 or such successor provision), be exchanged for a new Note, of like tenor and aggregate Principal Amount, which shall not bear the restrictive Legend. The Company shall inform the Trustee, in writing, of the effective date of any Registration Statement registering the Notes. The Trustee shall not be liable for any action taken or omitted to be taken by it in good faith in accordance with the aforementioned opinion of counsel or Registration Statement.

As used in the preceding Section 2.13(c) and (d), the term "*transfer*" encompasses any sale, transfer or other disposition of any Note.

Section 2.14 CUSIP Numbers.

The Company in issuing the Notes may use one or more "CUSIP" numbers (if then generally in use), and, if so, the Trustee shall use "CUSIP" numbers in notices of redemption or purchase as a convenience to Holders; *provided* that any such notice may state that no representation is made as to the correctness of such numbers either as printed on the Notes or as contained in any notice of a redemption or purchase and that reliance may be placed only on the other identification numbers printed on the Notes, and any such redemption or purchase shall not be affected by any defect in or omission of such numbers. The Company will promptly notify the Trustee, in writing, of any change in the "CUSIP" numbers.

Section 2.15 Book-Entry Provisions for Global Notes.

(a) The Global Note initially shall (i) be registered in the name of the Depositary or the nominee of such Depositary, (ii) be delivered to the Trustee as custodian for the Depositary and (iii) bear legends as set forth on the face of the Form of Note. The transfer and exchange of book-entry interests shall be effected through the Depositary, in accordance with the provisions of this Indenture and its Applicable Procedures. Neither the Trustee nor any Agent shall have any responsibility for any actions taken or not taken by the Depositary.

(b) Members of, or participants in, the Depositary ("*Agent Members"*) shall have no rights under this Indenture in respect of any Global Note held on their behalf by the Depositary, or the Trustee as its custodian, or under the Global Note, and the Depositary may be treated by the Company, the Trustee and any agent of the Company or the Trustee as the absolute owner of the Global Note for all purposes whatsoever. Notwithstanding the foregoing, nothing herein shall prevent the Company, the Trustee or any agent of the Company or the Trustee from giving effect to any written certification, proxy or other authorization furnished by the Depositary or impair, as between the Depositary and its Agent Members, the operation of customary practices governing the exercise of the rights of any Holder.

(c) Transfers of the Global Note shall be limited to transfers in whole, but not in part, to the Depositary, its successors or their respective nominees. Interests of Beneficial Owners in a Global Note may be transferred or exchanged, in whole or in part, for Physical Notes in accordance with the rules and procedures of the Depositary and the provisions of Section 2.13. In addition, Physical Notes shall be transferred to all Beneficial Owners in exchange for their beneficial interests in the Global Note if (A) such Depositary has notified the Company (or the Company becomes aware) that the Depositary (i) is unwilling or unable to continue as Depositary for such Global Note or (ii) has ceased to be a clearing agency registered under the Exchange Act when the Depositary is required to be so registered to act as such Depositary and, in either such case, no successor Depositary shall have been appointed within 90 days of such notification or of the Company becoming aware of such event; or (B) there shall have occurred and be continuing an Event of Default in respect of such Global Note and the outstanding Notes shall have become due and payable pursuant to Section 7.02 and the Holders request that Physical Note be issued; provided that Holders of Physical Note offered and sold in reliance on Rule 144A shall have the right, subject to applicable law, to request that such Notes be exchanged for interests in the applicable Global Note.

(d) In connection with any transfer or exchange of a portion of the beneficial interest in the Global Note to Beneficial Owners pursuant to clause (c) of this Section 2.15, the Registrar shall (if one or more Physical Notes are to be issued) reflect on its books and records the date and a decrease in the Principal Amount of the Global Note in an amount equal to the Principal Amount of the beneficial interest in the Global Note to be transferred, and the Company shall execute, and the Trustee shall authenticate and deliver, one or more Physical Notes of like tenor and amount.

(e) In connection with the transfer of the entire Global Note to Beneficial Owners pursuant to clause (c) of this Section 2.15, the Global Note shall be deemed to be surrendered to the Trustee for cancellation, and the Company shall execute, and the Trustee shall authenticate and deliver, to each Beneficial Owner identified by the Depositary in exchange for its beneficial interest in the Global Note, an equal aggregate Principal Amount of Physical Notes of authorized denominations and the same tenor.

(f) Any Physical Note bearing a restrictive Legend delivered in exchange for an interest in the Global Note pursuant to clause (c) or (d) of this Section 2.15 shall bear the legend regarding transfer restrictions applicable to the Physical Notes set forth on the face of the Form of Note in Exhibit A hereto.

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

(h) The Trustee shall have no responsibility or obligation to any Beneficial Owner of a Global Note, a member or, or a participant in the Depositary or other Person in respect of the accuracy of the books or records, or the acts or omissions, of the Depositary or its nominee or of any participant or member thereof, in respect of any ownership interest in the Notes or in respect of the delivery to any participant, member, Beneficial Owner or other Person (other than the Depositary) of any notice (including any notice of redemption) or the payment of any amount, under or in respect of such Notes. All notices and communications to be given to the Holders and all payment to be made to Holders under the Notes shall be given or made only to or upon the order of the registered Holders (which shall be the Depositary or its nominee in the case of a Global Note). The rights of Beneficial Owners in any Global Note shall be exercised only through the Depositary subject to its Applicable Procedures. The Trustee may rely on information furnished by the Depositary in respect of its Agent Members and any Beneficial Owners.

Section 2.16 Transfers to QIBs.

The following provisions shall apply in respect of the registration of any proposed transfer of a Note constituting a Note bearing a restrictive Legend to a QIB:

(a) the Registrar shall register the transfer if such transfer is being made by a proposed transferor who has checked the box provided for on the Form of Note stating, or has otherwise advised the Company and the Registrar in writing, that the sale has been made in compliance with the provisions of Rule 144A to a transferee who has signed the certification provided for on the Form of Note stating, or has otherwise advised the Company and the Registrar in writing, that it is purchasing the Note for its own account or an account in respect of which it exercises sole investment discretion and that it and any such account is a QIB within the meaning of Rule 144A, and is aware that the sale to it is being made in reliance on Rule 144A and acknowledges that it has received such information regarding the Company as it has requested pursuant to Rule 144A or has determined not to request such information and that it is aware that the transferor is relying upon its foregoing representations in order to claim the exemption from registration provided by Rule 144A.

(b) if the proposed transferee is an Agent Member, and the Notes to be transferred consist of Physical Notes which after transfer are to be evidenced by an interest in the Global Note, upon receipt by the Registrar of instructions given in accordance with the Depositary's and the Registrar's procedures, the Registrar shall reflect on its books and records the date and an increase in the Principal Amount of the Global Note in an amount equal to the Principal Amount of the Physical Notes to be transferred, and the Trustee shall cancel the Physical Notes so transferred.

ARTICLE 3.
REDEMPTION AND PREPAYMENT

Section 3.01 Notices to Trustee.

If the Company elects to exercise the Optional Redemption Right pursuant to Section 3.07 hereof, it shall notify the Trustee and the Registrar in writing at least 5 Business Days prior to the date that any Optional Redemption Notice is sent to the Holders (unless the Trustee consents to a shorter period) of the Optional Redemption Date and the Principal Amount of the Notes to be redeemed, together with an Officers' Certificate that all conditions precedent with respect to such redemption contained in Section 3.07 have been satisfied and that such redemption will comply with this Indenture.

Section 3.02 Selection of Notes To Be Redeemed.

In the case of any partial redemption, selection of the Notes for redemption will be made, with respect to Global Notes, in accordance with the Applicable Procedures of the Depositary and, with respect to Physical Notes, by lot, pro rata or by such other method as Trustee deems fair and reasonable. The Notes or portions of them selected will be redeemed in Principal Amounts of $1,000 or a whole multiple of $1,000. Provisions of this Indenture that apply to Notes called for redemption also apply to portions of Notes called for redemption. The Trustee shall notify the Company promptly of the Notes or portions of Notes to be redeemed. The Trustee may rely upon information provided by the Registrar for purposes of this Section 3.02.

If any portion of a Note selected for partial redemption is converted in part before termination of the conversion right in respect of the portion of the Note so selected, the converted portion of such Note shall be deemed (so far as may be) to be the portion selected for redemption such that the amount designated for partial redemption shall be reduced by the amount so converted. With respect to Physical Notes, Notes which have been converted during a selection of Notes to be redeemed may be treated by the Trustee as outstanding for the purpose of such selection.

Section 3.03 Notice of Redemption

At least 30 days but not more than 60 days before an Optional Redemption Date, the Company shall deliver a notice of redemption (an "*Optional Redemption Notice*") (with a copy to the Trustee) to each Holder of Notes to be redeemed at such Holder's registered address.

The Optional Redemption Notice shall identify the Notes to be redeemed and shall state:

(i) each date when, pursuant to the provisions of Section 3.07 hereof, the Company elects to redeem the Notes in whole or in part (the "*Optional Redemption Date*");

(ii) the Optional Redemption Price;

(iii) the Conversion Price;

(iv) the name and address of the Paying Agent where Notes are to be surrendered;

(v) that Notes called for redemption may be converted at any time prior to the close of business on the Business Day immediately preceding the Optional Redemption Date;

(vi) that Notes called for redemption must be surrendered to the Paying Agent to collect the Optional Redemption Price;

(vii) if fewer than all the outstanding Notes are to be redeemed, the identification and Principal Amounts of the particular Notes to be redeemed;

(viii) that, unless the Company defaults in making such redemption payment, Interest on Notes (or portion thereof) called for redemption ceases to accrue on and after the Optional Redemption Date; and

(ix) the CUSIP number or ISIN number, if any, printed on the Notes being redeemed.

At the Company's request, the Trustee shall give the Optional Redemption Notice in the Company's name and at the Company's expense. In such event, the Company shall provide the Trustee with the information required by this Section 3.03.

The Company will issue a press release if the Notes are redeemed.

Section 3.04 Effect of Notice of Redemption.

Once an Optional Redemption Notice is delivered to the Holders, the Notes (or portions thereof) called for redemption shall become irrevocably due and payable on the Optional Redemption Date and at the Optional Redemption Price stated in the Optional Redemption Notice. An Optional Redemption Notice may not be conditional and shall be irrevocable. Upon surrender to the Paying Agent, such Notes shall be paid on the Optional Redemption Date at the Optional Redemption Price stated in the Optional Redemption Notice; *provided* that if the Optional Redemption Date is on or after a regular record date and on or prior to the Interest Payment Date, the accrued and unpaid Interest shall be payable to the Holder of the redeemed Notes registered on the regular record date. Failure to give notice or any defect in the notice to any Holder shall not affect the validity of the notice to any other Holder.

Section 3.05 Deposit of Redemption Price.

No later than 11:00 a.m. (New York City time) on the Business Day prior to the date on which any Redemption Price on any Note is due and payable, the Company shall deposit with the Paying Agent (or, if the Company or a Subsidiary is the Paying Agent, shall segregate and hold in trust) money sufficient to pay the Redemption Price on all Notes to be redeemed on the applicable Redemption Date other than Notes or portions of Notes called for redemption which are owned by the Company or a Subsidiary and have been delivered by the Company or such Subsidiary to the Trustee for cancellation. If the Company complies with the provisions of this Section 3.05, then on and after the applicable Redemption Date, Interest will cease to accrue on the Notes (or portions of the Notes) called for redemption.

Section 3.06 Notes Redeemed in Part.

Upon cancellation of a Note that is redeemed in part, the Company shall issue and the Trustee shall authenticate for the Holder (at the Company's expense) a new Note equal in Principal Amount to the unredeemed portion of the Note surrendered. The Trustee shall notify the Registrar of the issuance of such new Note.

Section 3.07 Optional Redemption by the Company.

The Notes may not be redeemed at the option of the Company pursuant to this Indenture at any time prior to May 31, 2019. At any time and from time to time on or after May 31, 2019 the Company shall have the right to redeem (the "*Optional Redemption Right*") all or any portion of the Notes at a redemption price (the "*Optional Redemption Price*") equal to 100% of the Principal Amount plus accrued and unpaid Interest on such Principal, if any, up to the Optional Redemption Date; provided that the Closing Sale Price of the Common Stock is greater than 175% of the then effective Conversion Price for each of 20 of any 30 consecutive Trading Days immediately preceding the applicable Optional Redemption Notice.

If the Company has failed to pay any Interest or premium on the Notes and such failure to pay is continuing the Company may not redeem the Notes.

Section 3.08 Offer to Repurchase upon Election of Holder.

(a) Subject to receipt of the Holder Optional Redemption Notice, all (but not less than all) of the Notes of any Holder shall be repurchased by the Company, at the option of such Holder, on May 31, 2021 (the "*Holder Optional Redemption Date"*) at a purchase price in cash equal to 100% of the Principal Amount of the Notes to be repurchased together with Interest accrued and unpaid to (and including) the Holder Optional Redemption Date (the "*Holder Optional Redemption Price*"); provided, however, if the Holder Optional Redemption Date falls after a Regular Record Date but on or before the related Interest Payment Date, then the Interest on the Notes payable on such date shall be payable to the Holders in whose name the Notes were registered at the close of business on such Regular Record Date.

(b) Not more than 60 days and not less than 20 Business Days prior to the Holder Optional Redemption Date, the Company, or, at the written request and expense of the Company, the Trustee, shall send a written notice of the Holder Optional Redemption Date (the "*Holder Optional Redemption Notice*") to the Trustee (if the Trustee does not send such notice), the Paying Agent, the Conversion Agent, the Registrar and to each Holder. The Holder Optional Redemption Notice shall include the form of a Repurchase Notice to be completed by the Holder and shall state:

(i) the date by which a Repurchase Notice pursuant to this Section 3.08 must be given;

(ii) the Holder Optional Redemption Date;

(iii) the Holder Optional Redemption Price;

(iv) the Holder's right to require the Company to repurchase the Notes;

(v) briefly, the conversion rights of the Notes;

(vi) the name and address of each Paying Agent and Conversion Agent;

(vii) the Conversion Price (including any adjustments thereto);

(viii) that, the Notes as to which a Holder Optional Redemption Notice has been given may be converted into Cash and Common Stock (if any) pursuant to ARTICLE 9 of this Indenture only to the extent that the Holder Optional Redemption Notice has been withdrawn in accordance with the terms of this Indenture;

(ix) that, unless the Company defaults in making the payment of the Redemption Price, interest on Notes called for repurchase shall cease to accrue on and after the Redemption Date and the only remaining right of the Holder shall be to receive payment of the Redemption Price payable to such Holder upon presentation and surrender to a Paying Agent of the Notes;

(x) the procedures that the Holder must follow to exercise rights under this Section 3.08;

(xi) the procedures for withdrawing a Repurchase Notice, including a form of notice of withdrawal;

(xii) that the Holder must satisfy the requirements set forth in the Notes and ARTICLE 9 hereof in order to convert the Notes; and

(xiii) the CUSIP and/or ICIN numbers of the Notes.

If any of the Notes is in the form of a Global Note, then the Company shall modify such notice to the extent necessary to accord with the Applicable Procedures of the Depositary.

(c) A Holder may exercise its rights specified in this Section 3.08 (a "*Holder Optional Redemption*"), in the case of Physical Notes, upon delivery of a written notice to the Trustee (which shall be in substantially the form included as Attachment 3 to the Form of Note attached hereto as Exhibit A hereto and which may be delivered by letter, overnight courier, hand delivery, facsimile transmission or in any other written form and, in the case of Global Notes, may be delivered electronically or by other means in accordance with the Applicable Procedures of the Depositary) of the exercise of such rights (a "*Repurchase Notice*") at any time prior to the close of business on the second Business Day immediately preceding the Holder Optional Redemption Date.

(i) The delivery of all Notes of a Holder to any Paying Agent (together with all necessary endorsements) at the office of such Paying Agent shall be a condition to the receipt by a Holder of the Holder Optional Redemption Price therefor.

(ii) Notwithstanding anything herein to the contrary, any Holder delivering to the Trustee (or, in the case of the Global Notes, otherwise in accordance with the Applicable Procedures of the Depositary) the Repurchase Notice contemplated by Section 3.08(c) shall have the right to withdraw such Repurchase Notice at any time prior to 5:00 p.m., New York City time, on the second Business Day next preceding the Holder Optional Redemption Date by delivery of a written notice of withdrawal to the Trustee (or, in the case of the Global Notes, otherwise in accordance with the Applicable Procedures of the Depositary).

(iii) The Trustee shall promptly notify the Company of the receipt by it of any Repurchase Notice or written withdrawal thereof.

(iv) Anything herein to the contrary notwithstanding, in the case of Global Notes, any Repurchase Notice may be delivered or withdrawn and such Notes may be surrendered or delivered for repurchase in accordance with the Applicable Procedures of the Depositary.

(d) The Company shall deliver the applicable Holder Optional Redemption Price to the Paying Agent no later than 11:00 a.m. Eastern Time on the Business Day prior to the Holder Optional Redemption Date.

ARTICLE 4.
[INTENTIONALLY OMMITTED]

ARTICLE 5.
COVENANTS

Section 5.01 Payment of Notes.

The Company shall pay or cause to be paid the Principal of, premium, if any, Redemption Price, if applicable, Interest and any other amounts to be paid on the Notes on the dates and in the manner provided in this Indenture and the Notes. Principal, premium, if any, Redemption Price, if applicable, Interest and any other amounts to be paid shall be considered paid on the date due if the Paying Agent, if other than the Company or a Subsidiary thereof, holds as of 11:00 a.m. Eastern Time on the Business Day prior to the due date money deposited by the Company in immediately available funds and designated for and sufficient to pay all Principal of, premium, if any, Redemption Price, if applicable, Interest and any other amounts to be paid then due.

Section 5.02 Maintenance of Office or Agency.

The Company shall maintain in the Borough of Manhattan, The City of New York, an office or agency (which may be an office of the Trustee or an affiliate of the Trustee, Registrar or co-registrar) where Notes may be surrendered for registration of transfer or for exchange and where notices and demands to or upon the Company in respect of the Notes and this Indenture may be served. The Company shall give prompt written notice to the Trustee of the location, and any change in the location, of such office or agency in the Borough of Manhattan and any other designation or rescission of any other 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.

The Company may also from time to time designate one or more other offices or agencies where the Notes may be presented or surrendered for any or all such purposes and may from time to time rescind such designations; *provided*, *however*, that no such designation or rescission shall in any manner relieve the Company of its obligation to maintain an office or agency in the Borough of Manhattan, The City of New York, for such purposes. The Company shall 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.

The Company hereby designates the office of the Trustee, presently located at 101 Barclay Street, New York, NY 10286, Attn: Corporate Trust as one such office or agency of the Company in accordance with Section 2.03.

Section 5.03 Reports.

The Company shall file with the Trustee and each Holder copies of any annual or quarterly reports (on Form 10-K or Form 10-Q or any respective successor form) that the Company is required to file with the Commission pursuant to Section 13 or 15(d) of the Exchange Act (excluding, for the avoidance of doubt, any such information, documents or reports, or portions thereof, subject to confidential treatment and any correspondence with the Commission) within 15 days after the same are required to be filed with the Commission (giving effect to any grace period provided by Rule 12b-25 under the Exchange Act or any successor rule). Any such document or report that the Company files with the Commission via the Commission's EDGAR system (or any successor system) shall be deemed to be filed with the Trustee and the Holders for purposes of this Section 5.03 at the time such document or report is filed via the EDGAR system (or such successor system)it being understood that the Trustee shall have no responsibility to determine if such filings have been made. Notwithstanding the foregoing, at any time the Company is otherwise not required to file documents or reports with the SEC pursuant to Section 13 or 15(d) of the Exchange Act and the Conversion Obligation for the Notes may be satisfied by the delivery of Reference Property consisting of, in whole or in part, another entity's common stock, American depositary receipts, ordinary shares or other Capital Stock, as the case may be, the Company may satisfy its obligations under this Section 5.03 by delivering or filing the financial information of such entity within the same time periods and in the same manner described above. Delivery of the reports and documents described in this Section 5.03 to the Trustee is for informational purposes only, and the Trustee's receipt of such shall not constitute constructive notice of any information contained therein or determinable from information contained therein, including the Company's compliance with any of its covenants hereunder (as to which the Trustee is entitled to conclusively rely on an Officer's Certificate). Trustee shall have no liability or responsibility for the filing, timeliness or content of any such reports

Section 5.04 Compliance Certificate.

(a) The Company and each Guarantor shall deliver to the Trustee, within 90 days after the end of each fiscal year, an Officers' Certificate, one of the signatories of which is the Company's Chief Executive Officer, Chief Financial Officer or Chief Accounting Officer, stating that a review of the activities of the Company and its Subsidiaries during the preceding fiscal year has been made under the supervision of the signing Officers with a view to determining whether the Company and each obligor under the Notes and this Indenture has kept, observed, performed and fulfilled its obligations under this Indenture, the Note Guarantee, and the Collateral Documents, and further stating, as to each such Officer signing such certificate, that to the best of his or her knowledge the Company and each such obligor has kept, observed, performed and fulfilled each and every covenant contained in this Indenture, the Notes, the Note Guarantees, and the Collateral Documents and is not in default in the performance or observance of any of the terms, provisions and conditions of this Indenture, the Notes, the Note Guarantees, and the Collateral Documents (or, if a Default or Event of Default shall have occurred, describing all such Defaults or Events of Default of which he or she may have knowledge and what action the Company or such obligor is taking or proposes to take with respect thereto) and that to the best of his or her knowledge no event has occurred and remains in existence by reason of which payments on account of the Principal of, Interest or any other amounts due, if any, on the Notes is prohibited or if such event has occurred, a description of the event and what action the Company or such obligor is taking or proposes to take with respect thereto.

(b) The Company shall, so long as any of the Notes are outstanding, deliver to the Trustee, forthwith upon any Officer becoming aware of any Event of Default, an Officers' Certificate specifying such Event of Default and what action the Company is taking or proposes to take with respect thereto.

Section 5.05 Taxes.

The Company shall pay, and shall cause each of its Subsidiaries to pay, prior to delinquency, all material taxes, assessments, and governmental levies except such as are contested in good faith and by appropriate proceedings or where the failure to effect such payment would not reasonably be expected to have a Material Adverse Effect.

Section 5.06 Stay, Extension and Usury Laws.

The Company and each of the Guarantors covenants (to the extent that it may lawfully do so) that it shall not at any time insist upon, plead, or in any manner whatsoever claim or take the benefit or advantage of, any stay, extension or usury law wherever enacted, now or at any time hereafter in force, that may affect the covenants or the performance of this Indenture; and the Company and each of the Guarantors (to the extent that it may lawfully do so) hereby expressly waives all benefit or advantage of any such law, and covenants that it shall not, by resort to any such law, hinder, delay or impede the execution of any power herein granted to the Trustee.

Section 5.07 Restricted Payments.

The Company shall not, and shall not permit any of its Subsidiaries to, directly or indirectly:

(i) declare or pay any dividend or make any other payment or distribution on account of its Equity Interests (including, without limitation, any payment in connection with any merger or consolidation involving the Company or any Subsidiary of the Company) or to the direct or indirect holders of its Equity Interests in their capacity as such, other than dividends or distributions payable (a) in Equity Interests (other than Disqualified Stock) of the Company or any Subsidiary of the Company to the Company or any Subsidiary of the Company, or (b) in the case of dividends or distributions payable by any Subsidiary of the Company, pro rata to the holders of such Subsidiary's Equity Interests;

(ii) purchase, redeem or otherwise acquire or retire for value (including without limitation, in connection with any merger or consolidation involving the Company) any Equity Interests of the Company;

(iii) make any payment on or with respect to, or purchase, redeem, defease or otherwise acquire or retire for value any Indebtedness of the Company or any of its Subsidiaries that is contractually subordinated to the Notes or any Note Guarantee (excluding any intercompany Indebtedness between or among the Company and any of its Subsidiaries), except a payment of interest or principal at the maturity date; or

(iv) make any Restricted Investment,

all such payments and other actions set forth in clauses (i) through (iv) above being collectively referred to as "*Restricted Payments"* unless, solely with respect to any payment or other action that would otherwise constitute a Restricted Payment as set forth in clause (i), (ii) or (iv) above, at the time of and after giving effect to such Restricted Payment:

(1) no Default or Event of Default has occurred and is continuing or would occur as a consequence of such Restricted Payment; and

(2) such Restricted Payment, together with the aggregate amount of all other Restricted Payments made by the Company and its Subsidiaries since the date of this Indenture (excluding Restricted Payments permitted by clauses (ii) through and including (vii)) of the next succeeding paragraph, is less than the sum, without duplication, of:

(a) 50% of the Consolidated Net Income of the Company for the period (taken as one accounting period) from the beginning of the first fiscal quarter commencing after the date of this Indenture to the end of the Company's most recently ended fiscal quarter for which internal financial statements are available at the time of such Restricted Payment (or, if such Consolidated Net Income for such period is a deficit, less 100% of such deficit); *plus*

(b) 100% of the aggregate net cash proceeds received by the Company since the date of this Indenture as a contribution to its common equity capital or from the issue or sale of Equity Interests of the Company (other than Disqualified Stock) or from the issue or sale of convertible or exchangeable Disqualified Stock or convertible or exchangeable debt securities of the Company that have been converted into or exchanged for such Equity Interests (other than Equity Interests (or Disqualified Stock or debt securities) sold to a Subsidiary of the Company); *plus*

(c) to the extent that any Restricted Investment that was made after the date of this Indenture is sold for cash or otherwise liquidated or repaid for cash, the lesser of (i) the cash return of capital with respect to such Restricted Investment (less the cost of disposition, if any) and (ii) the initial amount of such Restricted Investment.

So long as no Event of Default shall have occurred and be continuing or would occur as a consequence thereof, the foregoing provisions shall not prohibit:

(i) the payment of any dividend or the consummation of any irrevocable redemption within 60 days after the date of declaration of the dividend or giving of the redemption notice, as the case may be, if at the date of declaration or notice, the dividend or redemption payment would have complied with the provisions of this Indenture;

(ii) the making of any Restricted Payment (other than a Restricted Payment as defined in clause (iii) of the definition of Restricted Payment) in exchange for, or out of the net cash proceeds of the substantially concurrent sale (other than to a Subsidiary of the Company or a Guarantor) of, Equity Interests of the Company (other than Disqualified Stock) or from the substantially concurrent contribution of common equity capital to the Company;

(iii) the redemption, repurchase, defeasance or other acquisition or retirement for value of Indebtedness of the Company or its Subsidiaries that is contractually subordinated or subordinated with respect to security interests to the Notes or any Note Guarantee with the net cash proceeds from a substantially concurrent incurrence of Permitted Refinancing Indebtedness;

(iv) the repurchase, redemption or other acquisition or retirement for value of any Equity Interests of the Company or any Subsidiary of the Company held by any current or former officer, director, employee or contractor of the Company or any of its Subsidiaries in order to pay or satisfy such officer's, director's, employee's or contractor's aggregate exercise price or withholding tax payment obligations or otherwise upon death, disability, retirement or termination of employment or engagement, pursuant to awards granted under the Company's equity incentive, stock option, restricted stock or other long-term equity compensation plans; *provided* that the aggregate price paid for all such repurchased, redeemed, acquired or retired Equity Interests may not exceed $500,000 in the aggregate in any calendar year, provided, that any unused amounts in any calendar year may be carried forward to one or more future periods;

(v) the repurchase of Equity Interests of the Company deemed to occur upon the exercise of stock options, warrants, or other convertible or exchangeable securities to the extent such Equity Interests represent a portion of the exercise price of those stock options, warrants or other convertible or exchangeable securities; and

(vi) Restricted Investments by the Company and its subsidiaries not otherwise permitted under this Indenture, in an aggregate amount not to exceed $2 million at any time outstanding.

The amount of all Restricted Payments (other than cash) shall be the Fair Market Value on the date of the Restricted Payment of the asset(s) or securities proposed to be transferred or issued by the Company or such Subsidiary, as the case may be, pursuant to the Restricted Payment. The Fair Market Value of any non-cash Restricted Payment shall be determined by the Board of Directors whose resolution with respect thereto shall be delivered to the Trustee in an Officer's Certificate.

Section 5.08 Dividend and Other Payment Restrictions Affecting Subsidiaries.

The Company shall not, and shall not permit any of its Subsidiaries to, directly or indirectly, create or otherwise permit, cause or suffer to exist or become effective any consensual encumbrance or restriction on the ability of any Subsidiary to (a)(i) pay dividends or make any other distributions on its Capital Stock to the Company or any of its Subsidiaries or with respect to any other interest or participation in, or measured by, its profits or (ii) pay any indebtedness owed to the Company or any of its Subsidiaries, (b) make loans or advances to the Company or any of its Subsidiaries or (c) sell, lease or transfer any of its properties or assets to the Company or any of its Subsidiaries, except for such encumbrances or restrictions existing under or by reasons of:

(i) this Indenture, the Notes and the Note Guarantees;

(ii) agreements governing Existing Indebtedness and Credit Facilities as in effect on the date of this Indenture and any amendments, restatements, modifications, renewals, supplements, refundings, replacements or refinancings of those agreements; *provided* that the amendments, restatements, modifications, renewals, supplements, refundings, replacements or refinancings are not materially more restrictive with respect to such dividend and other payment restrictions than those contained in those agreements on the date of this Indenture;

(iii) any instrument governing Indebtedness or Capital Stock of a Person acquired by the Company or any of its Subsidiaries as in effect at the time of such acquisition (except to the extent such Indebtedness or Capital Stock was incurred in connection with or in contemplation of such acquisition), which encumbrance or restriction is not applicable to any Person, or the properties or assets of any Person, other than the Person, or the property or assets of the Person, so acquired; *provided* that, in the case of Indebtedness, such Indebtedness was permitted by the terms of this Indenture;

(iv) purchase money obligations for property acquired in the ordinary course of business and Capital Lease Obligations that impose restrictions on the property purchased or leased of the nature set forth in Section 5.09(iii);

(v) Permitted Refinancing Indebtedness; *provided* that the restrictions contained in the agreements governing such Permitted Refinancing Indebtedness are not materially more restrictive, taken as a whole, than those contained in the agreements governing the Indebtedness being refinanced;

(vi) applicable law rule, regulation or order;

(vii) customary non-assignment provisions in contracts and licenses entered into in the ordinary course of business;

(viii) any agreement for the sale or other disposition of a Subsidiary that restricts distributions by that Subsidiary pending the sale or other disposition;

(ix) Liens permitted to be incurred under the provisions of Section 5.12 hereof that limit the right of the debtor to dispose of the assets subject to such Liens;

(x) provisions limiting the disposition or distribution of assets or property in joint venture agreements, asset sale agreements, sale-leaseback agreements, stock sale agreements and other similar agreements entered into with the approval of the Company's Board of Directors, which limitation is applicable only to the assets that are the subject of such agreements; and

(xi) restrictions on cash or other deposits or net worth imposed by customers under contracts entered into in the ordinary course of business.

Section 5.09 Incurrence of Indebtedness and Issuance of Disqualified Stock.

The Company shall not, and shall not permit any of its Subsidiaries to, directly or indirectly, create, incur, issue, assume, guarantee or otherwise become directly or indirectly liable, contingently or otherwise, with respect to (collectively, "*incur"*) any Indebtedness (including Acquired Debt), and, while the Company may issue shares of preferred stock, the Company shall not issue any Disqualified Stock and shall not permit any of its Subsidiaries to issue any shares of preferred stock.

The provisions of the first paragraph of this Section 5.09 shall not prohibit the incurrence of any of the following items of Indebtedness (collectively, "*Permitted Debt"*):

(i) the incurrence by the Company and its Subsidiaries of Existing Indebtedness;

(ii) the incurrence by the Company, and the Guarantee thereof by the Guarantors, of Indebtedness represented by the Notes on the date of this Indenture;

(iii) the incurrence by the Company or any of its Subsidiaries of (x) Indebtedness represented by Capital Lease Obligations or purchase money obligations, in each case incurred for the purpose of financing the purchase price or cost of equipment used in the production lines of the Company or any of its Subsidiaries and (y) additional Indebtedness represented by Capital Lease Obligations, mortgage financings or purchase money obligations, in each case, incurred for the purpose of financing all or any part of the purchase price or cost of design, construction, installation or improvement of property, plant or equipment used in the Permitted Business (other than as described in clause (x)) of the Company or any of its Subsidiaries, in the case of this clause (y), in an aggregate principal amount not to exceed $1.0 million in the aggregate outstanding at any time outstanding;

(iv) the incurrence by the Company or any of its Subsidiaries of Permitted Refinancing Indebtedness in exchange for, or the net proceeds of which are used to renew, refund, refinance, replace, defease or discharge any Indebtedness (other than Indebtedness owed by one Credit Party to another Credit Party) that was permitted by this Indenture to be incurred pursuant to clauses (i) or (iii) of this paragraph;

(v) the incurrence by the Company or any of its Subsidiaries of Indebtedness not to exceed in the aggregate at any time outstanding $5.0 million; *provided*, *however*, that (a) such Indebtedness is expressly subordinated to the prior payment in full in cash of all Obligations with respect to this Indenture, the Notes and the Note Guarantees, (b) such Indebtedness matures no less than 181 days following the maturity of the Notes;

(vi) the incurrence by the Company or any of its Subsidiaries of Hedging Obligations in the ordinary course of business (other than for speculative purposes);

(vii) the incurrence by the Company or any of its Subsidiaries of Indebtedness in respect of workers' compensation claims, self-insurance obligations, bankers' acceptances, performance and surety bonds in the ordinary course of business;

(viii) the incurrence by the Company or any of its Subsidiaries of unsecured Indebtedness not to exceed in the aggregate at any time outstanding $1.0 million;

(ix) Guarantees by the Company or any of its Subsidiaries of Indebtedness otherwise permitted hereunder;

(x) the incurrence of Indebtedness by the Company or any of its Subsidiaries arising from agreements providing for indemnification, contribution, earnout, adjustment of purchase price or similar obligations, in each case, incurred or assumed in connection with the acquisition or disposition of any business, assets or Capital Stock of a Subsidiary otherwise permitted under this Indenture;

(xi) the incurrence of intercompany Indebtedness among the Company and any of its Subsidiaries;

(xii) the incurrence by the Company or any of its Subsidiaries of Indebtedness arising from the honoring by a bank or other financial institution of a check, draft or similar instrument inadvertently drawn against insufficient funds, so long as such Indebtedness is covered within five Business Days.

The Company will not incur, and will not permit any Guarantor to incur, any Indebtedness (including Permitted Debt) that is contractually subordinated in right of payment to any other Indebtedness of the Company or such Guarantor unless such Indebtedness is also contractually subordinated in right of payment to the Notes and the Note Guarantees on substantially identical terms; *provided, however*, that no Indebtedness will be deemed to be contractually subordinated in right of payment to any other Indebtedness of the Company solely by virtue of being unsecured or by virtue of being secured on a first or junior Lien basis.

For purposes of determining compliance with this Section, in the event that an item of proposed Indebtedness meets the criteria of more than one of the categories of Permitted Debt set forth above, or is entitled to be incurred pursuant to the first paragraph of this covenant, the Company will be permitted to classify such item of Indebtedness on the date of its incurrence, or later reclassify all or a portion of such item of Indebtedness, in any manner that complies with this covenant.

The accrual of interest, the accretion or amortization of original issue discount, the payment of interest on any Indebtedness in the form of additional Indebtedness with the same terms, the reclassification of preferred stock as Indebtedness due to a change in accounting principles, and the payment of dividends on Disqualified Stock in the form of additional shares of the same class of Disqualified Stock will not be deemed to be an incurrence of Indebtedness or an issuance of Disqualified Stock for purposes of this covenant. Notwithstanding any other provision of this covenant, the maximum amount of Indebtedness that the Company or any Subsidiary may incur pursuant to this covenant shall not be deemed to be exceeded solely as a result of fluctuations in exchange rates or currency values.

The amount of any Indebtedness outstanding as of any date will be:

(i) the accreted value of the Indebtedness, in the case of any Indebtedness issued with original issue discount;

(ii) the principal amount of the Indebtedness, in the case of any other Indebtedness; and

(iii) in respect of Indebtedness of another Person secured by a Lien on the assets of the specified Person, the lesser of:

A. the Fair Market Value of such assets at the date of determination; and

B. the amount of the Indebtedness of the other Person.

Section 5.10 Asset Sales and Events of Loss.

(a) The Company shall not, and shall not permit any of its Subsidiaries to:

(i) sell, lease, convey or otherwise dispose of any assets or rights other than the sale, lease, conveyance or other disposition of all or substantially all of the assets of the Company and its Subsidiaries taken as a whole, which will be governed by Section 6.01 and not by the provisions of this Section 5.10; and

(ii) issue Equity Interests in any of the Subsidiaries or sell Equity Interests in any of its Subsidiaries.

(each of the foregoing, an "*Asset Sale"*), unless such Asset Sale is a Permitted Asset Sale (as defined below):

(b) A "*Permitted Asset Sale"* shall mean:

(i) an Asset Sale in which the Company (or the Subsidiary, as the case may be) receives consideration at the time of such Asset Sale at least equal to the Fair Market Value of the assets or Equity Interests issued or sold or otherwise disposed of; and at least 75% of the consideration received therefor by the Company or such Subsidiary is in the form of cash; *provided*, *however*, that the amounts of the following shall be deemed to be cash for purposes of this provision:

A. any liabilities (as shown on the Company's most recent consolidated balance sheet or in the notes thereto), of the Company or any Subsidiary (other than contingent liabilities or liabilities that are by their terms subordinated in right of payment or as to security interests to the Notes or any Note Guarantee) that are assumed by the transferee of any such assets pursuant to a customary novation agreement that releases the Company or such Subsidiary from further liability,

B. any securities, notes or other obligations received by the Company or any such Subsidiary from such transferee that are contemporaneously, subject to ordinary settlement periods, converted by the Company or such Subsidiary into cash (to the extent of the cash received in that conversion), and

C. any stock or assets received of the Company or any Subsidiary used to acquire (1) all or substantially all of the assets of, or any Capital Stock of, another Permitted Business if, after giving effect to any such acquisition of Capital Stock, the Permitted Business is or becomes a Subsidiary of the Company and a Guarantor or (2) other assets that are not classified as current assets under GAAP and that are used or useful in a Permitted Business.

(ii) any single Asset Sale or series of related Asset Sales that involves assets having a Fair Market Value of less than $1.0 million in the aggregate;

(iii) the transfer, sale or lease of products, services or accounts receivable by the Company or any Subsidiary in the ordinary course of business and any sale or other disposition of damaged, worn-out, replaced, retired or obsolete assets by the Company or any Subsidiary in the ordinary course of business;

(iv) the sale or other disposition by the Company or any Subsidiary of cash or Cash Equivalents;

(v) a transfer of assets by the Company to a Subsidiary or by a Subsidiary of the Company to the Company or another Subsidiary of the Company;

(vi) an issuance of Equity Interests by a Subsidiary to the Company or to another Subsidiary of the Company;

(vii) any Restricted Payment, Permitted Investment that is permitted by Section 5.07 hereof or Permitted Lien that is permitted by Section 5.12 hereof;

(viii) any leases or subleases in the ordinary course of business to third Persons not interfering in any material respect with the ordinary conduct of the business of the Company and otherwise not prohibited by this Indenture;

(ix) any dispositions of accounts receivable in connection with the collection or compromise thereof in the ordinary course of business; and

(x) any licensing of intellectual property in accordance with industry practice in the ordinary course of the Company's business.

(c) After any Permitted Asset Sale, the Company (or such Subsidiary) may apply the Net Proceeds from such Asset Permitted Sale, at its option, either with respect to the Company or the applicable Subsidiary.

(i) to repay Indebtedness and other Obligations under a Credit Facility, and if the Indebtedness repaid is revolving credit Indebtedness, to correspondingly reduce commitments with respect thereto,

(ii) to repay Indebtedness and to correspondingly permanently reduce commitments with respect thereto;

(iii) to acquire all or substantially all of the assets of, or any Capital Stock of, another Permitted Business if, after giving effect to any such acquisition of Capital Stock, the Permitted Business is or becomes a Subsidiary of the Company and a Guarantor;

(iv) to make capital expenditures in a Permitted Business of a Subsidiary; or

(v) to acquire other assets that are not classified as current assets under GAAP and that are used or useful in a Permitted Business of a Subsidiary.

(d) After the receipt of any Net Proceeds from an Event of Loss, the Company (or the applicable Subsidiary, as the case may be) may apply such Net Proceeds with respect to the Company or the applicable Subsidiary:

(i) to repay Secured Indebtedness and to correspondingly reduce commitments with respect thereto;

(ii) to acquire all or substantially all of the assets of, or any Capital Stock of, another Permitted Business, if, after giving effect to any such acquisition of Capital Stock, the Permitted Business is or becomes a Subsidiary of the Company and a Guarantor;

(iii) to make capital expenditures in a Permitted Business of a Subsidiary; or

(iv) to acquire other assets that are not classified as current assets under GAAP and that are used or useful in a Permitted Business.

Pending the application of any Net Proceeds from an Asset Sale or Event of Loss, the Company may temporarily invest such Net Proceeds in cash or Cash Equivalents.

Section 5.11 Transactions with Affiliates.

The Company shall not, and shall not permit any of its Subsidiaries to, make any payment to, or sell, lease, transfer or otherwise dispose of any of its properties or assets to, or purchase any property or assets from, or enter into or make or amend any contract, agreement, understanding, loan, advance, transaction or guarantee with, or for the benefit of, any Affiliate of the Company (each of the foregoing, an "*Affiliate Transaction"*), unless;

(a) such Affiliate Transaction is on terms that are not materially less favorable to the Company or the relevant Subsidiary than those that could reasonably have been obtained in a comparable transaction by the Company or such Subsidiary with an unrelated Person, and

(b) the Company delivers to the Trustee, with respect to any Affiliate Transaction or series of related Affiliate Transactions involving aggregate consideration in excess of $1.0 million, a resolution of the Board of Directors set forth in an Officers' Certificate certifying that such Affiliate Transaction complies with clause (a) above and that such Affiliate Transaction has been approved by a majority of the disinterested members of the Board of Directors of the Company;

provided, *however*, that the Company shall not be required to comply with this Section 5.11 with respect to the following, none of which shall be an Affiliate Transaction:

(i) any employment agreement, employee benefit plan, officer or director indemnification agreement or any similar arrangement entered into by the Company or any of its Subsidiaries in the ordinary course of business and payments made pursuant thereto;

(ii) transactions between or among the Company and/or its Subsidiaries;

(iii) Restricted Payments other than Permitted Investments that do not violate Section 5.07 of this Indenture;

(iv) transactions with a Person that is an Affiliate of the Company solely because the Company owns, directly or through a Subsidiary, an Equity Interest in, or controls, such Person;

(v) payment of reasonable directors' fees to Persons who are not otherwise Affiliates of the Company; or

(vi) loans or advances to employees for expenses incurred or to be incurred in connection with the Permitted Business and such employee's employment in the ordinary course of business not to exceed $250,000 in the aggregate at any time outstanding, in each case shall not be deemed Affiliate Transactions.

Section 5.12 Liens.

The Company shall not, and shall not permit any of its Subsidiaries to, directly or indirectly create, incur, assume or suffer to exist any Lien of any kind on any asset now owned or hereafter acquired, except Permitted Liens.

Section 5.13 Line of Business.

The Company shall not, and shall not permit any of its Subsidiaries to, engage in any business other than Permitted Businesses, except to such extent as would not be material to the Company and its Subsidiaries taken as a whole.

Section 5.14 Corporate Existence.

Subject to ARTICLE 6 hereof, the Company shall do or cause to be done all things necessary to preserve and keep in full force and effect (i) its corporate existence, and the corporate, partnership or other existence of each of its Subsidiaries, in accordance with the respective organizational documents (as the same may be amended from time to time) of the Company or any such Subsidiary and (ii) the rights (charter and statutory), licenses and franchises of the Company and its Subsidiaries; provided, however, that the Company shall not be required to preserve any such right, license or franchise, or the corporate, partnership or other existence of any of its Subsidiaries, if the preservation thereof is no longer desirable in the conduct of the business of the Company and its Subsidiaries, taken as a whole, and the loss thereof would not reasonably be expected to have a Material Adverse Effect.

Section 5.15 [*Intentionally Omitted*]

Section 5.16 Maintenance of Properties and Insurance.

(a) The Company shall, and shall cause each of its Subsidiaries to, maintain all material properties in good working order and condition in all material respects (subject to ordinary wear and tear) and make all necessary repairs, renewals, replacements, additions, betterments and improvements thereto and actively conduct and carry on its business; *provided*, *however*, that nothing in this Section 5.16 shall prevent the Company or any of its Subsidiaries from discontinuing the operation and maintenance of any of its properties if such discontinuance is, in the good faith judgment of the Board of Directors or other governing body of the Company or the Subsidiary concerned, as the case may be, desirable in the conduct of its business and is not disadvantageous in any material respect to the Holders.

(b) The Company shall maintain insurance (including appropriate self-insurance) against loss or damage of the kinds that, in the good faith judgment of the holdings and the Company, are adequate and appropriate for the conduct of the business of the Company and its Subsidiaries in a prudent manner, with reputable insurers or with the government of the United States of America or an agency or instrumentality thereof, in such amounts, with such deductibles, and by such methods as shall be customary, in the good faith judgment of the Company, for companies similarly situated in the industry.

Section 5.17 Payments for Consent.

Neither the Company nor any of its Subsidiaries shall, directly or indirectly, pay or cause to be paid any consideration, whether by way of interest, fee or otherwise, to or for the benefit of any Holder of any Notes for or as an inducement to any consent, waiver or amendment of any of the terms or provisions of this Indenture or the Notes unless such consideration is offered to be paid or is paid to all Holders of the Notes that consent, waive or agree to amend in the time frame set forth in the solicitation documents relating to such consent, waiver or agreement.

Section 5.18 Additional Guarantors.

If at any time, (a) any Person becomes directly or indirectly a Subsidiary of one of the Guarantors, (b) if the Capital Stock of any Guarantor is held by any Subsidiary of the Company that is not a Guarantor, or (c) any Guarantor transfers or causes to be transferred, in one transaction or a series of related transactions, any assets or property to any Guarantor that, following such transaction or series of related transactions is a Subsidiary but is not a Guarantor, then the Company and such Subsidiary, as soon as reasonably practical and in any event within three Business Days after such event shall:

(a) execute a supplemental indenture hereto whereby such Subsidiary will become a Guarantor hereunder and comply with the other applicable provisions of this Indenture.

(b) execute and deliver to the Trustee a Guarantee in the form of the Guarantee set forth in Exhibit A pursuant to which such Subsidiary shall unconditionally guarantee on a senior secured basis of all of the Company's obligations under the Notes and this Indenture on the terms set forth in this Indenture;

(c) (i) execute and deliver to the appropriate agent any amendments to any then existing intercreditor agreement as necessary in order to make such Subsidiary a party to the such intercreditor agreement; (ii) execute and deliver to the Collateral Agent and the Trustee such amendments to the Collateral Documents as the Collateral Agent deems necessary or advisable in order to grant to Collateral Agent, for the benefit of the Holders, a perfected security interest in the Capital Stock of such new Subsidiary and the debt securities of such new Subsidiary subject only to the Permitted Liens, which are owned by the Company or any Subsidiary and required to be pledged pursuant to the Pledge and Security Agreement and (iii) deliver to the Collateral Agent the certificates representing such Capital Stock and debt securities, together with (x) in the case of such Capital Stock, undated stock powers or instruments of transfer, as applicable, endorsed in blank, and (y) in the case of such debt securities, endorsed in blank, in each case executed and delivered by an Officer of the Company or such Subsidiary, as the case may be;

(d) take such actions necessary or advisable to grant to the Collateral Agent for the benefit of itself, the Holders and the Trustee a perfected security interest in the assets of such new Subsidiary, subject only to Permitted Liens, including the filing of Uniform Commercial Code financing statements in such jurisdictions as may be required by the Collateral Documents or by law or as may be reasonably requested by the Collateral Agent; and

(e) take such further action and execute and deliver such other documents specified in this Indenture or otherwise reasonably requested by the Trustee or the Collateral Agent to effectuate the foregoing.

Thereafter, such Subsidiary shall be a Guarantor for all purposes of this Indenture.

Section 5.19 Issuance or Sale of Subsidiary Stock.

The Company shall not, and shall not permit any of its Subsidiaries to, sell any Capital Stock of a Subsidiary of the Company, except to the Company or to another wholly owned Subsidiary of the Company, unless the Company and its Subsidiaries, as the case may be, sell 100% of the Capital Stock of the subject Subsidiary that they own in accordance with this Indenture, as applicable. In addition, no Subsidiary of the Company shall issue any Capital Stock, other than to the Company or another Subsidiary of the Company.

Section 5.20 Impairment of Security Interest.

Neither the Company nor any of the Guarantors will take or omit to take any action which would adversely affect or impair the Liens in favor of the Collateral Agent, on behalf of itself, the Trustee and the Holders, with respect to the Collateral. Neither the Company nor any of its Subsidiaries shall grant to any Person, or permit any Person to retain (other than the Collateral Agent), any interest whatsoever in the Collateral other than Permitted Liens. Neither the Company nor any of its Subsidiaries will enter into any agreement that requires the proceeds received from any sale of Collateral to be applied to repay, redeem, defease or otherwise acquire or retire any Indebtedness of any Person, other than as permitted or required by this Indenture, the Notes or the Collateral Documents. The Company shall, and shall cause each Guarantor to, at their sole cost and expense, execute and deliver all such agreements and instruments as the Collateral Agent or the Trustee shall reasonably request to more fully or accurately describe the property intended to be Collateral or the obligations intended to be secured by the Collateral Documents. The Company shall, and shall cause each Guarantor to, at its sole cost and expense, file any such notice filings or other agreements or instruments as may be reasonably necessary or desirable under applicable law to perfect the Liens created by the Collateral Documents at such times and at such places as shall be necessary to perfect such Liens.

Section 5.21 Additional Interest; Special Interest.

If at any time Additional Interest becomes payable by the Company pursuant to the Registration Rights Agreement or any Special Interest becomes payable by the Company pursuant to Section 7.03 hereof, the Company shall promptly deliver to the Trustee a certificate to that effect and stating (i) the amount of such applicable Additional Interest or Special Interest that is payable and (ii) the date on which such applicable Additional Interest is payable pursuant to the terms of the Registration Rights Agreement or Special Interest is payable pursuant to Section 7.03 hereof. Unless and until a Responsible Officer of the Trustee receives such a certificate, the Trustee may assume without inquiry that no Additional Interest or Special Interest is payable. If the Company has paid Additional Interest or Special Interest directly to the Persons entitled to such Additional Interest or Special Interest, the Company shall deliver to the Trustee a certificate setting forth the particulars of such payment.

ARTICLE 6.
CONSOLIDATION, MERGER AND SALE OF ASSETS

Section 6.01 When Company May Merger, Etc.

Subject to the provisions of Section 6.02, the Company shall not consolidate with or merge with or into, or sell, convey, transfer or lease all or substantially all of the consolidated properties and assets of the Company and its direct and indirect Subsidiaries, taken as a whole, to another Person (other than one or more of the Company's direct or indirect Subsidiaries), unless:

(a) the resulting, surviving or transferee Person (the "*Surviving Entity*"), if not the Company, is a corporation organized and existing under the laws of the United States of America, any State thereof or the District of Columbia, and the Surviving Entity, if not the Company, expressly assumes by supplemental indenture all of the obligations of the Company under the Notes and this Indenture; and

(b) immediately after giving effect to such transaction, no Default or Event of Default shall have occurred and be continuing under this Indenture.

For purposes of this Section 6.01, the sale, conveyance, transfer or lease of all or substantially all of the properties and assets of one or more Subsidiaries of the Company to another Person, which properties and assets, if held by the Company instead of such Subsidiaries, would constitute all or substantially all of the properties and assets of the Company on a consolidated basis, shall be deemed to be the sale, conveyance, transfer or lease of all or substantially all of the properties and assets of the Company to another Person.

Section 6.02 Successor Corporation to Be Substituted.

In case of any such consolidation, merger, sale, conveyance, transfer or lease and upon the assumption by the Surviving Entity, by supplemental indenture, executed and delivered to the Trustee and satisfactory in form to the Trustee, of the due and punctual payment of the principal of and accrued and unpaid interest on all of the Notes, the due and punctual delivery or payment, as the case may be, of any consideration due upon conversion of the Notes and the due and punctual performance of all of the covenants and conditions of this Indenture to be performed by the Company, such Surviving Entity (if not the Company) shall succeed to and, except in the case of a lease of all or substantially all of the Company's properties and assets, shall be substituted for the Company, with the same effect as if it had been named herein as the party of the first part. Such Surviving Entity thereupon may cause to be signed, and may issue either in its own name or in the name of the Company any or all of the Notes issuable hereunder which theretofore shall not have been signed by the Company and delivered to the Trustee; and, upon the written order of such Surviving Entity signed by one of its Officers (instead of a Company Order) and subject to all the terms, conditions and limitations in this Indenture prescribed, the Trustee shall authenticate and shall deliver, or cause to be authenticated and delivered, any Notes that previously shall have been signed and delivered by an Officer of the Company to the Trustee for authentication, and any Notes that such Surviving Entity thereafter shall cause to be signed and delivered to the Trustee for that purpose. All the Notes so issued shall in all respects have the same legal rank and benefit under this Indenture as the Notes theretofore or thereafter issued in accordance with the terms of this Indenture as though all of such Notes had been issued at the date of the execution hereof. In the event of any such consolidation, merger, sale, conveyance or transfer (but not in the case of a lease), upon compliance with this ARTICLE 6 the Person named as the "Company" in the first paragraph of this Indenture (or any successor that shall thereafter have become such in the manner prescribed in this ARTICLE 6) may be dissolved, wound up and liquidated at any time thereafter and, except in the case of a lease, such Person shall be released from its liabilities as obligor and maker of the Notes and from its obligations under this Indenture and the Notes.

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

Section 6.03 Opinion of Counsel to Be Given to Trustee.

If the Surviving Entity is not the Company, no such consolidation, merger, sale, conveyance, transfer or lease pursuant to Section 6.01 shall be effective unless the Trustee shall receive an Officer's Certificate and an Opinion of Counsel as conclusive evidence that any such consolidation, merger, sale, conveyance, transfer or lease and any such assumption and, if a supplemental indenture is required in connection with such transaction, such supplemental indenture, complies with the provisions of this ARTICLE 6.

ARTICLE 7.
DEFAULTS AND REMEDIES

Section 7.01 Events of Default.

An "*Event of Default"* means any of the following events:

(a) the Company's (i) failure to comply with its obligation to convert any Notes in accordance with this Indenture upon exercise of a Holder's conversion right, including the payment of any Interest Make-Whole Payment or Qualifying Fundamental Change Payment, and such failure continues for a period of five (5) Business Days;

(b) the Common Stock is not listed on any Eligible Market;

(c) the Company defaults in the payment when due of Interest (whether in cash or shares, as determined by the Company) on the Notes and such default continues for a period of 30 days;

(d) the Company defaults in the payment when due of Principal of or premium, if any, on the Notes when the same becomes due and payable at maturity, upon redemption (including in connection with an offer to purchase) or otherwise;

(e) the Company or any of its Subsidiaries fails to comply with any of the provisions of Section 5.07, Section 5.09, Section 5.10, Section 5.12, Section 6.01 or ARTICLE 10 hereof;

(f) failure by the Company to give the Holder Optional Redemption Notice pursuant to Section 3.08(b), a Qualifying Fundamental Change Company Notice pursuant to Section 9.03(b), or Fundamental Change Company Notice pursuant to Section 10.01(c), in each case, when due and such failure continues for three (3) Business Days after the due date for such notice;

(g) the Company or any Guarantor fails to observe or perform any other covenant, representation, warranty or other agreement in this Indenture (other than a default specified in clauses (a) through (f) above), the Notes, the Note Guarantees or the Collateral Documents for 30 days after notice to the Company by the Trustee or the Holders of at least 25% in aggregate Principal Amount of the Notes then outstanding voting as a single class;

(h) a default occurs under any mortgage, indenture or instrument under which there may be issued or by which there may be secured or evidenced any Indebtedness for money borrowed by the Company or any of its Subsidiaries (or the payment of which is guaranteed by the Company or any of its Subsidiaries), whether such Indebtedness or Guarantee now exists, or is created after the date of this Indenture, which default (i) is caused by a failure to pay principal of, or interest or premium, if any, on such Indebtedness prior to the expiration of the grace period provided in such Indebtedness on the date of such default (a "*Payment Default"*); or (ii) results in the acceleration of such Indebtedness prior to its express maturity and, in each case, the Principal Amount of such Indebtedness, together with the Principal Amount of any other such Indebtedness under which there has been a Payment Default or the maturity of which has been so accelerated, aggregates $1.0 million or more, in any such case, after notice to the Company by the Trustee or the Holders of at least 25% in aggregate Principal Amount of the Notes then outstanding voting as a single class;

(i) a final judgment or final judgments for the payment of money are entered by a court or courts of competent jurisdiction against the Company or any of its Subsidiaries and such judgment or judgments remain undischarged, unpaid or unstayed for a period (during which execution shall not be effectively stayed) of 60 days, *provided* that the aggregate of all such undischarged judgments exceeds $1.0 million (excluding amounts covered by insurance), after notice to the Company by the Trustee or the Holders of at least 25% in aggregate Principal Amount of the Notes then outstanding voting as a single class;

(j) except as otherwise permitted by this Indenture, any Note Guarantee is held in any judicial proceeding to be unenforceable or invalid or ceases for any reason to be in full force and effect, or any Guarantor, or any Person acting on behalf of any Guarantor, denies or disaffirms its obligations under its Note Guarantee;

(k) except as otherwise permitted by this Indenture, any Lien purported to be granted under any Collateral Document on any Collateral having a Fair Market Value, individually or in the aggregate, in excess of $1.0 million is held in any judicial proceeding not to be an enforceable and perfected first priority Lien or ceases for any reason to be in full force and effect (other than as a result of any action or inaction by the Trustee, Collateral Agent or the Holders of the Notes), subject only to Permitted Liens;

(l) the Company, any Significant Subsidiary (as defined in Rule 1-02 of Regulation S-X under the Securities Act and Exchange Act or any successor rule) or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary, pursuant to or within the meaning of Bankruptcy Law:

(i) commences a voluntary case,

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

(iii) consents to the appointment of a custodian, receiver, trustee, assignee, liquidator or similar official under Bankruptcy Law of it or for all or substantially all of its property,

(iv) makes a general assignment for the benefit of its creditors, or

(v) generally is not paying its debts as they become due;

(m) a court of competent jurisdiction enters an order or decree under any Bankruptcy Law that:

(i) is for relief against the Company, any of the Subsidiaries, any Significant Subsidiary or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary, in an involuntary case;

(ii) appoints a custodian, receiver, trustee, assignee, liquidator or similar official under Bankruptcy Law of the Company, any of the Subsidiaries, any Significant Subsidiary or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary, or for all or substantially all of the property of the Company, any of the Subsidiaries, any Significant Subsidiary or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary; or

(iii) orders the liquidation of the Company, any of the Subsidiaries, any Significant Subsidiary or any group of Subsidiaries that, taken as a whole, would constitute a Significant Subsidiary, and the order or decree remains unstayed and in effect for 60 consecutive days;

(n) any provision of any Collateral Document, at any time after the execution and delivery thereof, ceases to be in full force and effect, which adversely affects the validity, enforceability, perfection or priority of the Liens purported to be granted pursuant to the Collateral Documents in any material respect, for any reason other than (x) as expressly permitted hereunder or thereunder, (y) as a result of any action or inaction by the Trustee, the Collateral Agent or the Holders of the Notes or (z) as a result of the satisfaction and discharge in full of this Indenture;

(o) any Collateral Document, at any time after the execution and delivery thereof, ceases to create a valid and perfected Lien, with the priority required by the Collateral Documents, on and security interest in any material portion of the Collateral purported to be covered thereby, for any reason other than (x) as expressly permitted hereunder or thereunder, (y) as a result of any action or inaction by the Trustee, the Collateral Agent or the Holders of the Notes, or (z) as a result of the satisfaction and discharge in full of this Indenture; or

(p) any Credit Party contests in writing the validity, enforceability, perfection or priority of any Liens on a material portion of the Collateral.

Section 7.02 Acceleration.

If any Event of Default (other than an Event of Default specified in clause (l) or (m) of Section 7.01) occurs and is continuing, the Trustee or the Holders of at least 25% in Principal Amount of the then outstanding Notes may declare all the Notes to be due and payable immediately (the "*Event of Default Redemption Price*"). Upon any such declaration, the Notes shall become due and payable immediately. Notwithstanding the foregoing, if an Event of Default specified in clause (l) or (m) of Section 7.01 hereof occurs, all outstanding Notes shall be due and payable immediately without further action or notice.

The Majority Holders by written notice to the Trustee and the Collateral Agent may, on behalf of all of the Holders, rescind an acceleration and its consequences if the rescission would not conflict with any judgment or decree and if all existing Events of Default (except nonpayment of Principal, Interest or premium that has become due solely because of the acceleration) have been cured or waived.

In the event of a declaration of acceleration of the Notes solely because an Event of Default described in Section 7.01(h) has occurred and is continuing, the declaration of acceleration of the Notes shall be automatically rescinded and annulled if the payment default or acceleration triggering such Event of Default pursuant to Section 7.01(h) shall be remedied or cured or waived by the holders of the relevant debt within 20 Business Days after the declaration of acceleration with respect thereto and if the rescission and annulment of the acceleration of the Notes would not conflict with any judgment or decree of a court of competent jurisdiction obtained by the Trustee for the payment of amounts due on the Notes.

Section 7.03 Other Remedies.

If an Event of Default occurs and is continuing, the Trustee may pursue any available remedy to collect the payment of Principal, premium, if any, and Interest on the Notes then due or to enforce the performance of any provision of the Notes or this Indenture.

The Trustee may maintain a proceeding even if it does not possess any of the Notes or does not produce any of them in the proceeding. A delay or omission by the Trustee or any Holder of a Note in exercising any right or remedy accruing upon an Event of Default shall not impair the right or remedy or constitute a waiver of or acquiescence in the Event of Default. All remedies are cumulative to the extent permitted by law.

Notwithstanding the foregoing, the sole remedy for an Event of Default relating to the failure by the Company to comply with the provisions of Section 5.03 shall, for the first 180 days after the occurrence of such an Event of Default, consist exclusively of the right to receive special interest ("*Special Interest*") on the Notes at an annual rate equal to 0.50% of the Principal Amount of the Notes. Such Special Interest shall be paid quarterly in arrears on each Interest Payment Date, with the first payment due of the first Interest Payment Date following the date on which such Special Interest began to accrue on the Notes and shall cease to accrue upon the cure or waiver of such Event of Default. Special Interest shall accrue on all outstanding Notes from and including the date on which an Event of Default relating to a failure to comply with the provisions of Section 5.03 shall first occur to but not including the 180th day thereafter (or such earlier date on which such Event of Default shall have been cured or waived). On such 180th day (or earlier, if the Event of Default relating to the failure to comply with Section 5.03 is cured or waived prior to such 180th day), such Special Interest shall cease to accrue and, if the Event of Default relating to the failure to comply with Section 5.03 shall not have been cured or waived prior to such 180th day, the Notes shall be subject to acceleration as provided in Section 7.02. The provisions of this paragraph shall not affect the rights of holders in the event of the occurrence of any other Event of Default. Upon the occurrence of an Event of Default giving rise to the obligation to pay Special Interest, all references herein to interest accrued or payable of any date shall include any Special Interest accrued or payable as of such dates if and to the extent provided in this Section 7.03.

Section 7.04 Waiver of Past Defaults.

The Majority Holders by notice to the Trustee and the Collateral Agent may on behalf of the Holders of all of the Notes waive an existing Default and its consequences hereunder, except (a) a Default or Event of Default described in clauses (l) or (m) of Section 7.01 or (b) in respect of a covenant or provision hereof which under Section 12.02 cannot be modified or amended without the consent of the Holder of each outstanding Note affected (in which case such notice to waive such existing Default and its consequences hereunder shall be given to the Trustee by all Holders of affected Notes). 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 7.05 Control by Majority.

Subject to Section 8.02(g) the Majority Holders 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, provided that: (a) such direction shall not be in conflict with any rule of law, this Indenture or the Collateral Documents; (b) the Trustee may take any other action deemed proper by the Trustee which is not inconsistent with such direction; and (c) the Trustee may refuse to follow any direction that conflicts with law or that the Trustee determines may involve the Trustee in personal liability or may be prejudicial to the rights of the Holders of Notes.

Section 7.06 Limitation on Suits.

No Holder shall have any right to institute any proceeding, judicial or otherwise, in respect of this Indenture, or for the appointment of a receiver or trustee, or for any other remedy hereunder (other than in the case of an Event of Default specified in clause (l) or (m) of Section 7.01), unless:

(a) the Holder of a Note gives to the Trustee written notice of a continuing Event of Default;

(b) the Holders of at least 25% in Principal Amount of the then outstanding Notes make a written request to the Trustee to pursue the remedy;

(c) such Holder of a Note or Holders of Notes offer and, if requested, provide to the Trustee indemnity reasonably satisfactory to the Trustee against any loss, liability or expense;

(d) the Trustee does not comply with the request within 60 days after receipt of the request and the offer and, if requested, the provision of indemnity; and

(e) during such 60-day period the Majority Holders do not give the Trustee a direction inconsistent with the request.

No one or more Holders shall have any right in any manner whatever by virtue of, or by availing itself of, any provision of this Indenture to affect, disturb or prejudice the rights of any other Holders (it being understood that the Trustee does not have an affirmative duty to ascertain whether or not such actions or forbearances are unduly prejudicial to such Holders), or to obtain or to seek to obtain priority or preference over any other Holders or to enforce any right under this Indenture, except in the manner herein provided and for the equal and ratable benefit of all the Holders.

Section 7.07 Unconditional Rights of Holders of Notes to Receive Payment.

Notwithstanding any other provision of this Indenture, the right of any Holder to receive payment of the Principal, the Redemption Price, or Interest, in respect of the Notes held by such Holder, on or after the respective due dates expressed in the Notes or any Redemption Date, as applicable, and to convert the Notes in accordance with ARTICLE 9, or to bring suit for the enforcement of any such payment on or after such respective dates or the right to convert, shall not be impaired or affected adversely without the consent of such Holder.

Section 7.08 Collection Suit by Trustee.

If an Event of Default specified in Section 7.01(c) or (d) occurs and is continuing, the Trustee is authorized to recover judgment in its own name and as trustee of an express trust against the Company and the Subsidiaries for the whole amount of Principal of, premium, if any, Redemption Price, Interest and any other amounts remaining unpaid on the Notes and interest on overdue principal and, to the extent lawful, interest and 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.

Section 7.09 Trustee May File Proofs of Claim.

The Trustee is authorized to file such proofs of claim and other papers or documents as may be necessary or advisable in order to have the claims of the Trustee (including any claim for the reasonable compensation, expenses, disbursements and advances of the Trustee, its agents and counsel), the Collateral Agent and the Holders of the Notes allowed in any judicial proceedings relative to the Company (or any other obligor upon the Notes and the Note Guarantees, including the Guarantors), its creditors or its property and shall be entitled and empowered to collect, receive and distribute any money or other property payable or deliverable on any such claims and any custodian 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 to 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 8.07 hereof. To the extent that the payment of any such compensation, expenses, disbursements and advances of the Trustee, the Collateral Agent, the respective agents and counsel of either one, and any other amounts due the Trustee or the Collateral Agent under Section 8.07 hereof out of the estate in any such proceeding, shall be denied for any reason, payment of the same shall be secured by a Lien on, and shall be paid out of, any and all distributions, dividends, money, securities and other properties that the Holders may be entitled to receive in such proceeding whether in liquidation or under any plan of reorganization or arrangement or otherwise. Nothing herein contained 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 Notes or the rights of any Holder, or to authorize the Trustee to vote in respect of the claim of any Holder in any such proceeding.

Section 7.10 Priorities.

If the Trustee collects any money pursuant to this ARTICLE 7, it shall pay out the money in the following order:

> *First*: to the Trustee, the Collateral Agent, and their respective agents and attorneys for amounts due under Section 8.07 hereof and Section 5.03 through Section 5.06 of the Collateral Agency Agreement, including payment of all compensation, expense and liabilities incurred, and all advances made, by the Trustee or the Collateral Agent and the costs and expenses of collection;
>
> *Second*: to Holders of Notes for amounts due and unpaid on the Notes for principal, premium, if any, and interest, ratably, without preference or priority of any kind, according to the amounts due and payable on the Notes for Principal, premium, if any, Interest and any other amounts due, respectively; and

Third: to the Company or to such party as a court of competent jurisdiction shall direct.

The Trustee may fix a record date and payment date for any payment to Holders of Notes pursuant to this Section 7.10.

Section 7.11 Undertaking for Costs.

In any suit for the enforcement of any right or remedy under this Indenture or in any suit against the Trustee for any action taken or omitted by it as Trustee, in either case in respect of the Notes, a court may require any party litigant in such suit to file an undertaking to pay the costs of the suit, and the court may assess reasonable costs, including reasonable attorney's fees, and expenses, against any party litigant in the suit having due regard to the merits and good faith of the claims or defenses made by the party litigant; but the provisions of this Section 7.11 shall not apply to any suit instituted by the Company, to any suit instituted by the Trustee, to any suit instituted by any Holder, or group of Holders, holding in the aggregate more than 10% in aggregate Principal Amount of the then outstanding Notes, or to any suit instituted by any Holder for the enforcement of the payment of the Principal Amount or Interest, on any Note on or after the Stated Maturity of such Note or applicable Redemption Price on or after the applicable Redemption Date.

Section 7.12 Waiver of Stay or Extension of Laws.

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

ARTICLE 8.
TRUSTEE

Section 8.01 Duties of Trustee.

(a) If an Event of Default has occurred and is continuing, the Trustee shall exercise such of the rights and powers vested in it by this Indenture, and use the same degree of care and skill in its exercise, as a prudent person would exercise or use under the circumstances in the conduct of such person's own affairs.

(b) The duties and responsibilities of the Trustee shall be as provided by the TIA. Except during the continuance of an Event of Default:

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

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

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

(i) this paragraph does not limit the effect of paragraph (b) of this Section 8.01;

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

(iii) the Trustee shall not be liable with respect to any action taken or omitted to be taken by it in good faith in accordance with the direction of the Majority Holders, determined as provided in Section 2.05, Section 2.08, Section 2.09 and Section 7.05, relating to the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred upon the Trustee, under this Indenture; and

(iv) 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.

(d) Whether or not therein expressly so provided, every provision of this Indenture that in any way relates to the Trustee is subject to paragraphs (a), (b), and (c) of this Section 8.01

(e) The Trustee shall be under no obligation to exercise any of its rights and powers under this Indenture at the request of any Holder, unless such Holder shall have offered to the Trustee security and indemnity satisfactory to it against any loss, liability or expense.

(f) The Trustee shall be under no liability for interest on any money received by it hereunder except as the Trustee may agree in writing with the Company. Money held in trust by the Trustee hereunder need not be segregated from other funds except to the extent required by law.

Section 8.02 Rights of Trustee.

(a) The Trustee may conclusively 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. The Trustee need not investigate any fact or matter stated in any such paper or document.

(b) 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 may require an Officers' Certificate or an Opinion of Counsel or both, and may, in the absence of bad faith on its part, conclusively rely upon such Officers' Certificate or Opinion of Counsel.

(c) The Trustee may consult with counsel of its selection and the advice of such counsel or any Opinion of Counsel shall be full and complete authorization and protection from liability in respect of any action taken, suffered or omitted by it hereunder in good faith and in reliance thereon.

(d) 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 the misconduct or negligence on the part of any agent or attorney appointed with due care by it hereunder.

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

(f) Unless otherwise specifically provided in this Indenture, any demand, request, direction or notice from the Company or a Guarantor mentioned herein shall be sufficiently evidenced by Company Order.

(g) In the event the Trustee receives inconsistent or conflicting requests and indemnity from two or more groups of Holders, each representing less than a majority in aggregate principal amount of the Notes then outstanding, pursuant to the provisions of this Indenture, the Trustee, in its sole discretion, may determine what action, if any, will be taken and shall not incur any liability for its failure to act until such inconsistency or conflict is, in its reasonable opinion, resolved.

(h) The Trustee shall not be deemed to have notice of any Default or Event of Default unless written notice of any event which is in fact such a Default or Event of Default is received by a Responsible Officer of the Trustee at the Corporate Trust Office of the Trustee, and such notice references the Notes and this Indenture.

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

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

(k) In no event shall the Trustee be responsible or liable for special, indirect, punitive or consequential loss or damage of any kind whatsoever (including, but not limited to, loss of profit) irrespective of whether the Trustee has been advised of the likelihood of such loss or damage and regardless of the form of action.

(l) 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 at the sole cost of the Company and shall incur no liability or additional liability of any kind by reason of such inquiry or investigation.

(m) Delivery of reports, information and documents to the Trustee (including, without limitation, under Section 5.03 hereof) 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 Issuer's compliance with any of their covenants hereunder (as to which the Trustee is entitled to rely exclusively on Officer's Certificates).

(n) The Trustee will not be liable to any person if prevented or delayed in performing any of its obligations or discretionary functions under this Indenture by reason of any present or future law applicable to it, by any governmental or regulatory authority or by any circumstances beyond its control.

Section 8.03 Individual Rights of Trustee.

The Trustee in its individual or any other capacity may become the owner or pledgee of Notes and may otherwise deal with the Company or any Affiliate of the Company with the same rights it would have if it were not Trustee. However, in the event that the Trustee acquires any conflicting interest, and a default occurs with respect to the Notes, it must eliminate such conflict within 90 days, apply to the SEC for permission to continue as Trustee or resign. Any authentication agent, any Agent, or any other agent of the Trustee may do the same with like rights and duties. The Trustee is also subject to Section 8.10 and Section 8.11 hereof.

Section 8.04 Trustee's Disclaimer.

The Trustee shall not be responsible for and makes no representation as to the validity or adequacy of this Indenture, the Collateral Documents, the Collateral or the Notes. The Trustee and any authenticating agent shall not be accountable for the Company's use of the proceeds from the Notes or any money paid to the Company or upon the Company's direction under any provision of this Indenture, and shall not be responsible for the use or application of any money received by any Paying Agent other than the Trustee. The statements and recitals contained herein, in the Notes or in any other document in connection with the sale of the Notes or pursuant to this Indenture, except the Trustee's certificates of authentication, shall be taken as the statements of the Company, and the Trustee or any authenticating agent assumes no responsibility for their correctness.

Section 8.05 Notice of Defaults.

If a Default or Event of Default occurs and is continuing and if it is known to the Trustee, the Trustee shall send to Holders of Notes a notice of the Default or Event of Default within 90 days after it knows of such Default or Event of Default, unless such Default or Event of Default shall have been cured or waived. Except in the case of a Default or Event of Default in payment of Principal of, premium, if any, Interest or any other amounts due on any Note, the Trustee shall be protected in withholding such notice if and so long as the board of directors, the executive committee or a trust committee of directors or Responsible Officers of the Trustee in good faith determines that the withholding of such notice is in the interest of the Holders; and provided, further, that in the case of any default of the character specified in Section 7.01(g), no such notice to Holders shall be given until at least 30 days after the occurrence thereof.

Section 8.06 Reports by Trustee to Holders of the Notes.

The Trustee shall transmit to Holders such reports concerning the Trustee and its actions under this Indenture as may be required pursuant to the TIA at the times and in the manner provided pursuant thereto. If required by TIA § 313(a), the Trustee shall, within sixty days after each October 15 following the date of the initial issuance of Securities under this Indenture deliver to Holders a brief report, dated as of such October 15, which complies with the provisions of TIA § 313(a).

A copy of each such report shall, at the time of such transmission to Holders, be filed by the Trustee with each stock exchange, if any, upon which the Notes are listed, with the Commission and with the Company. The Company will promptly notify the Trustee in writing when the Securities are listed on any stock exchange and of any delisting thereof.

Section 8.07 Compensation and Indemnity.

The Company shall pay to the Trustee from time to time compensation for its acceptance of this Indenture and services hereunder as shall be agreed in writing by the Company and the Trustee. The Trustee's compensation shall not be limited by any law on compensation of a trustee of an express trust. The Company shall reimburse the Trustee promptly upon request for all reasonable disbursements, advances and expenses incurred or made by it in addition to the compensation for its services. Such expenses shall include the reasonable compensation, disbursements and expenses of the Trustee's agents and counsel.

The Company shall indemnify the Trustee and its agents for, and to hold them harmless against, any and all losses, liabilities, damages, claims or expenses, including taxes (other than taxes based upon, measured by or determined by the income of the Trustee) incurred by it arising out of or in connection with the acceptance or administration of its duties under this Indenture, including the costs and expenses of enforcing this Indenture against the Company (including this Section 8.07) and defending itself against any claim (whether asserted by the Company or any Holder or any other person) or liability in connection with the exercise or performance of any of its powers or duties hereunder, except to the extent any such loss, damage, claim, liability or expense is due to its own gross negligence or willful misconduct (as determined by a court of competent jurisdiction in a final, non-appealable order). The Trustee shall notify the Company promptly of any claim for which it may seek indemnity. Failure by the Trustee to so notify the Company shall not relieve the Company of its obligations hereunder. The Company shall defend the claim and the Trustee shall cooperate in the defense. The Trustee may have separate counsel and the Company shall pay the reasonable fees and expenses of such counsel. The Company need not pay for any settlement made without its consent, which consent shall not be unreasonably withheld.

The obligations of the Company under this Section 8.07 shall survive the satisfaction and discharge of this Indenture and the resignation or removal of the Trustee.

To secure the Company's payment obligations in this Section, the Trustee shall have a Lien prior to the Notes on all money or property held or collected by the Trustee for any amount owing to it or any predecessor Trustee pursuant to this Section 8.07, except that held in trust to pay Principal and Interest on particular Notes. Such Lien shall survive the satisfaction and discharge of this Indenture.

When the Trustee incurs expenses or renders services after an Event of Default specified in Section 7.01 (l) or (m) 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 Bankruptcy Law.

Section 8.08 Replacement of Trustee.

A resignation or removal of the Trustee and appointment of a successor Trustee shall become effective only upon the successor Trustee's acceptance of appointment and taking of office as provided in this Section.

The Trustee may resign in writing at any time and be discharged from the trust hereby created by so notifying the Company. The Majority Holders may remove the Trustee by so notifying the Trustee and the Company in writing. The Company may remove the Trustee if:

(a) the Trustee fails to comply with Section 8.10 hereof;

(b) the Trustee is adjudged a bankrupt or an insolvent or an order for relief is entered with respect to the Trustee under any Bankruptcy Law;

(c) a custodian, receiver, trustee, assignee, liquidator or similar official under Bankruptcy Law or public officer takes charge of the Trustee or its property; or

(d) the Trustee becomes incapable of acting.

If the Trustee resigns or is removed or if a vacancy exists in the office of Trustee for any reason, the Company shall promptly appoint a successor Trustee. Within one year after the successor Trustee takes office, the Majority Holders may appoint a successor Trustee to replace the successor Trustee appointed by the Company.

If a successor Trustee does not take office within 30 days after the retiring Trustee resigns or is removed, the retiring Trustee, the Company, or the Holders of at least 10% in Principal Amount of the then outstanding Notes may petition any court of competent jurisdiction, at the expense of the Company, for the appointment of a successor Trustee.

If the Trustee, after written request by any Holder who has been a Holder for at least six months, fails to comply with Section 8.10, such Holder may petition any court of competent jurisdiction for the removal of the Trustee and the appointment of a successor Trustee.

A successor Trustee shall deliver a written acceptance of its appointment to the retiring Trustee and to the Company. Thereupon, the resignation or removal of the retiring Trustee shall become effective, and the successor Trustee shall have all the rights, powers and duties of the Trustee under this Indenture. The successor Trustee shall deliver a notice of its succession to Holders. The retiring Trustee shall promptly transfer all property held by it as Trustee to the successor Trustee, provided all sums owing to the Trustee hereunder have been paid and subject to the Lien provided for in Section 8.07 hereof. Notwithstanding replacement of the Trustee pursuant to this Section 8.08, the Company's obligations under Section 8.07 hereof shall continue for the benefit of the retiring Trustee.

Section 8.09 Successor Trustee by Merger, etc.

If the Trustee consolidates, merges or converts into, or transfers all or substantially all of its corporate trust business to, another corporation, the successor corporation without any further act shall be the successor Trustee; provided, that such successor corporation shall otherwise be eligible and qualified under this ARTICLE 8.

Section 8.10 Eligibility; Disqualification.

There shall at all times be a Trustee hereunder that is a corporation organized and doing business under the laws of the United States of America or of any state thereof that is authorized under such laws to exercise corporate trustee power, that is subject to supervision or examination by federal or state authorities and that has a combined capital and surplus of at least $100 million as set forth in its most recent published annual report of condition.

This Indenture shall always have a Trustee who satisfies the requirements of TIA § 310(a)(l), (2) and (5). The Trustee is subject to TIA § 310(b).

Section 8.11 Preferential Collection of Claims Against Company.

The Trustee is subject to TIA § 311 (a), excluding any creditor relationship listed in TIA § 311 (b). A Trustee who has resigned or been removed shall be subject to TIA § 31I (a) to the extent indicated therein.

ARTICLE 9.
CONVERSION OF NOTES

Section 9.01 Conversion Privilege.

(a) Subject to and upon compliance with the provisions of this Article 9, each Holder of a Note shall have the right, at such Holder's option, to convert all or any portion (if the portion to be converted is $1,000 Principal Amount or an integral multiple thereof) of such Note at any time prior to the close of business on the Business Day immediately preceding the Stated Maturity at an initial conversion rate of 152.6718 shares of Common Stock (subject to adjustment as provided in this Article 9, the "*Conversion Rate*") per $1,000 Principal Amount of Notes (subject to, and in accordance with, the settlement provisions of Section 9.02, the "*Conversion Obligation*").

(b) For any Conversion Date that occurs on or after the date that is one year after the date hereof and prior to May 31, 2021 (other than a conversion in connection with a Qualifying Fundamental Change), the Company shall make a payment to the Holder of such Notes equal to the sum of the remaining scheduled payments of interest that would have been made on the Notes to be converted had such Notes remained outstanding from the Conversion Date through, and including the Holder Optional Redemption Date (the "*Interest Make-Whole Payment*").

If a Conversion Date occurs after the close of business on a Regular Record Date but prior to the open of business on the Interest Payment Date corresponding to such Regular Record Date, the Interest Make-Whole Payment will not include the accrued interest to any converting Holder and instead the Company will pay the full amount of the relevant interest payment on such Interest Payment Date to the Holder of record on such Regular Record Date. In such case, the Interest Make-Whole Payment to such converting Holders will equal the value of all remaining interest payments, starting with the next Interest Payment Date for which interest has not been provided for through May 31, 2021.

The Company will have the option to pay any Interest Make-Whole Payment in cash and/or by delivering Freely Tradeable Common Stock. Subject to the limitations in Section 9.02(k) below, all Interest Make-Whole Payments shall be paid by delivering Freely Tradeable Common Stock, unless the Company delivers prior written notice to each Holder (with a copy to the Trustee) stating that the Company will pay all or a portion of any future Interest Make-Whole Payments in cash, and specifying the time periods during which such election shall apply and the percentages of the Interest Make-Whole Payments that will be paid as cash and Freely Tradeable Common Stock, respectively. Such notice shall not be effective until the end of the 15th Trading Day after such notice has been delivered. For all time periods, the number of shares of Freely Tradeable Common Stock a converting Holder will receive, if any, will be the number of shares equal to the amount of the Interest Make-Whole Payment to be paid in Freely Tradeable Common Stock to such Holder, divided by the product of (x) 95% and (y) the simple average of the Daily VWAP of the Common Stock for the ten consecutive Trading Days ending on and including the Trading Day immediately preceding the Conversion Date.

Section 9.02 Conversion Procedure; Settlement Upon Conversion.

(a) Subject to this Section 9.02, Section 9.03(b) and Section 9.07(a), upon conversion of any Note, the Company shall satisfy its Conversion Obligation by delivering to the converting Holder, in respect of each $1,000 Principal Amount of Notes being converted, a number of shares of Common Stock equal to the Conversion Rate, together with a cash payment, if applicable, in lieu of delivering any fractional share of Common Stock in accordance with subsection (j) of this Section 9.02, and an Interest Make-Whole Payment or Qualifying Fundamental Change Payment, if applicable, on the second Business Day immediately following the relevant Conversion Date (or such longer period as the Applicable Procedures of the Depositary may require, with respect to any conversions by Beneficial Owners of interests in a Global Note).

(b) Subject to Section 9.02(e), before any Holder of a Note shall be entitled to convert a Note as set forth above, such Holder shall (i) in the case of a Global Note, comply with the Applicable Procedures of the Depositary and, if required, pay funds equal to interest payable on the next Interest Payment Date to which such Holder is not entitled as set forth in Section 9.02(h) and (ii) in the case of a Physical Note, the Holder thereof shall (1) complete, manually sign and deliver an irrevocable notice (or a facsimile, PDF or other electronic transmission thereof) to the Conversion Agent as set forth in the Form of Notice of Conversion (a "*Notice of Conversion*") in the form set forth in Attachment 2 to the Form of Note attached hereto as Exhibit A, at the office of the Conversion Agent and state in writing therein the Principal Amount of Notes to be converted and the name or names (with addresses) in which such Holder wishes the certificate or certificates for the shares of Common Stock to be delivered upon settlement of the Conversion Obligation (and settlement of any Interest Make-Whole Payment or Qualifying Fundamental Change Payment, if applicable) to be registered, (2) surrender such Notes, duly endorsed to the Company or in blank (and accompanied by appropriate endorsement and transfer documents), at the office of the Conversion Agent, (3) if required, furnish appropriate endorsements and transfer documents, (4) if required, pay funds equal to interest payable on the next Interest Payment Date to which such Holder is not entitled as set forth in Section 9.02(h) and (5) if required, pay all transfer or similar taxes, if any. The Conversion Agent shall notify the Company of any conversion pursuant to this Article 9 on the Conversion Date for such conversion. The exercise of such conversion rights shall be irrevocable. No Holder may surrender Notes for conversion if such Holder has also delivered (a) a Fundamental Change Repurchase Notice to the Company in respect of such Notes and has not validly withdrawn such Fundamental Change Repurchase Notice in accordance with Section 10.02, or (b) a Repurchase Notice to the Company in respect of such Notes and has not validly withdrawn such Repurchase Notice in accordance with Section 3.08.

If more than one Note shall be surrendered for conversion at one time by the same Holder, the Conversion Obligation and Interest Make-Whole Payment or Qualifying Fundamental Change Payment, if applicable, with respect to such Notes shall be computed on the basis of the aggregate Principal Amount of the Notes (or specified portions thereof to the extent permitted thereby) so surrendered.

(c) A Note shall be deemed to have been converted immediately prior to the close of business on the date (the "*Conversion Date*") that the Holder has complied with the requirements set forth in subsection (b) above. The Company shall issue or cause to be issued, and deliver (if applicable) to its transfer agent or to such Holder, or such Holder's nominee or nominees, the full number of shares of Common Stock to which such Holder shall be entitled, in book-entry format through the Depositary, in satisfaction of the Company's Conversion Obligation together with any Interest Make-Whole Payment or Qualifying Fundamental Change Payment, if applicable.

(d) In case any Note shall be surrendered for partial conversion, the Company shall deliver a Company Order, and the Company shall execute and the Trustee shall authenticate and deliver to or upon the written order of the Holder of the Note so surrendered a new Note or Notes in authorized denominations in an aggregate Principal Amount equal to the unconverted portion of the surrendered Note, without payment of any service charge by the converting Holder but, if required by the Company or Trustee, with payment of a sum sufficient to cover any documentary, stamp or similar issue or transfer tax or similar governmental charge required by law or that may be imposed in connection therewith as a result of the name of the Holder of the new Notes issued upon such conversion being different from the name of the Holder of the old Notes surrendered for such conversion.

(e) If a Holder submits a Note for conversion, the Company shall pay any documentary, stamp or similar issue or transfer tax due on the issuance of any shares of Common Stock upon conversion, unless the tax is due because the Holder requests such shares of Common Stock to be issued in a name other than such Holder's name, in which case such Holder shall pay that tax. The conversion of such a Holder's Note may be delayed if the Trustee, and the Conversion Agent does not, receives a sum sufficient to pay any tax that is due by such Holder in accordance with the immediately preceding sentence.

(f) Except as provided in Section 9.04, no adjustment shall be made for dividends on any shares of Common Stock issued upon the conversion of any Note as provided in this Article 9.

(g) Upon the conversion of an interest in a Global Note, the Trustee, or the Note Custodian (if other than the Trustee) at the direction of the Trustee, shall make a notation on such Global Note as to the reduction in the Principal Amount represented thereby. The Company shall notify the Trustee in writing of any conversion of Notes effected through any Conversion Agent other than the Trustee.

(h) Upon conversion, a Holder shall not receive any separate cash payment for accrued and unpaid interest, if any, except as set forth below and in connection with an Interest Make-Whole Payment, if applicable. The Company's settlement of the full Conversion Obligation shall be deemed to satisfy in full its obligation to pay the Principal Amount of the Note and accrued and unpaid interest, if any, to, but not including, the relevant Conversion Date. As a result, accrued and unpaid interest, if any, to, but not including, the relevant Conversion Date shall be deemed to be paid in full rather than cancelled, extinguished or forfeited. Notwithstanding the foregoing, if Notes are converted after the close of business on a Regular Record Date, but prior to the open of business on the immediately following Interest Payment Date, Holders of such Notes as of the close of business on such Regular Record Date shall receive the full amount of interest payable on such Notes on the corresponding Interest Payment Date notwithstanding the conversion.

Notes surrendered for conversion during the period from the close of business on any Regular Record Date to the open of business on the immediately following Interest Payment Date shall be accompanied by funds equal to the amount of interest payable on the Notes so converted on the corresponding Interest Payment Date (regardless of whether the Holder was the holder of record on the corresponding Regular Record Date); *provided* that no such payment shall be required (1) for conversions following the Regular Record Date immediately preceding the Stated Maturity; (2) for conversions in respect of which an Interest Make-Whole Payment is payable upon conversion; (3) if the Company has specified a Fundamental Change Repurchase Date that is after a Regular Record Date and on or prior to the Business Day immediately following the corresponding Interest Payment Date, in respect of Notes converted; or (4) to the extent of any overdue interest, if any overdue interest exists at the time of conversion with respect to such Note. Therefore, for the avoidance of doubt, all Holders of record on the Regular Record Date immediately preceding the Stated Maturity, any Holders of record entitled to receive an Interest Make-Whole Payment upon conversion described in clause (2) above and any Fundamental Change Repurchase Date described in clause (3) above shall receive the full interest payment due on the Stated Maturity or other applicable Interest Payment Date in cash regardless of whether their Notes have been converted or repurchased following such Regular Record Date.

(i) The Person in whose name the shares of Common Stock shall be issuable upon conversion shall become the holder of record of such shares as of the close of business on the relevant Conversion Date. Upon a conversion of Notes, such Person shall no longer be a Holder of such Notes surrendered for conversion; *provided* that (a) the converting Holder shall have the right to receive the Conversion Obligation due upon conversion and the Interest Make-Whole Payment or Qualifying Fundamental Change Payment, if applicable, and (b) in the case of a conversion between a Regular Record Date and the corresponding Interest Payment Date, the Holder of record as of the close of business on such Regular Record Date shall have the right to receive the full amount of interest payable on such Interest Payment Date, in accordance with clause (h) above.

(j) The Company shall not issue any fractional share of Common Stock upon conversion of the Notes and shall instead pay cash in lieu of delivering any fractional share of Common Stock issuable upon conversion based on the Closing Sale Price of the Common Stock on the relevant Conversion Date.

(k) Notwithstanding anything to the contrary in this Indenture, unless the Company shall have obtained the requisite Stockholder Approval pursuant to NASDAQ Marketplace Rule 5635(d) or the listing requirements of such other Relevant Stock Exchange,

(i) the number of shares of Common Stock the Company may deliver in respect of the Notes, including those delivered as Common Stock Interest, in connection with an Interest Make-Whole Payment, or in connection with a Qualifying Fundamental Change Payment will not exceed, and

(ii) the Conversion Price or the Conversion Rate will not be adjusted beyond the amount that results in the total number of shares issuable in respect of the Notes exceeding,

19.99% of the Common Stock of the Company outstanding (as appropriately adjusted to give effect to any stock splits, reverse stock splits, stock combinations, reclassifications, reorganizations or other similar transactions occurring after the date of this Indenture) as of the close of the Trading Day immediately preceding the date of this Indenture (the "*20% Threshold*"). The Company will not be required to make any cash payments in lieu of any fractional shares or have any further obligation to deliver any shares of Common Stock in excess of the 20% Threshold; *provided, however*, that the Company will make a cash payment in lieu of any whole shares of Common Stock that are not able to be delivered in excess of the 20% Threshold, calculated based upon the simple average of the Daily VWAP for the ten consecutive Trading Days ending on and including the Trading Day immediately preceding the relevant payment date.

(l) The Company shall not effect any conversion of a Note, and no Holder shall have the right to convert any portion of such Note, to the extent that after giving effect to such conversion, such Holder (together with such Holder's affiliates) would Beneficially Own in excess of 4.99% of the number of shares of Common Stock outstanding immediately after giving effect to such conversion (the "*Conversion Limitation*"). For purposes of the foregoing sentence, the number of shares of Common Stock beneficially owned by such Holder and its affiliates shall include the number of shares of Common Stock issuable upon conversion of a Note with respect to which the determination of such sentence is being made, but shall exclude the number of shares of Common Stock which would be issuable upon (A) conversion of the remaining, nonconverted portion of any Note beneficially owned by such Holder or any of its affiliates and (B) exercise or conversion of the unexercised or nonconverted portion of any other securities of the Company subject to a limitation on conversion or exercise analogous to the limitation contained herein beneficially owned by such Holder or any of its affiliates. Except as set forth in the preceding sentence, for purposes of this Section, beneficial ownership shall be calculated in accordance with Section 13(d) of the Exchange Act. For purposes of this Section 9.02(l), in determining the number of outstanding shares of Common Stock, such Holder may rely on the number of outstanding shares of Common Stock as reflected in (x) the Company's most recent annual, quarterly or current report on Form 10-K, Form 10-Q or Form 8-K, respectively, as the case may be; (y) a more recent public announcement by the Company or (z) any other notice by the Company setting forth the number of shares of Common Stock outstanding. For any reason at any time, upon the written or oral request of a Holder, the Company shall within two Business Days confirm orally and in writing to such Holder the number of shares of Common Stock then outstanding. In any case, the number of outstanding shares of Common Stock shall be determined after giving effect to the conversion or exercise of securities of the Company, including any Note, by such Holder or its affiliates since the date as of which such number of outstanding shares of Common Stock was reported. By written notice to the Company, any Holder may increase or decrease the Conversion Limitation to any other percentage not in excess of 9.99% specified in such notice; provided that (i) any such increase will not be effective until the 61st day after such notice is delivered to the Company, and (ii) any such increase or decrease will apply only to the Holder sending such notice and not to any other Holder of Notes. Notwithstanding the foregoing, the Conversion Limitation shall not be applicable (i) on any of the ten Trading Days up to and including the Stated Maturity, or (ii) on any of the ten Trading Days up to and including the Effective Date of such Fundamental Change or (iii) during the period between the date that the Fundamental Change notice is sent and the Fundamental Change Repurchase Date.

Section 9.03 Payment in Connection with Conversion Upon a Qualifying Fundamental Change.

(a) If the Effective Date of a Qualifying Fundamental Change occurs prior to the Stated Maturity and a Holder elects to convert its Notes in connection with such Qualifying Fundamental Change, the Company shall, under the circumstances described below, subject in all cases to the limitations in Section 9.02(k), make a payment to the Holder of such Notes equal to $130 per $1,000 Principal Amount of Converted Notes (the "*Qualifying Fundamental Change Payment*"), as described below. A conversion of Notes shall be deemed for these purposes to be "in connection with" such Qualifying Fundamental Change if the relevant Conversion Date occurs during the period from, and including, the Effective Date of the Qualifying Fundamental Change up to, and including, the Business Day immediately prior to the related Fundamental Change Repurchase Date (or, in the case of a Qualifying Fundamental Change that would have been a Fundamental Change but for the *proviso* in clause (b) of the definition thereof, the 35th Trading Day immediately following the Effective Date of such Qualifying Fundamental Change) (such period, the "*Qualifying Fundamental Change Period*").

(b) Upon surrender of Notes for conversion in connection with a Qualifying Fundamental Change, the Company shall satisfy the related Conversion Obligation by delivering shares of Common Stock in accordance with Section 9.02; *provided*, *however*, that if the consideration received by holders of the Common Stock in exchange for such Common Stock in any Qualifying Fundamental Change described in clause (b) of the definition of Fundamental Change is composed entirely of cash, for any conversion of Notes following the Effective Date of such Qualifying Fundamental Change, the Conversion Obligation shall be calculated based solely on the price paid (or deemed to be paid) per share of the Common Stock in the Qualifying Fundamental Change (the "Stock Price") for the transaction and shall be deemed to be an amount of cash per $1,000 Principal Amount of converted Notes equal to the Conversion Rate, *multiplied by* such Stock Price. If the holders of Common Stock receive in exchange for their Common Stock only cash in a Qualifying Fundamental Change described in clause (b) of the definition of Fundamental Change, the Stock Price shall be the cash amount paid per share. Otherwise, the Stock Price shall be the average of the Closing Sale Prices of the Common Stock over the five consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the relevant Effective Date. The Company shall make appropriate adjustments to the Stock Price, in its good faith determination, to account for any adjustment to the Conversion Rate that becomes effective, or any event requiring an adjustment to the Conversion Rate where the Ex-Dividend Date, Effective Date or expiration date of the event occurs during such five consecutive Trading Day period. The Company shall notify the Trustee, the Conversion Agent (if other than the Trustee) and Holders (a "*Qualifying Fundamental Change Company Notice*"), in writing, of the Effective Date of any Qualifying Fundamental Change no later than five (5) Business Days after such Effective Date.

(c) The Company will have the option to pay any Qualifying Fundamental Change Payment in cash and/or by delivering Freely Tradeable Common Stock. Subject to the limitations in Section 9.02(k) below, all Qualifying Fundamental Change Payments shall be paid by delivering Freely Tradeable Common Stock, unless the Company delivers prior written notice to each Holder (with a copy to the Trustee) stating that the Company will pay all or a portion of any future Qualifying Fundamental Change Payments in cash, and specifying the time periods during which such election shall apply and the percentages of the Qualifying Fundamental Change Payments that will be paid as cash and Freely Tradeable Common Stock, respectively. Such notice shall not be effective until the end of the 15th Trading Day after such notice has been delivered. For all time periods, the number of shares of Freely Tradeable Common Stock a converting Holder will receive, if any, will be the number of shares equal to the amount of the Qualifying Fundamental Change Payment to be paid in Freely Tradeable Common Stock to such Holder, divided by the product of (x) 95% and (y) the Stock Price as determined in Section 9.03(b).

Notwithstanding the foregoing, if a Qualifying Fundamental Change Payment is made for Notes converted in connection with a Qualifying Fundamental Change, then the Holder of such converted Notes will not receive the Interest Make-Whole Payment with respect to such converted Notes.

(d) Nothing in this Section 9.03 shall prevent an adjustment to the Conversion Rate pursuant to Section 9.04 in respect of a Qualifying Fundamental Change.

Section 9.04 Adjustment of Conversion Rate.

The Conversion Rate shall be adjusted from time to time by the Company if any of the following events occurs, except that the Company shall not make any adjustments to the Conversion Rate if Holders participate (other than in the case of (x) a share split or share combination or (y) a tender or exchange offer), at the same time and upon the same terms as holders of the Common Stock and solely as a result of holding the Notes, in any of the transactions described in this Section 9.04, without having to convert their Notes as if they held a number of shares of Common Stock equal to the Conversion Rate, *multiplied by* the Principal Amount (expressed in thousands) of Notes held by such Holder.

(a) If the Company exclusively issues shares of the Common Stock as a dividend or distribution on shares of the Common Stock, or if the Company effects a share split or share combination, the Conversion Rate shall be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_1}{OS_0}$$

where,

CR^0 = the Conversion Rate in effect immediately prior to the close of business on the Record Date of such dividend or distribution, or immediately prior to the open of business on the Effective Date of such share split or share combination, as applicable;

CR^1 = the Conversion Rate in effect immediately after the close of business on such Record Date or immediately after the open of business on such Effective Date, as applicable;

OS^0 = the number of shares of the Common Stock outstanding immediately prior to the close of business on such Record Date or immediately prior to the open of business on such Effective Date, as applicable (before giving effect to any such dividend, distribution, split or combination); and

OS^1 = the number of shares of the Common Stock outstanding immediately after giving effect to such dividend, distribution, share split or share combination.

Any adjustment made under this Section 9.04(a) shall become effective immediately after the close of business on the Record Date for such dividend or distribution, or immediately after the open of business on the Effective Date for such share split or share combination, as applicable. If any dividend or distribution of the type described in this Section 9.04(a) is declared but not so paid or made, the Conversion Rate shall be immediately readjusted, effective as of the date the Board of Directors determines not to pay such dividend or distribution, to the Conversion Rate that would then be in effect if such dividend or distribution had not been declared.

(b) If the Company distributes to all or substantially all holders of the Common Stock any rights, options or warrants (other than pursuant to a stockholder rights plan) entitling them, for a period of not more than 45 calendar days after the announcement date of such distribution, to subscribe for or purchase shares of the Common Stock at a price per share that is less than the average of the Closing Sale Prices of the Common Stock for the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of such distribution, the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{OS_0 + X}{OS_0 + Y}$$

where,

CR^0 = the Conversion Rate in effect immediately prior to the close of business on the Record Date for such distribution;

CR^1 = the Conversion Rate in effect immediately after the close of business on such Record Date;

OS^0 = the number of shares of the Common Stock outstanding immediately prior to the close of business on such Record Date;

X = the total number of shares of the Common Stock distributable pursuant to such rights, options or warrants; and

Y = the number of shares of the Common Stock equal to the aggregate price payable to exercise such rights, options or warrants, *divided by* the average of the Closing Sale Prices of the Common Stock over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of the distribution of such rights, options or warrants.

Any increase made under this Section 9.04(b) shall be made successively whenever any such rights, options or warrants are distributed and shall become effective immediately after the close of business on the Record Date for such distribution. To the extent that such rights, options or warrants are not exercised prior to their expiration or shares of Common Stock are not delivered after the expiration of such rights, options or warrants, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect had the increase with respect to the distribution of such rights, options or warrants been made on the basis of delivery of only the number of shares of Common Stock actually delivered. If such rights, options or warrants are not so distributed or if such rights, options or warrants are not exercised prior to their expiration, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect if such Record Date for such distribution had not occurred.

For the purpose of this Section 9.04(b), in determining whether any rights, options or warrants entitle the holders to subscribe for or purchase shares of the Common Stock at less than such average of the Closing Sale Prices of the Common Stock for the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the date of announcement of such distribution, and in determining the aggregate offering price of such shares of Common Stock, there shall be taken into account any consideration received by the Company for such rights, options or warrants and any amount payable on exercise or conversion thereof, the value of such consideration, if other than cash, to be determined by the Company in good faith and in a commercially reasonable manner.

(c) If the Company distributes shares of its Capital Stock, evidences of its Indebtedness, other assets or property of the Company or rights, options or warrants to acquire its Capital Stock or other securities, to all or substantially all holders of the Common Stock, excluding (i) dividends, distributions or issuances as to which an adjustment was effected or pursuant to Section 9.04(a) or Section 9.04(b) or will be so effected in accordance with the 1% Provision, (ii) except as otherwise provided below, rights issued pursuant to any stockholder rights plan of the Company then in effect, (iii) dividends or distributions paid exclusively in cash as to which the provisions set forth in Section 9.04(d) shall apply, (iv) dividends or distributions of Reference Property issued in exchange for the Common Stock pursuant to Section 9.07, and (v) Spin-Offs as to which the provisions set forth below in this Section 9.04(c) shall apply (any of such shares of Capital Stock, evidences of Indebtedness, other assets or property or rights, options or warrants to acquire Capital Stock or other securities, the "*Distributed Property*"), then the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{SP_0}{SP_0 - FMV}$$

where,

CR^0 = the Conversion Rate in effect immediately prior to the close of business on the Record Date for such distribution;

CR^1 = the Conversion Rate in effect immediately after the close of business on such Record Date;

SP^0 = the average of the Closing Sale Prices of the Common Stock over the 10 consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the Ex-Dividend Date for such distribution; and

FMV = the fair market value (as determined by the Company in good faith and in a commercially reasonable manner) of the Distributed Property distributed with respect to each outstanding share of the Common Stock on the Record Date for such distribution.

Any increase made under the portion of this Section 9.04(c) above shall become effective immediately after the close of business on the Record Date for such distribution. If such distribution is not so paid or made, the Conversion Rate shall be decreased to the Conversion Rate that would then be in effect if such distribution had not been declared. In the case of any distribution of rights, options or warrants, to the extent such rights options or warrants expire unexercised, the applicable Conversion Rate shall be immediately readjusted to the applicable Conversion Rate that would then be in effect had the increase made for the distribution of such rights, options or warrants been made on the basis of delivery of only the number of shares of Common Stock actually delivered upon exercise of such rights, options or warrants. Notwithstanding the foregoing, if "FMV" (as defined above) is equal to or greater than "SP0" (as defined above), in lieu of the foregoing increase, each Holder of a Note shall receive, in respect of each $1,000 Principal Amount thereof, at the same time and upon the same terms as holders of the Common Stock receive the Distributed Property without having to convert its Notes, the amount and kind of Distributed Property such Holder would have received if such Holder owned a number of shares of Common Stock equal to the Conversion Rate in effect on the Record Date for the distribution. If the Company determines the "FMV" (as defined above) of any distribution for purposes of this Section 9.04(c) by reference to the actual or when-issued trading market for any securities, it shall in doing so consider the prices in such market over the same period used in computing "SP0."

With respect to an adjustment pursuant to this Section 9.04(c) where there has been a payment of a dividend or other distribution on the Common Stock of shares of Capital Stock of any class or series, or similar equity interest, of or relating to a Subsidiary or other business unit of the Company, that are, or, when issued, will be, listed or admitted for trading on a U.S. national securities exchange (a "*Spin-Off*"), the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{FMV_0 + MP_0}{MP_0}$$

where,

CR^0 = the Conversion Rate in effect immediately prior to the end of the Valuation Period;

CR^1 = the Conversion Rate in effect immediately after the end of the Valuation Period;

FMV^0 = the average of the Closing Sale Prices of the Capital Stock or similar equity interest distributed to holders of the Common Stock applicable to one share of the Common Stock (determined by reference to the definition of Closing Sale Price as if references therein to Common Stock were to such Capital Stock or similar equity interest) over the first 10 consecutive Trading Day period after, and including, the Ex-Dividend Date of the Spin-Off (the "*Valuation Period*"); and

MP^0 = the average of the Closing Sale Prices of the Common Stock over the Valuation Period.

The increase to the Conversion Rate under the preceding paragraph shall occur at the close of business on the last Trading Day of the Valuation Period; *provided* that in respect of any conversion of Notes, if the relevant Conversion Date occurs during the Valuation Period, the references to "10" in the preceding paragraph shall be deemed to be replaced with such lesser number of Trading Days as have elapsed between the Ex-Dividend Date of such Spin-Off and such Conversion Date in determining the Conversion Rate. If any dividend or distribution that constitutes a Spin-Off is declared but not so paid or made, the Conversion Rate shall be immediately decreased, effective as of the date the Board of Directors determines not to pay or make such dividend or distribution, to the Conversion Rate that would then be in effect if such dividend or distribution had not been declared or announced.

For purposes of this Section 9.04(c) (and subject in all respects to Section 9.11), rights, options or warrants distributed by the Company to all holders of the Common Stock entitling them to subscribe for or purchase shares of the Company's Capital Stock, including shares of Common Stock (either initially or under certain circumstances), which rights, options or warrants, until the occurrence of a specified event or events ("*Trigger Event*"): (i) are deemed to be transferred with such shares of the Common Stock; (ii) are not exercisable; and (iii) are also issued in respect of future issuances of the Common Stock, shall be deemed not to have been distributed for purposes of this Section 9.04(c) (and no adjustment to the Conversion Rate under this Section 9.04(c) will be required) until the occurrence of the earliest Trigger Event, whereupon such rights, options or warrants shall be deemed to have been distributed and an appropriate adjustment (if any is required) to the Conversion Rate shall be made under this Section 9.04(c). If any such right, option or warrant, including any such existing rights, options or warrants distributed prior to the date of this Indenture, are subject to events, upon the occurrence of which such rights, options or warrants become exercisable to purchase different securities, evidences of Indebtedness or other assets, then the date of the occurrence of any and each such event shall be deemed to be the date of distribution and Record Date with respect to new rights, options or warrants with such rights (in which case the existing rights, options or warrants shall be deemed to terminate and expire on such date without exercise by any of the holders thereof). In addition, in the event of any distribution (or deemed distribution) of rights, options or warrants, or any Trigger Event or other event (of the type described in the immediately preceding sentence) with respect thereto that was counted for purposes of calculating a distribution amount for which an adjustment to the Conversion Rate under this Section 9.04(c) was made, (1) in the case of any such rights, options or warrants that shall all have been redeemed or purchased without exercise by any holders thereof, upon such final redemption or purchase (x) the Conversion Rate shall be readjusted as if such rights, options or warrants had not been issued and (y) the Conversion Rate shall then again be readjusted to give effect to such distribution, deemed distribution or Trigger Event, as the case may be, as though it were a cash distribution, equal to the per share redemption or purchase price received by a holder or holders of Common Stock with respect to such rights, options or warrants (assuming such holder had retained such rights, options or warrants), made to all holders of Common Stock as of the date of such redemption or purchase, and (2) in the case of such rights, options or warrants that shall have expired or been terminated without exercise by any holders thereof, the Conversion Rate shall be readjusted as if such rights, options and warrants had not been issued.

For purposes of Section 9.04(a), Section 9.04(b) and this Section 9.04(c), if any dividend or distribution to which this Section 9.04(c) is applicable also includes one or both of:

(A) a dividend or distribution of shares of Common Stock to which Section 9.04(a) is applicable (the "*Clause A Distribution*"); or

(B) a dividend or distribution of rights, options or warrants to which Section 9.04(b) is applicable (the "*Clause B Distribution*"),

then, in either case, (1) such dividend or distribution, other than the Clause A Distribution and the Clause B Distribution, shall be deemed to be a dividend or distribution to which this Section 9.04(c) is applicable (the "*Clause C Distribution*") and any Conversion Rate adjustment required by this Section 9.04(c) with respect to such Clause C Distribution shall then be made, and (2) the Clause A Distribution and Clause B Distribution shall be deemed to immediately follow the Clause C Distribution and any Conversion Rate adjustment required by Section 9.04(a) and Section 9.04(b) with respect thereto shall then be made, except that, if determined by the Company (I) the "Record Date" of the Clause A Distribution and the Clause B Distribution shall be deemed to be the Record Date of the Clause C Distribution and (II) any shares of Common Stock included in the Clause A Distribution or Clause B Distribution shall be deemed not to be "outstanding immediately prior to the close of business on such Record Date or immediately after the open of business on such Effective Date, as applicable" within the meaning of Section 9.04(a) or "outstanding immediately prior to the close of business on such Record Date" within the meaning of Section 9.04(b).

(d) If the Company pays or makes any cash dividend or distribution to all or substantially all holders of the shares of the Common Stock, the Conversion Rate shall be adjusted based on the following formula:

$$CR_1 = CR_0 \times \frac{SP_0}{SP_0 - C}$$

where,

CR^0 = the Conversion Rate in effect immediately prior to the close of business on the Record Date for such dividend or distribution;

CR^1 = the Conversion Rate in effect immediately after the close of business on such Record Date for such dividend or distribution;

SP^0 = the Closing Sale Price of the Common Stock on the Trading Day immediately preceding the Ex-Dividend Date for such dividend or distribution; and

C = the amount in cash per share of the Common Stock the Company distributes to all or substantially all holders of the Common Stock.

Any increase to the Conversion Rate made pursuant to this Section 9.04(d) shall become effective immediately after the close of business on the Record Date for such dividend or distribution. If such dividend or distribution is not so paid, the Conversion Rate shall be decreased, effective as of the date the Board of Directors determines not to make or pay such dividend or distribution, to be the Conversion Rate that would then be in effect if such dividend or distribution had not been declared. Notwithstanding the foregoing, if "C" (as defined above) is equal to or greater than "SP0" (as defined above), in lieu of the foregoing increase, each Holder of a Note shall receive, for each $1,000 Principal Amount of Notes, at the same time and upon the same terms as holders of shares of the Common Stock without having to convert its Notes, the amount of cash that such Holder would have received if such Holder owned a number of shares of Common Stock equal to the Conversion Rate on the Record Date for such cash dividend or distribution.

(e) If the Company or any of its Subsidiaries make a payment pursuant to a tender or exchange offer for the Common Stock that is subject to the then-applicable tender offer rules under the Exchange Act (other than any odd-lot tender offer), to the extent that the cash and value of any other consideration included in the payment per share of the Common Stock exceeds the average of the Closing Sale Prices of the Common Stock over the 10 consecutive Trading Day period commencing on, and including, the Trading Day next succeeding the last date on which tenders or exchanges may be made pursuant to such tender or exchange offer (the "*Expiration Date*"), the Conversion Rate shall be increased based on the following formula:

$$CR_1 = CR_0 \times \frac{AC + (SP_1 \times OS_1)}{OS_0 \times SP_1}$$

where,

CR^0 = the Conversion Rate in effect immediately prior to the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the Expiration Date;

CR^1 = the Conversion Rate in effect immediately after the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the Expiration Date;

AC = the aggregate value of all cash and any other consideration (as determined by the Company in good faith and in a commercially reasonable manner) paid or payable for shares of Common Stock purchased in such tender or exchange offer;

OS^0 = the number of shares of Common Stock outstanding immediately prior to the Expiration Date (prior to giving effect to the purchase of all shares of Common Stock accepted for purchase or exchange in such tender or exchange offer);

OS^1 = the number of shares of Common Stock outstanding immediately after the Expiration Date (after giving effect to the purchase of all shares of Common Stock accepted for purchase or exchange in such tender or exchange offer); and

SP^1 = the average of the Closing Sale Prices of the Common Stock over the 10 consecutive Trading Day period commencing on, and including, the Trading Day next succeeding the Expiration Date.

The increase to the Conversion Rate under this Section 9.04(e) shall occur at the close of business on the 10th Trading Day immediately following, and including, the Trading Day next succeeding the Expiration Date; *provided* that, in respect of any conversion of Notes, if the relevant Conversion Date occurs during the 10 Trading Days immediately following, and including, the Trading Day next succeeding the Expiration Date, references to "10" or "10th" in the preceding paragraph shall be deemed replaced with such lesser number of Trading Days as have elapsed between the Expiration Date and such Conversion Date in determining the Conversion Rate.

If the Company is obligated to purchase shares of Common Stock pursuant to any such tender or exchange offer described in this Section 9.04(e) but is permanently prevented by applicable law from effecting any such purchase or all such purchases are rescinded, the applicable Conversion Rate will be readjusted to be the Conversion Rate that would then be in effect if such tender or exchange offer had not been made or had been made only in respect of the purchases that have been effected.

(f) In the event that the Company issues, or is deemed to issue, shares of Common Stock, (other than Excluded Securities) for a consideration per share (the "*Trigger Price*") less than the Conversion Price in effect immediately prior to the such issuance or deemed issuance (a "*Dilutive Issuance*"), then immediately after such Dilutive Issuance, the Conversion Rate then in effect shall be adjusted to reduce the Conversion Price to an amount equal to the higher of (i) the Trigger Price or (ii) $5.00 (as appropriately adjusted to give effect to any stock splits, reverse stock splits, stock combinations, reclassifications, reorganizations or other similar transactions occurring after the date of this Indenture).

(g) Except as stated herein, the Company shall not adjust the Conversion Rate for the issuance of shares of Common Stock or any securities convertible into or exchangeable for shares of Common Stock or the right to purchase shares of Common Stock or such convertible or exchangeable securities.

(h) In addition to those adjustments required by clauses (a), (b), (c), (d), (e) and (f) of this Section 9.04, and to the extent permitted by applicable law and subject to the applicable rules of any exchange on which any securities of the Company are then listed, the Company from time to time may increase the Conversion Rate by any amount for a period of at least 20 Business Days if the Company determines that such increase would be in the Company's best interest. In addition, to the extent permitted by applicable law and subject to the applicable rules of any exchange on which any of the Company's securities are then listed, the Company may (but is not required to) increase the Conversion Rate to avoid or diminish any income tax to holders of Common Stock or rights to purchase shares of Common Stock in connection with a dividend or distribution of shares of Common Stock (or rights to acquire shares of Common Stock) or similar event. Whenever the Conversion Rate is increased pursuant to either of the preceding two sentences, the Company shall deliver to the Holder of each Note a notice of the increase at least 15 days prior to the date the increased Conversion Rate takes effect, and such notice shall state the increased Conversion Rate and the period during which it will be in effect.

(i) Notwithstanding anything to the contrary in this Article 9, the Conversion Rate shall not be adjusted:

(i) upon the issuance or deemed issuance of shares of Common Stock at a price below the Conversion Price or otherwise, other than for any adjustment described in Section 9.04(a), Section 9.04(b), Section 9.04(c), or Section 9.04(f);

(ii) upon the issuance of any shares of Common Stock pursuant to any present or future plan providing for the reinvestment of dividends or interest payable on the Company's securities and the investment of additional optional amounts in shares of Common Stock under any plan, other than for any adjustment described in Section 9.04(f);

(iii) upon the issuance of any shares of the Common Stock covered by clause (i) of the definition of "Excluded Securities";

(iv) upon the issuance of any shares of the Common Stock covered by clause (ii) of the definition of "Excluded Securities";

(v) for a third-party tender offer by any party other than a tender offer by one or more of the Company's Subsidiaries as described in Section 9.04(e);

(vi) upon the repurchase of any shares of the Common Stock pursuant to an open market share repurchase program or other buy-back transaction, including structured or derivative transactions such as accelerated share repurchase transactions or similar forward derivatives, or other buy-back transaction, that is not a tender offer or exchange offer of the kind described in Section 9.04(e);

(vii) solely for a change in the par value of the Common Stock; or

(viii) upon the issuance of any shares of Common Stock covered by clause (iii) of the definition of "Excluded Securities."

(j) All calculations and other determinations under this Article 9 shall be made by the Company and all calculations of the Conversion Rate shall be made to the nearest one-ten thousandth (1/10,000th) of a share.

(k) If an adjustment to the Conversion Rate otherwise required by the provisions described in Section 9.04 would result in a change of less than 1% to the Conversion Rate, then, notwithstanding the foregoing, the Company may, at its election, defer and carry forward such adjustment, except that all such deferred adjustments must be given effect immediately upon the earliest to occur of the following: (i) when all such deferred adjustments would result in an aggregate change of at least 1% to the Conversion Rate; (ii) the Conversion Date for any Notes; and (iii) on the Effective Date of any Qualifying Fundamental Change, in each case, unless the adjustment has already been made (the "*1% Provision*").

(l) Whenever the Conversion Rate is adjusted as herein provided, the Company shall promptly file with the Trustee (and the Conversion Agent if not the Trustee) an Officer's Certificate setting forth the Conversion Rate after such adjustment and setting forth a brief statement of the facts requiring such adjustment. Unless and until a Responsible Officer of the Trustee (and the Conversion Agent if not the Trustee) shall have received such Officer's Certificate, the Trustee (and the Conversion Agent if not the Trustee) shall not be deemed to have knowledge of any adjustment of the Conversion Rate and may assume without inquiry that the last Conversion Rate of which it has knowledge is still in effect. Promptly after delivery of such certificate, the Company shall prepare a notice of such adjustment of the Conversion Rate setting forth the adjusted Conversion Rate and the date on which each adjustment becomes effective and shall deliver such notice of such adjustment of the Conversion Rate to each Holder. Failure to deliver such notice shall not affect the legality or validity of any such adjustment and for the avoidance of doubt, neither the Trustee nor the Conversion Agent shall have any liability or responsibility for the Conversion Rate (or any adjustments thereof), the calculation thereof or application thereof.

(m) For purposes of this Section 9.04, the number of shares of Common Stock at any time outstanding shall not include shares of Common Stock held in the treasury of the Company so long as the Company does not pay any dividend or make any distribution on shares of Common Stock held in the treasury of the Company, but shall include shares of Common Stock issuable in respect of scrip certificates issued in lieu of fractions of shares of Common Stock.

Section 9.05 Adjustments of Prices.

Whenever any provision of this Indenture requires the Company to calculate the Closing Sale Prices or the Daily VWAPs over a span of multiple days (including, without limitation, the period, if any, for determining the Stock Price for purposes of a Qualifying Fundamental Change), the Company shall make appropriate adjustments in good faith and in a commercially reasonable manner (to the extent no corresponding adjustment is otherwise made pursuant to the provisions described under Section 9.04) to each to account for any adjustment to the Conversion Rate that becomes effective, or any event requiring an adjustment to the Conversion Rate where the Ex-Dividend Date, Effective Date or Expiration Date, as the case may be, of the event occurs, at any time during the period when the Closing Sale Prices or the Daily VWAPs, are to be calculated.

For the avoidance of doubt, the adjustments made pursuant to this Section 9.05 shall be made, solely to the extent the Company determines in good faith and in a commercially reasonable manner that any such adjustment is appropriate, without duplication of any adjustment made pursuant to the provision set forth under Section 9.04.

Section 9.06 Share Reservations.

The Company shall reserve and keep available at all times, free from preemptive rights, out of its authorized but unissued shares, 4,444,217 shares of Common Stock (less any number of shares theretofore issued as Underlying Securities or Additional Shares (as appropriately adjusted to give effect to any stock splits, reverse stock splits, stock combinations, reclassifications, reorganizations or other similar transactions occurring after the date of this Indenture) (the "Maximum Share Reserve") to provide for issuance upon conversion of the Notes from time to time as such Notes are presented for conversion, and for issuances as Additional Shares. 3,000,000 shares of the Maximum Share Reserve (as adjusted from time to time to reflect any adjustments to the Conversion Rate, other than pursuant to Section 9.04(f)) shall be reserved exclusively for issuance upon conversion of the Notes from time to time as such Notes are presented for conversion (the "Maximum Conversion Share Reserve"). Up to all of the remaining shares in the Maximum Share Reserve shall be reserved for issuance as Additional Shares (the "Maximum Additional Share Reserve").

The Company shall use the Maximum Conversion Share Reserve exclusively for the issuance of shares pursuant to the Conversion Obligation and may use the Maximum Additional Share Reserve for the issuance of Additional Shares. No Additional Shares shall be issued by the Company to the extent that the shares of Common Stock remaining in the Maximum Share Reserve would, after giving effect to such issuance, be less than the remaining shares that could then be issued pursuant to the Conversion Obligation (assuming the maximum increase to the Conversion Rate upon a Dilutive Issuance pursuant to Section 9.04(f)(ii)). The Maximum Share Reserve (and as a result, the Maximum Additional Share Reserve) may be increased by the Company to the extent that the Company has obtained the requisite Stockholder Approval pursuant to NASDAQ Marketplace Rule 5635(d) or the listing requirements of such other Relevant Stock Exchange.

Section 9.07 Effect of Recapitalizations, Reclassifications and Changes of the Common Stock.

(a) In the case of:

(i) any recapitalization, reclassification or change of the Common Stock (other than a change to par value, or from par value to no par value, or changes resulting from a share split or share combination),

(ii) any consolidation, merger or combination involving the Company,

(iii) any sale, lease or other transfer to a third party of all or substantially all of the consolidated assets of the Company and the Company's Subsidiaries, taken as a whole; or

(iv) any statutory share exchange,

in each case, as a result of which the Common Stock would be converted into, or exchanged for, stock, other securities or other property or assets (including cash or any combination thereof) (any such event, a "*Share Exchange Event*"), then, at and after the effective time of such Share Exchange Event, the right to convert each $1,000 Principal Amount of Notes shall be changed into a right to convert such Principal Amount of Notes into the kind and amount of shares of stock, other securities or other property or assets (including cash or any combination thereof) that a holder of a number of shares of the Common Stock equal to the Conversion Rate immediately prior to such Share Exchange Event would have owned or been entitled to receive (the "*Reference Property*", with each "*unit of Reference Property*" meaning the kind and amount of Reference Property that a holder of one share of Common Stock would have been entitled to receive) upon such Share Exchange Event; *provided*, *however*, that at and after the effective time of the Share Exchange Event, the number of shares of Common Stock otherwise deliverable upon conversion of the Notes in accordance with Section 9.02 shall instead be deliverable in the amount and type of Reference Property that a holder of that number of shares of Common Stock would have been entitled to receive in such Share Exchange Event.

If the Share Exchange Event causes the Common Stock to be converted into, or exchanged for, the right to receive more than a single type of consideration (determined based in part upon any form of stockholder election), then (i) the Reference Property into which the Notes will be convertible shall be deemed to be (x) the weighted average of the types and amounts of consideration received by the holders of Common Stock that affirmatively make such an election or (y) if no holders of Common Stock affirmatively make such an election, the types and amounts of consideration actually received by the holders of Common Stock, and (ii) the unit of Reference Property for purposes of the immediately preceding paragraph shall refer to the consideration referred to in clause (i) attributable to one share of Common Stock. The Company shall notify Holders, the Trustee and the Conversion Agent (if other than the Trustee) in writing of such weighted average as soon as reasonably practicable after such determination is made.

If the Reference Property in respect of any Share Exchange Event includes, in whole or in part, shares of Common Equity, the supplemental indenture providing that the Notes will be convertible into Reference Property will also provide for anti-dilution and other adjustments that are as nearly equivalent as possible to the adjustments described under Section 9.04 with respect to the portion of the Reference Property consisting of such Common Equity. If the Reference Property in respect of any Share Exchange Event includes shares of stock, securities or other property or assets (other than cash and/or Cash Equivalents) of a company other than the Company or the successor or purchasing corporation, as the case may be, in such Share Exchange Event, then such other company, if an Affiliate of the Company or the successor or acquiring company, shall also execute such supplemental indenture, and such supplemental indenture shall contain such additional provisions to protect the interests of the Holders, including the right of Holders to require the Company to repurchase their Notes upon a Fundamental Change pursuant to Section 10.01, as the Company in good faith reasonably considers necessary by reason of the foregoing.

(b) Promptly following execution by the Company of a supplemental indenture pursuant to subsection (a) of this Section 9.07, the Company shall file with the Trustee an Officer's Certificate briefly stating the reasons therefor, the kind or amount of cash, securities or property or asset that will comprise a unit of Reference Property after any such Share Exchange Event, any adjustment to be made with respect thereto and that all conditions precedent have been complied with, and shall promptly deliver notice thereof to all Holders. The Company shall cause notice of the execution of such supplemental indenture to be delivered to each Holder, within twenty days after execution thereof. Failure to deliver such notice shall not affect the legality or validity of such supplemental indenture.

(c) The Company shall not become a party to any Share Exchange Event unless its terms are consistent with this Section 9.07. None of the foregoing provisions shall affect the right of a Holder to convert its Notes into cash, shares of Common Stock or a combination of cash and shares of Common Stock, as applicable, as set forth in Section 9.01 and Section 9.02 prior to the Effective Date of such Share Exchange Event.

(d) The above provisions of this Section 9.07 shall similarly apply to successive Share Exchange Events.

Section 9.08 Certain Covenants

(a) The Company covenants that all shares of Common Stock issuable as Common Stock Interest, pursuant to an Interest Make-Whole Payment and/or pursuant to a Qualifying Fundamental Change Payment will be Freely Tradeable.

(b) The Company covenants that all shares of Common Stock issued upon conversion of Notes will be fully paid and non-assessable by the Company and free from all taxes, liens and charges with respect to the issue thereof.

(c) The Company covenants that, if any shares of Common Stock to be provided for the purpose of conversion of Notes hereunder require registration with or approval of any governmental authority under any federal or state law before such shares of Common Stock may be validly issued upon conversion, the Company will, to the extent then permitted by the rules and interpretations of the Commission, secure such registration or approval, as the case may be.

(d) The Company further covenants that if at any time the Common Stock shall be listed on any national securities exchange or automated quotation system the Company will list and keep listed, so long as the Common Stock shall be so listed on such exchange or automated quotation system, any Common Stock issuable upon conversion of the Notes.

Section 9.09 Responsibility of Trustee.

The Trustee and any other Conversion Agent shall not at any time be under any duty or responsibility to any Holder to determine the Conversion Rate (or any adjustment thereto) or whether any facts exist that may require any adjustment (including any increase) of the Conversion Rate, or with respect to the nature or extent or calculation of any such adjustment when made, or with respect to the method employed, or herein or in any supplemental indenture provided to be employed, in making the same. The Trustee and any other Conversion Agent shall not be accountable with respect to the validity or value (or the kind or amount) of any shares of Common Stock, or of any securities, property or cash that may at any time be issued or delivered upon the conversion of any Note; and the Trustee and any other Conversion Agent make no representations with respect thereto. Neither the Trustee nor any Conversion Agent shall be responsible for any failure of the Company to issue, transfer or deliver any shares of Common Stock or stock certificates or other securities or property or cash upon the surrender of any Note for the purpose of conversion or to comply with any of the duties, responsibilities or covenants of the Company contained in this Article. Without limiting the generality of the foregoing, neither the Trustee nor any Conversion Agent shall be under any responsibility to determine the correctness of any provisions contained in any supplemental indenture entered into pursuant to Section 9.07 relating either to the kind or amount of shares of stock or securities or property (including cash) receivable by Holders upon the conversion of their Notes after any event referred to in such Section 9.07 or to any adjustment to be made with respect thereto, may accept (without any independent investigation) as conclusive evidence of the correctness of any such provisions, and shall be protected in relying upon, the Officer's Certificate (which the Company shall be obligated to file with the Trustee prior to the execution of any such supplemental indenture) with respect thereto.

Section 9.10 Notice to Holders Prior to Certain Actions.

In case of any:

(a) action by the Company or one of its Subsidiaries that would require an adjustment in the Conversion Rate pursuant to Section 9.04 or Section 9.11;

(b) Share Exchange Event; or

(c) voluntary or involuntary dissolution, liquidation or winding-up of the Company;

then, in each case (unless notice of such event is otherwise required pursuant to another provision of this Indenture, in which case the timing and delivery requirements of such provision shall supersede this Section 9.10), the Company shall cause to be filed with the Trustee and the Conversion Agent (if other than the Trustee) and to be delivered to each Holder, as promptly as possible but in any event at least 3 Business Days after the occurrence of such event. Failure to give such notice, or any defect therein, shall not affect the legality or validity of such action by the Company or one of its Subsidiaries, Share Exchange Event, dissolution, liquidation or winding-up.

Section 9.11 Stockholder Rights Plans.

If the Company has a stockholder rights plan in effect upon conversion of the Notes, each share of Common Stock, if any, issued upon such conversion shall be entitled to receive the appropriate number of rights, if any, and the certificates representing the Common Stock issued upon such conversion shall bear such legends, if any, in each case as may be provided by the terms of any such stockholder rights plan, as the same may be amended from time to time. However, if, prior to any conversion of Notes, the rights have separated from the shares of Common Stock in accordance with the provisions of the applicable stockholder rights plan, the Conversion Rate shall be adjusted at the time of separation as if the Company distributed to all or substantially all holders of the Common Stock Distributed Property as provided in Section 9.04(c), subject to readjustment in the event of the expiration, termination or redemption of such rights.

ARTICLE 10.
REPURCHASE OF NOTES AT OPTION OF HOLDERS

Section 10.01 Repurchase at Option of Holder Upon Fundamental Change.

(a) If a Fundamental Change occurs at any time prior to the Stated Maturity, each Holder shall have the right, at such Holder's option, to require the Company to repurchase for cash all of such Holder's Notes, or any portion thereof that is equal to $1,000 or an integral multiple of $1,000, on the date (the "*Fundamental Change Repurchase Date*") specified by the Company that is not less than 20 Business Days or more than 35 Business Days following the date of the Fundamental Change Company Notice at a repurchase price equal to 100% of the Principal Amount thereof, *plus* accrued and unpaid interest thereon to, but excluding, the Fundamental Change Repurchase Date (the "*Fundamental Change Repurchase Price*"), unless the Fundamental Change Repurchase Date falls after a Regular Record Date but on or prior to the Interest Payment Date to which such Regular Record Date relates, in which case the Company shall instead pay the full amount of accrued and unpaid interest (to, but not including, such Interest Payment Date) to Holders of record as of such Regular Record Date, and the Fundamental Change Repurchase Price shall be equal to 100% of the Principal Amount of Notes to be repurchased pursuant to this ARTICLE 10.

(b) Repurchases of Notes under this Section 10.01 shall be made, at the option of the Holder thereof, upon:

(i) delivery to the Trustee by a Holder of a duly completed notice (the "*Fundamental Change Repurchase Notice*") in the form set forth in Attachment 4 to the Form of Note attached hereto as Exhibit A, if the Notes are Physical Notes, or in compliance with the Applicable Procedures of the Depositary, if the Notes are Global Notes, in each case at any time prior to the close of business on second Business Day immediately preceding the Fundamental Change Repurchase Date; and

(ii) delivery of the Notes, if the Notes are Physical Notes, to the paying agent at any time after delivery of the Fundamental Change Repurchase Notice (together with all necessary endorsements for transfer) at the Corporate Trust Office of the Paying Agent, or if the Notes are Global Notes, in compliance with the Applicable Procedures of the Depositary, in each case such delivery being a condition to receipt by the Holder of the Fundamental Change Repurchase Price therefor.

The Fundamental Change Repurchase Notice in respect of any Notes to be repurchased that are Physical Notes shall state:

(i) the certificate numbers of the Notes to be delivered for repurchase;

(ii) the portion of the Principal Amount of Notes to be repurchased, which must be $1,000 or an integral multiple thereof; and

(iii) that the Notes are to be repurchased by the Company pursuant to the applicable provisions of the Notes and this Indenture;

provided, *however*, that if the Notes are Global Notes, Holders must surrender their Notes in accordance with the Applicable Procedures of the Depositary.

Notwithstanding anything herein to the contrary, any Holder delivering to the Trustee (or, in the case of the Global Notes, otherwise in accordance with the Applicable Procedures of the Depositary) the Fundamental Change Repurchase Notice contemplated by this Section 10.01 shall have the right to withdraw, in whole or in part, such Fundamental Change Repurchase Notice at any time prior to the close of business on the second Business Day immediately preceding the Fundamental Change Repurchase Date by delivery of a written notice of withdrawal to the Trustee in accordance with Section 10.02.

The Trustee shall promptly notify the Company of the receipt by it of any Fundamental Change Repurchase Notice or written notice of withdrawal thereof.

No Fundamental Change Repurchase Notice with respect to any Notes may be surrendered by a Holder thereof if such Holder has also surrendered a Repurchase Notice and has not validly withdrawn such Repurchase Notice in accordance with Section 10.02.

(c) On or before the 20th Business Day after the occurrence of the Effective Date of a Fundamental Change, the Company shall provide to all Holders of Notes, the Trustee, the Conversion Agent (if other than the Trustee) and the paying agent (if other than the Trustee) a notice (the "*Fundamental Change Company Notice*") of the occurrence of the Effective Date of the Fundamental Change and of the repurchase right at the option of the Holders arising as a result thereof. In the case of Physical Notes, such notice shall be by first class mail or, in the case of Global Notes, such notice shall be delivered in accordance with the Applicable Procedures of the Depositary. Each Fundamental Change Company Notice shall specify:

(i) the events causing the Fundamental Change;

(ii) the Effective Date of the Fundamental Change;

(iii) the last date on which a Holder may exercise the repurchase right pursuant to this ARTICLE 10;

(iv) the Fundamental Change Repurchase Price;

(v) the Fundamental Change Repurchase Date;

(vi) the name and address of the paying agent and the Conversion Agent, if applicable;

(vii) if applicable, the Conversion Rate and any adjustments to the Conversion Rate;

(viii) that the Notes with respect to which a Fundamental Change Repurchase Notice has been delivered by a Holder may be converted only if the Holder withdraws the Fundamental Change Repurchase Notice in accordance with the terms of this Indenture; and

(ix) the procedures that Holders must follow to require the Company to repurchase their Notes.

No failure of the Company to give the foregoing notices and no defect therein shall limit the Holders' repurchase rights or affect the validity of the proceedings for the repurchase of the Notes pursuant to this Section 10.01. Notwithstanding anything to the contrary above, the Company will not be required to repurchase or make an offer to repurchase the Notes upon the occurrence of the Effective Date of a Fundamental Change if a third party makes such an offer in the same manner, at the same time and otherwise is in compliance with the requirements for an offer made by the Company as set forth in this Indenture, and such third party purchases all Notes properly surrendered and not validly withdrawn under its offer in the same manner, at the same time and otherwise is in compliance with the requirements for an offer made by the Company as set forth in this Indenture.

At the Company's written request, the Trustee shall give such notice in the Company's name and at the Company's expense; *provided*, *however*, that, in all cases, the text of such Fundamental Change Company Notice shall be prepared by the Company.

(d) Notwithstanding the foregoing, no Notes may be repurchased by the Company on any date at the option of the Holders upon a Fundamental Change if the Principal Amount of the Notes has been accelerated, and such acceleration has not been rescinded, on or prior to such date (except in the case of an acceleration resulting from a Default by the Company in the payment of the Fundamental Change Repurchase Price with respect to such Notes). The Paying Agent will promptly return to the respective Holders thereof any Physical Notes held by it during the acceleration of the Notes (except in the case of an acceleration resulting from a Default by the Company in the payment of the Fundamental Change Repurchase Price with respect to such Notes), or, with respect to any Global Notes, in compliance with the Applicable Procedures of the Depositary any election by Holders with respect to such Notes shall be deemed to have been cancelled, and, upon such return or cancellation, as the case may be, the Fundamental Change Repurchase Notice with respect thereto shall be deemed to have been withdrawn.

Section 10.02 Withdrawal of Fundamental Change Repurchase Notice.

A Fundamental Change Repurchase Notice may be withdrawn (in whole or in part), with respect to any Physical Notes, by means of a written notice of withdrawal delivered to the Corporate Trust Office of the Paying Agent in accordance with this Section 10.02 at any time prior to the close of business on the second Business Day immediately preceding the Fundamental Change Repurchase Date specifying:

(i) the Principal Amount of the Notes with respect to which such notice of withdrawal is being submitted, which must be $1,000 or an integral multiple thereof,

(ii) the certificate number of the Note in respect of which such notice of withdrawal is being submitted, and

(iii) the Principal Amount, if any, of such Note that remains subject to the original Fundamental Change Repurchase Notice, which portion must be in Principal Amounts of $1,000 or an integral multiple of $1,000;

provided, *however*, that if the Notes are Global Notes, Holders must withdraw the relevant Fundamental Change Repurchase Notice in accordance with the Applicable Procedures of the Depositary.

Section 10.03 Deposit of Fundamental Change Repurchase Price.

(a) The Company will deposit with the Trustee (or other paying agent appointed by the Company, or if the Company is acting as its own paying agent, set aside, segregate and hold in trust) on or prior to 11:00 a.m., New York City time, on the Business Day prior to the Fundamental Change Repurchase Date an amount of money sufficient to repurchase all of the Notes to be repurchased at the appropriate Fundamental Change Repurchase Price. Subject to receipt of funds and/or Notes by the Trustee (or other paying agent appointed by the Company), payment for Notes surrendered for repurchase (and not withdrawn prior to the close of business on the second Business Day immediately preceding the Fundamental Change Repurchase Date) will be made on the later of (i) with respect to Global Notes, the Fundamental Change Repurchase Date (*provided* that the Holder has satisfied the conditions in Section 10.01) pursuant to the Applicable Procedures of the Depositary, and (ii) with respect to Physical Notes, the time of book-entry transfer or the delivery of such Note to the Trustee (or other paying agent appointed by the Company) by the Holder thereof in the manner required by Section 10.01 by mailing checks for the amount payable to the Holders of such Notes entitled thereto as they shall appear in the Note Register. The Trustee shall, promptly after such payment and upon written demand by the Company, return to the Company any funds in excess of the Fundamental Change Repurchase Price.

(b) If by 11:00 a.m. New York City time, on the Business Day prior to the Fundamental Change Repurchase Date, the Trustee (or other paying agent appointed by the Company) holds money sufficient to make payment on all the Notes or portions thereof that are to be repurchased on such Fundamental Change Repurchase Date, then, on the Fundamental Change Repurchase Date, with respect to the Notes that have been properly surrendered for repurchase and have not been validly withdrawn, (i) such Notes will cease to be outstanding, (ii) interest will cease to accrue on such Notes (whether or not book-entry transfer of the Notes has been made or the Notes have been delivered to the Trustee or paying agent) and (iii) all other rights of the Holders of such Notes will terminate (other than the right to receive the Fundamental Change Repurchase Price and, if the Fundamental Change Repurchase Date falls after a Regular Record Date but on or prior to the Interest Payment Date to which such Regular Record Date relates, accrued and unpaid interest payable to the Holders as of such Regular Record Date).

(c) Upon surrender of a Note that is to be repurchased in part pursuant to Section 10.01, the Company shall execute and the Trustee shall authenticate and deliver to the Holder a new Note in an authorized denomination equal in Principal Amount to the unrepurchased portion of the Note surrendered.

Section 10.04 Covenant to Comply with Applicable Laws Upon Repurchase of Notes.

In connection with any repurchase offer pursuant to a Fundamental Change Repurchase Notice, the Company will, if required:

(a) comply with tender offer rules under the Exchange Act that may then be applicable;

(b) file a Schedule TO or any other required schedule under the Exchange Act; and

(c) otherwise comply in all material respects with all federal and state securities laws in connection with any offer by the Company to repurchase the Notes;

in each case, so as to permit the rights and obligations under this ARTICLE 10 to be exercised in the time and in the manner specified in this ARTICLE 10.

To the extent that the provisions of any securities law or regulations conflict with the provisions of this Indenture relating to the Company's obligation to repurchase the Notes upon the occurrence of a Fundamental Change, the Company will comply with the applicable securities laws and regulations and will not be deemed to have breached the Company's obligations under such provisions of this Indenture by virtue of such conflict.

ARTICLE 11.
COVENANT DEFEASANCE

Section 11.01 Option to Effect Covenant Defeasance.

The Company may, at the option of its Board of Directors evidenced by a resolution set forth in an Officers' Certificate, at any time, elect to have Section 11.02 hereof be applied to all outstanding Notes and all obligations of the Guarantors discharged with respect to the Note Guarantees upon compliance with the conditions set forth below in this ARTICLE 11.

Section 11.02 Covenant Defeasance.

Upon the Company's exercise under Section 11.01 hereof of the option applicable to this Section 11.02, the Company and the Guarantors shall, subject to the satisfaction of the conditions set forth in Section 11.03 hereof, be released from its obligations under the covenants contained in Section 5.07, Section 5.08, Section 5.09, Section 5.10, Section 5.11, Section 5.12, Section 5.13, Section 5.16, Section 5.17, Section 5.18, Section 5.19, and Section 6.01 and ARTICLE 10 hereof with respect to the outstanding Notes on and after the date the conditions set forth in Section 11.03 are satisfied (hereinafter, "*Covenant Defeasance*"), and the Notes shall thereafter be deemed not "outstanding" for the purposes of any direction, waiver, consent or declaration or act of Holders (and the consequences of any thereof) in connection with such covenants, but shall continue to be deemed "outstanding" for all other purposes hereunder (it being understood that such Notes shall not be deemed outstanding for accounting purposes). For this purpose, Covenant Defeasance means that, with respect to the outstanding Notes, 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 covenant, whether directly or indirectly, by reason of any reference elsewhere herein to any such covenant or by reason of any reference in any such covenant to any other provision herein or in any other document and such omission to comply shall not constitute a Default or an Event of Default under Section 7.01 hereof, but, except as specified above, the remainder of this Indenture and such Notes shall be unaffected thereby. In addition, upon the Company's exercise under Section 11.01 hereof of the option applicable to this Section 11.02 hereof, subject to the satisfaction of the conditions set forth in Section 11.03 hereof, Section 7.01(c) through Section 7.01(i) and Section 7.01(k) hereof shall not constitute Events of Default.

Section 11.03 Conditions to Covenant Defeasance.

The following shall be the conditions to the application of Section 11.02 hereof to the outstanding Notes:

(a) the Company must irrevocably deposit with the Trustee, in trust, for the benefit of the Holders, cash in United States dollars, non-callable Government Securities, or a combination thereof, in such amounts as will be sufficient, in the opinion of a nationally recognized investment bank, appraisal firm or firm of independent public accountants, to pay the principal of, premium, if any, and interest on the outstanding Notes, including the maximum amount potentially payable as of the date of such deposit as any Interest Make-Whole Payment or any Qualifying Fundamental Change Payment, on the stated dates for payment thereof;

(b) the Company shall have delivered to the Trustee an Opinion of Counsel in the United States reasonably acceptable to the Trustee confirming that the Holders of the outstanding Notes will not recognize income, gain or loss for federal income tax purposes as a result of such Covenant Defeasance and will be subject to federal income tax on the same amounts, in the same manner and at the same times as would have been the case if such Covenant Defeasance had not occurred;

(c) no Default or Event of Default shall have occurred and be continuing on the date of such deposit (other than a Default or Event of Default resulting from the incurrence of Indebtedness all or a portion of the proceeds of which will be used to defease the Notes pursuant to this ARTICLE 11 concurrently with such incurrence) or insofar as Section 7.01(j) hereof is concerned, at any time in the period ending on the 91st day after the date of deposit;

(d) such Covenant Defeasance shall not result in a breach or violation of, or constitute a default under, any material agreement or instrument (other than this Indenture) to which the Company or any Guarantor is a party or by which the Company or any Guarantor is bound;

(e) the Company shall have delivered to the Trustee an Opinion of Counsel (which may be subject to customary exceptions) to the effect that on the 91st day following the deposit, the trust funds will not be subject to the effect of any applicable bankruptcy, insolvency, reorganization or similar laws affecting creditors' rights generally;

(f) the Company shall have delivered to the Trustee an Officers' Certificate stating that the deposit was not made by the Company with the intent of preferring the Holders over any other creditors of the Company or with the intent of defeating, hindering, delaying or defrauding any other creditors of the Company; and

(g) the Company shall have delivered to the Trustee an Officers' Certificate and an Opinion of Counsel, each stating that all conditions precedent provided for or relating to the Covenant Defeasance have been complied with.

Section 11.04 Deposited Money and Government Securities to be Held in Trust; Other Miscellaneous Provisions.

Subject to Section 11.05 hereof, all money and non-callable Government Securities (including the proceeds thereof) deposited with the Trustee (or other qualifying trustee, collectively for purposes of this Section 11.04, the "*Trustee*") pursuant to Section 11.03 hereof in respect of the outstanding Notes shall be held in trust and applied by the Trustee, in accordance with the provisions of such Notes and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as Paying Agent) as the Trustee may determine, to the Holders of such Notes of all sums due and to become due thereon in respect of principal, premium, if any, and interest, but such money need not be segregated from other funds except to the extent required by law.

The Company and Guarantors shall pay and indemnify the Trustee against any tax, fee or other charge imposed on or assessed against the cash or non-callable Government Securities deposited pursuant to Section 11.03 hereof 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 the outstanding Notes.

Anything in this ARTICLE 11 to the contrary notwithstanding, the Trustee shall deliver or pay to the Company from time to time upon the request of the Company any money or non-callable Government Securities held by it as provided in Section 11.03 hereof which, in the opinion of a nationally recognized firm of independent public accountants expressed in a written certification thereof delivered to the Trustee (which may be the opinion delivered under Section 11.03(a) hereof), are in excess of the amount thereof that would then be required to be deposited to effect an equivalent Legal Defeasance or Covenant Defeasance.

Section 11.05 Repayment to Company.

Any money deposited with the Trustee or any Paying Agent, or then held by the Company, in trust for the payment of the principal of, premium, if any, or interest on any Note and remaining unclaimed for two years after such principal, and premium, if any, or interest has become due and payable shall be paid to the Company on its request or (if then held by the Company) shall be discharged from such trust; and the Holder of such Note shall thereafter 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.

ARTICLE 12.
AMENDMENT, SUPPLEMENT AND WAIVER

Section 12.01 Without Consent of Holders of Notes.

Notwithstanding Section 12.02 of this Indenture, the Company, the Guarantors and the Trustee may amend or supplement this Indenture, the Note Guarantees or the Notes, the Collateral Agent, the Company and the Guarantors may amend or supplement the Collateral Documents, without the consent of any Holder of a Note:

(a) to cure any ambiguity, defect or inconsistency; provided, however, that such cure does not, in the good faith opinion of the Board of Directors, adversely affect the interests of the Holders in any material respect;

(b) to provide for uncertificated Notes in addition to or in place of certificated Notes or to alter the provisions of ARTICLE 2 hereof (including the related definitions) in a manner that does not materially adversely affect any Holder;

(c) to provide for the assumption of the Company's or a Guarantor's obligations to the Holders of the Notes under this Indenture, the Notes and the Note Guarantee by a successor to the Company or a Guarantor pursuant to ARTICLE 6 or ARTICLE 14 hereof;

(d) to make any change that would provide any additional rights or benefits to the Holders of the Notes or that does not adversely affect the legal rights hereunder or under, the Notes, the Note Guarantees, and the Collateral Documents of any Holder of the Note;

(e) to comply with requirements of the SEC in order to effect or maintain the qualification of this Indenture under the TIA; or

(f) to allow any Guarantor to execute a supplemental indenture and/or a Note Guarantee with respect to the Notes.

In determining whether the Holders of the requisite Principal Amount of outstanding Notes are present at a meeting of Holders of Notes for quorum purposes or have consented to or voted in favor of any request, demand, authorization, direction, notice, consent, waiver, amendment or modification hereunder, Notes held for the account of the Company, or for any Person directly or indirectly controlling or controlled by or under direct or indirect common control with the Company, shall be disregarded and deemed not to be outstanding; provided, however, that no Holder shall be deemed to be directly or indirectly controlling or controlled by or under direct or indirect common control with the Company solely by reason of ownership of such Notes. A change in a defined term used in this Section shall be deemed to be a change to this Section.

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such amended or supplemental Indenture, and upon receipt by the Trustee of the documents described in Section 12.06 hereof, the Trustee shall join with the Company and the Guarantors in the execution of any amended or supplemental Indenture authorized or permitted by the terms of this Indenture and to make any further appropriate agreements and stipulations that may be therein contained, but the Trustee shall not be obligated to enter into such amended or supplemental Indenture that affects its own rights, duties or immunities under this Indenture or otherwise.

Section 12.02 With Consent of Holders of Notes.

Except as provided below in this Section 12.02, the Company and the Trustee or, with respect to the Collateral Documents, the Collateral Agent, may amend or supplement this Indenture (including, without limitation, Section 5.10 and ARTICLE 10 hereof), the Note Guarantees, the Notes, and any Collateral Document with the consent of the Majority Holders voting as a single class (including consents obtained in connection with a tender offer or exchange offer for, or purchase of, the Notes), and, subject to Section 7.04 and Section 7.07 hereof, any existing Default or Event of Default (other than a Default or Event of Default in the payment of the Principal of, premium, if any, Interest or any other amounts due on the Notes, except a payment default resulting from an acceleration that has been rescinded pursuant to Section 7.02) or compliance with any provision of this Indenture, the Note Guarantees, the Notes, and any Collateral Document may be waived with the consent of the Majority Holders voting as a single class (including consents obtained in connection with a tender offer or exchange offer for, or purchase of, the Notes).

After an amendment, supplement or waiver under this Section becomes effective, the Company shall deliver to the Holders of Notes affected thereby a notice briefly describing the amendment, supplement or waiver. Any failure of the Company to send such notice, or any defect therein, shall not, however, in any way impair or affect the validity of any such amended or supplemental Indenture, Notes, Note Guarantees, or Collateral Document or waiver. Subject to Section 7.04 and Section 7.07 hereof, the Majority Holders voting as a single class may waive compliance in a particular instance by the Company with any provision of this Indenture or the Notes, the Note Guarantees, or any Collateral Document. Notwithstanding anything in this Indenture to the contrary, without the consent of each Holder affected, an amendment or waiver under this Section 12.02 may not (with respect to any Notes held by a non-consenting Holder):

(a) reduce the Principal Amount of Notes whose Holders must consent to an amendment, supplement or waiver;

(b) reduce the Principal of, Redemption Price of, Interest, premium, or any other amounts due hereunder or change the fixed maturity of any Note or alter or waive any of the provisions with respect to the redemption of the Notes except as provided above with respect to Section 5.10 and ARTICLE 10 hereof;

(c) reduce the rate of or change the time for payment of Interest on any Note;

(d) waive a Default or Event of Default in the payment of Principal of or premium, if any, Interest or any other amounts due on the Notes (except a rescission of acceleration of the Notes by the Majority Holders and a waiver of the payment default that resulted from such acceleration pursuant to Section 7.02);

(e) make any Note payable in money or currency other than that stated in the Notes;

(f) make any change in the provisions of this Indenture relating to waivers of past Defaults or the rights of Holders of Notes to receive payments of Principal or Interest or premium, if any, or any other amounts due on the Notes;

(g) make any change in Section 7.04 or Section 7.07 hereof or in the amendment and waiver provisions of Section 12.01 or this Section 12.02;

(h) impair the right to institute suit for the enforcement of any payment on or with respect to, or conversion of, any Note;

(i) modify the Company's obligation to purchase Notes at the option of Holders or the Company's right to redeem the Notes, in a manner adverse to the Holders;

(j) make any change that adversely affects the repurchase option of Holders upon a Fundamental Change;

(k) reduce the percentage in aggregate Principal Amount of Notes outstanding necessary to modify or amend this Indenture or to waive any past default;

(l) modify any provision of this Indenture or the Notes, the Note Guarantees, or any Collateral Document requiring notice to the Trustee in any manner adverse to Holders;

(m) reduce the quorum or voting requirements under this Indenture;

(n) modify in any manner the calculation of the Interest Make-Whole Payment or Qualifying Fundamental Change Payment; or

(o) change the ranking of the Notes in a manner adverse to the Holders;

(p) release any Collateral from the Liens of any Collateral Documents except as contemplated by the Collateral Documents and this Indenture;

(q) adversely affect the conversion rights of the Holders of the Notes set forth in ARTICLE 10 hereof; or

(r) release any Guarantor from any of its obligations under its Note Guarantee or this Indenture, except in accordance with the terms of this Indenture.

Upon the request of the Company accompanied by a resolution of its Board of Directors authorizing the execution of any such amended or supplemental Indenture, and upon the filing with the Trustee of evidence satisfactory to the Trustee and/or Collateral Agent, as applicable, of the consent of the Holders holding the applicable percentage of Notes as aforesaid, and upon receipt by the Trustee and/or Collateral Agent, as applicable, of the documents described in Section 12.06 hereof, the Trustee shall join with the Company in the execution of such amended or supplemental Indenture, the Notes, Note Guarantees, or Collateral Document unless such amended or supplemental Indenture directly affects the Trustee's own rights, duties or immunities under this Indenture or otherwise, in which case the Trustee may in its discretion, but shall not be obligated to, enter into such amended or supplemental Indenture.

It shall not be necessary for the consent of the Holders of Notes under this Section 12.02 to approve the particular form of any proposed amendment or waiver, but it shall be sufficient if such consent approves the substance thereof.

Section 12.03 Compliance with Trust Indenture Act.

Every amendment or supplement to this Indenture, the Notes, the Note Guarantees, or any Collateral Document shall be set forth in an amended or supplemental Indenture that complies with the TIA as then in effect.

Section 12.04 Revocation and Effect of Consents.

Until an amendment, supplement or waiver becomes effective, a consent to it by a Holder of a Note is a continuing consent by the Holder of a Note and every subsequent Holder of a Note or portion of a Note that evidences the same debt as the consenting Holder's Note, even if notation of the consent is not made on any Note. However, any such Holder of a Note or subsequent Holder of a Note may revoke the consent as to its Note if the Trustee or the relevant agent receives written notice of revocation before the date the waiver, supplement or amendment becomes effective. An amendment, supplement or waiver becomes effective in accordance with its terms and thereafter binds every Holder.

Section 12.05 Notation on or Exchange of Notes.

The Trustee may place an appropriate notation about an amendment, supplement or waiver on any Note thereafter authenticated. The Company in exchange for all Notes may issue and the Trustee shall, upon receipt of an Authentication Order, authenticate new Notes (and accompanying Note Guarantees) that reflect the amendment, supplement or waiver.

Failure to make the appropriate notation or issue a new Note shall not affect the validity and effect of such amendment, supplement or waiver.

Section 12.06 Trustee to Sign Amendments, etc.

The Trustee or, with respect to the Collateral Documents, the Collateral Agent, shall sign any amended or supplemental Indenture, Note, Note Guarantee, or any Collateral Document authorized pursuant to this ARTICLE 12 if the amendment or supplement does not adversely affect the rights, duties, liabilities or immunities of the Trustee or the Collateral Agent, as applicable. The Company and Guarantors may not sign an amendment or supplemental Indenture until the Board of Directors or Guarantor, as applicable, approves it. In executing any amended or supplemental indenture, the Trustee or, with respect to the Collateral Documents, the Collateral Agent, shall be entitled to receive and (with respect to the Trustee, subject to Section 8.01 hereof) shall be fully protected in relying upon, in addition to the documents required by Section 17.06 hereof, an Officer's Certificate and an Opinion of Counsel stating that the execution of such amended or supplemental Indenture, Note, Note Guarantee, or Collateral Document, as applicable, is authorized or permitted by this Indenture and that such amended or supplemental Indenture, Note, Note Guarantee, or Collateral Document, as applicable, is the legal, valid and binding obligation of the Company (and any Guarantor) enforceable against them in accordance with its terms, subject to customary exceptions, and complies with the provisions of this Indenture, the Note, the Note Guarantee, or the Collateral Documents, as applicable.

ARTICLE 13.
COLLATERAL AND SECURITY

Section 13.01 Collateral Documents.

The due and punctual payment of the Principal of and Interest, if any, on the Notes when and as the same shall be due and payable, whether on an Interest Payment Date, at maturity, by acceleration, repurchase, redemption or otherwise, and any other amounts due on the Notes and performance of all other obligations of the Company to the Holders of Notes, the Trustee or the Collateral Agent under this Indenture, the Notes, the Note Guarantee, or the Collateral Documents, according to the terms hereunder or thereunder, shall be secured as provided herein and in the Collateral Documents. Each Holder of Notes, by its acceptance thereof, consents and agrees to the terms of the Collateral Documents (including, without limitation, the provisions providing for foreclosure and release of Pledged Collateral) as the same may be in effect or may be amended from time to time in accordance with its terms and authorizes and directs each of the Collateral Agent and the Trustee, as the case may be, to enter into the Collateral Documents and to perform its obligations and exercise its rights thereunder in accordance therewith. The Company shall deliver to the Trustee copies of all documents delivered to the Collateral Agent pursuant to any Collateral Document, and shall do or cause to be done all such acts and things as may be necessary or proper, or as may be required by the provisions of any Collateral Document, to assure and confirm to the Trustee and the Collateral Agent the security interest in the Pledged Collateral contemplated hereby, by any Collateral Document or any part thereof, as from time to time constituted, so as to render the same available for the security and benefit of this Indenture, the Notes and the Note Guarantees secured hereby, according to the intent and purposes herein expressed. The Company shall take, or shall cause its Subsidiaries to take any and all actions reasonably required to cause the Collateral Documents to create and maintain, as security for the Obligations of the Company hereunder, a valid and enforceable perfected first priority Lien in and on all the Pledged Collateral, in favor of the Collateral Agent for the benefit of itself, the Trustee and the Holders of Notes and other Indebtedness subject to the this Indenture and the Collateral Documents superior to and prior to the rights of all third Persons and subject to no other Liens other than Permitted Liens.

The Company and the Guarantors shall pledge as additional Collateral all After-Acquired Property, subject to Permitted Liens. The Company and the Guarantors shall also use all commercially reasonable efforts to ensure that any material contract or agreement relating to After-Acquired Property will not contain provisions that would impair or prevent the creation of a security interest therein or result in such contract or After-Acquired Property being excluded from the Collateral.

Section 13.02 Recording and Opinions.

(a) The Company shall furnish to the Collateral Agent and the Trustee contemporaneously with the execution and delivery of this Indenture and promptly after the execution and delivery of any other instrument of further assurance or amendment an Opinion of Counsel (i) stating that in the opinion of such counsel the Collateral Documents are effective to create a Lien in the collateral described therein to the extent that the Company has rights in or the power to transfer such collateral and creation of a Lien in such collateral is governed by Article 9 of the UCC; and (ii) stating that in the opinion of such counsel, all action has been taken with respect to the filing of financing statements as is necessary to perfect the Lien in that portion of the collateral (x) in which the Company has rights or the power to transfer, (y) the creation and perfection of a Lien which is governed by Article 9 of the UCC and (z) in which a Lien can be perfected by filing a financing statement under the UCC.

(b) The Company shall furnish to the Collateral Agent and the Trustee on September 30 of each year beginning with September 30, 2019, an Opinion of Counsel, dated as of such date, (i) stating that the Collateral Documents have not been terminated or revoked by the Company, and remain in full force and effect; and (ii) stating that all action has been taken with respect to the filing of financing statements, continuation statements and other registrations and recordings as is necessary for the Lien in that portion of the collateral subject to the Collateral Documents (x) in which the Company has rights or the power to transfer, (y) the creation and perfection of a Lien which is governed by Article 9 of the UCC, and (z) in which a Lien can be perfected by filing a financing statement under the UCC, to continue to be perfected.

(c) The Company shall otherwise comply with the provisions of TIA §314(b).

Section 13.03 Release of Collateral.

(a) Subject to subsection (c) of this Section 13.03 and Section 12.02, Pledged Collateral shall automatically be released from the Lien and security interest created by the Collateral Documents at any time or from time to time in accordance with the provisions of the Collateral Documents or as provided hereby, upon delivery to the Trustee and the Collateral Agent of an Officer's Certificate and an Opinion of Counsel pursuant to Section 17.06. In addition, upon the request of the Company pursuant to an Officers' Certificate and an Opinion of Counsel certifying that all conditions precedent hereunder have been met and stating whether or not such release is in connection with an Asset Sale and (at the sole cost and expense of the Company and without any recourse, representation or warranty), the Collateral Agent, shall release Pledged Collateral that is sold, conveyed or disposed of in compliance with the provisions of this Indenture. Upon receipt of such Officers' Certificate and Opinion of Counsel, the Collateral Agent shall, at the sole cost and expense of the Company and without recourse, representation or warranty, execute, deliver or acknowledge any necessary or proper instruments of termination, satisfaction or release (in form and substance reasonably satisfactory to the Collateral Agent) to evidence the release of any Pledged Collateral permitted to be released pursuant to this Indenture or the Collateral Documents.

(b) No Pledged Collateral shall be released from the Liens and security interest created by the Collateral Documents pursuant to the provisions of the Collateral Documents (other than any automatic release) unless there shall have been delivered to the Collateral Agent the Officers' Certificate and Opinion of Counsel required by this Section 13.03.

(c) At any time when an Event of Default shall have occurred and be continuing and the maturity of the Notes shall have been accelerated (whether by declaration or otherwise), no release of Pledged Collateral pursuant to the provisions of the Collateral Documents shall be effective as against the Holders of Notes.

(d) The release of any Pledged Collateral from the terms of this Indenture and the Collateral Documents shall not be deemed to impair the security under this Indenture in contravention of the provisions hereof if and to the extent the Pledged Collateral is released pursuant to the terms hereof. To the extent applicable, the Company shall cause TIA § 313(b), relating to reports, and TIA § 314(d), relating to the release of property or securities from the Lien and security interest of the Collateral Documents and relating to the substitution therefor of any property or securities to be subjected to the Lien and security interest of the Collateral Documents, to be complied with. Any certificate or opinion required by TIA § 314(d) may be made by an Officer of the Company except in cases where TIA § 314(d) requires that such certificate or opinion be made by an independent Person, which Person shall be an independent engineer, appraiser or other expert selected or approved by the Trustee and the Collateral Agent in the exercise of reasonable care.

Section 13.04 Certificates of the Company.

The Company shall furnish to the Trustee and the Collateral Agent, prior to each proposed release of Pledged Collateral pursuant to any Collateral Document, (i) all documents required by TIA §314(d) and (ii) an Opinion of Counsel to the effect that such accompanying documents constitute all documents required by TIA §314(d). The Trustee may, to the extent permitted by Section 8.01 and Section 8.02 hereof, accept as conclusive evidence of compliance with the foregoing provisions the appropriate statements contained in such documents and such Opinion of Counsel.

Section 13.05 Authorization of Actions to Be Taken by the Trustee Under the Collateral Documents.

Subject to the provisions of Section 8.01 and Section 8.02 hereof, the Trustee may, at the written direction of the Majority Holders, on behalf of the Holders of Notes, take, or direct the Collateral Agent to take, all actions it deems necessary or appropriate in order to (a) enforce any of the terms of the Collateral Documents and (b) collect and receive any and all amounts payable in respect of the Obligations of the Company hereunder. The Trustee and the Collateral Agent shall each have power to institute and maintain such suits and proceedings as it may deem expedient to prevent any impairment of the Pledged Collateral by any acts that may be unlawful or in violation of the Collateral Documents or this Indenture, and such suits and proceedings as the Trustee may deem expedient to preserve or protect its interests and the interests of the Holders of Notes in the Pledged Collateral (including power to institute and maintain suits or proceedings to restrain the enforcement of or compliance with any legislative or other governmental enactment, rule or order that may be unconstitutional or otherwise invalid if the enforcement of, or compliance with, such enactment, rule or order would impair the security interest hereunder or be prejudicial to the interests of the Holders of Notes or of the Trustee).

Section 13.06 Authorization of Receipt of Funds by the Trustee Under the Collateral Documents.

The Trustee is authorized to receive any funds for the benefit of the Holders of Notes distributed under the Collateral Documents, and to make further distributions of such funds to the Holders of Notes according to the provisions of this Indenture.

Section 13.07 Termination of Security Interest.

Upon the payment in full of all Obligations of the Company under this Indenture and the Notes, the Trustee shall, at the written request and sole cost and expense of the Company, deliver a certificate to the Collateral Agent stating that such Obligations have been paid in full, and instruct the Collateral Agent to release the Liens pursuant to this Indenture and the Collateral Documents.

Section 13.08 Collateral Agent.

Each Holder of Notes, by its acceptance thereof, hereby (a) appoints the Collateral Agent hereunder, under the Collateral Agency Agreement, and under the other Collateral Documents, and (b) authorizes the Collateral Agent (and its officers, directors, employees and agents) to take such action on the Holder's behalf in accordance with the terms hereof and thereof. For the avoidance of doubt, all rights, privileges, immunities and benefits given to the Collateral Agent, including without limitation, its right to be indemnified, under the Collateral Agency Agreement are incorporated by reference herein.

ARTICLE 14.
NOTE GUARANTEES

Section 14.01 Guarantee.

Subject to this ARTICLE 14, each of the Guarantors hereby jointly and severally, unconditionally guarantees to each Holder of a Note authenticated and delivered by the Trustee and to the Trustee and its successors and assigns, irrespective of the validity and enforceability of this Indenture, the Notes or the obligations of the Company hereunder or thereunder, that: (a) the Principal of and Interest on the Notes will be promptly paid in full when due, whether at maturity, by acceleration, redemption, repurchase or otherwise, any other amounts due on the Notes, if any, if lawful, and all other obligations of the Company to the Holders, the Trustee or the Collateral Agent hereunder or thereunder or under the Collateral Documents will be promptly paid in full or performed, all in accordance with the terms hereof and thereof; and (b) in case of any extension of time of payment or renewal of any Notes or any of such other obligations, that same will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, whether at Stated Maturity, by acceleration or otherwise. Failing payment when due of any amount so guaranteed or any performance so guaranteed for whatever reason, the Guarantors shall be jointly and severally obligated to pay the same immediately, whether or not such failure to pay has become an Event of Default which could cause acceleration pursuant to ARTICLE 7 hereof. Each Guarantor agrees that this is a guarantee of payment and not a guarantee of collection.

The Guarantors hereby agree that their obligations hereunder shall be unconditional, irrespective of the validity, regularity or enforceability of the Notes or this Indenture, the absence of any action to enforce the same, any waiver or consent by any Holder of the Notes with respect to any provisions hereof or thereof, the recovery of any judgment against the Company, any action to enforce the same or any other circumstance which might otherwise constitute a legal or equitable discharge or defense of a Guarantor. Each Guarantor hereby waives and relinquishes diligence, presentment, demand of payment, filing of claims with a court in the event of insolvency or bankruptcy of the Company, any right to require a proceeding first against the Company, protest, notice and all demands whatsoever and covenant that this Note Guarantee shall not be discharged except by complete performance of the obligations contained in the Notes and this Indenture.

If any Holder, the Trustee or the Collateral Agent is required by any court or otherwise to return to the Company, the Guarantors or any custodian, trustee, liquidator or other similar official acting in relation to either the Company or the Guarantors, any amount paid by either to the Trustee, such Holder, or the Collateral Agent, this Note Guarantee, to the extent theretofore discharged, shall be reinstated in full force and effect.

Each Guarantor agrees that it shall not be entitled to any right of subrogation in relation to the Holders in respect of any obligations guaranteed hereby until payment in full of all obligations guaranteed hereby. Each Guarantor further agrees that, as between the Guarantors, on the one hand, and the Holders and the Trustee, on the other hand, (x) the maturity of the obligations guaranteed hereby may be accelerated as provided in ARTICLE 7 hereof for the purposes of this Note Guarantee, notwithstanding any stay, injunction or other prohibition preventing such acceleration in respect of the obligations guaranteed hereby, and (y) in the event of any declaration of acceleration of such obligations as provided in ARTICLE 7 hereof, such obligations (whether or not due and payable) shall forthwith become due and payable by the Guarantors for the purpose of this Note Guarantee. The Guarantors shall have the right to seek contribution from any non-paying Guarantor so long as the exercise of such right does not impair the rights of the Holders under the Guarantee.

Section 14.02 Limitation on Guarantor Liability.

Each Guarantor, and by its acceptance of Notes, each Holder, hereby confirms that it is the intention of all such parties that the Note Guarantee of such Guarantor not constitute a fraudulent transfer or conveyance for purposes of Bankruptcy Law, the Uniform Fraudulent Conveyance Act, the Uniform Fraudulent Transfer Act or any similar federal or state law to the extent applicable to any Note Guarantee. To effectuate the foregoing intention, the Trustee, the Collateral Agent, the Holders and the Guarantors hereby irrevocably agree that the obligations of such Guarantor will, after giving effect to such maximum amount and all other contingent and fixed liabilities of such Guarantor that are relevant under such laws, and after giving effect to any collections from, rights to receive contribution from or payments made by or on behalf of any other Guarantor in respect of the obligations of such other Guarantor under this ARTICLE 14, result in the obligations of such Guarantor under its Note Guarantee not constituting a fraudulent transfer or conveyance.

Section 14.03 Continuing Guarantee.

Each Guarantor hereby agrees that its Note Guarantee set forth in Section 14.01 shall remain in full force and effect notwithstanding any failure to endorse on each Note a notation of such Note Guarantee.

If an Officer whose signature is on this Indenture no longer holds that office at the time the Trustee authenticates the Note, the Note Guarantee shall be valid nevertheless.

The delivery of any Note by the Trustee, after the authentication thereof hereunder, shall constitute due delivery of the Note Guarantee set forth in this Indenture on behalf of the Guarantors.

Section 14.04 Releases Following Sale of Assets.

In the event of a sale or other transfer, including by way of merger or consolidation, of all the Capital Stock of such Guarantor in compliance with the terms of this Indenture following which such Guarantor ceases to be the Company's direct or indirect Subsidiary, such Guarantor shall automatically and unconditionally be released and relieved of any of its obligations under its Note Guarantee. Upon delivery by the Company to the Trustee of an Officers' Certificate and an Opinion of Counsel to the effect that such sale or other disposition was made by the Company in accordance with the provisions of this Indenture, the Trustee shall execute any documents reasonably required in order to evidence the release of any Guarantor from its obligations under its Note Guarantee.

Any Guarantor not released from its obligations under its Note Guarantee shall remain liable for the full amount of Principal of, Interest and any other amounts due on the Notes and for the other obligations of any Guarantor under this Indenture as provided in this ARTICLE 14.

ARTICLE 15.
SATISFACTION AND DISCHARGE

Section 15.01 Satisfaction and Discharge.

This Indenture will be discharged and will cease to be of further effect (except as to any surviving rights of registration of transfer or exchange of Notes herein expressly provided for) as to all Notes issued hereunder, when:

(i) either:

(1) all Notes that have been authenticated (except lost, stolen or destroyed Notes that have been replaced or paid and Notes for whose payment money has theretofore been deposited in trust and thereafter repaid to the Company) have been delivered to the Trustee for cancellation; or

(2) all Notes that have not been delivered to the Trustee for cancellation have become due and payable and the Company or any Guarantor has irrevocably deposited or caused to be deposited with the Trustee as trust funds in trust solely for the benefit of the Holders, cash in U.S. dollars, non-callable Government Securities, or a combination thereof, and/or (in the case of conversion) shares of Common Stock in such amounts as will be sufficient without consideration of any reinvestment of interest, to pay and discharge the entire Indebtedness on the Notes not delivered to the Trustee for cancellation for Principal, premium, if any, and accrued Interest to the Stated Maturity;

(ii) the Company or any Guarantor has paid or caused to be paid all other sums payable by it under the Transaction Documents;

(iii) the Company has delivered irrevocable instructions to the Trustee under this Indenture to apply the deposited money toward the payment of the Notes at maturity; and

(iv) the Company has delivered an Officers' Certificate and an Opinion of Counsel to the Trustee stating that all conditions precedent to satisfaction and discharge have been satisfied.

Notwithstanding the satisfaction and discharge of this Indenture, the obligations of the Company to the Trustee under Section 8.07 and, if money shall have been deposited with the Trustee pursuant to subclause (b) of clause (1) of this Section, the provisions of Section 15.02 and Section 11.05 shall survive.

Section 15.02 Application of Trust Money.

Subject to the provisions of Section 11.05, all money deposited with the Trustee pursuant to Section 15.01 shall be held in trust and applied by it, in accordance with the provisions of the Notes and this Indenture, to the payment, either directly or through any Paying Agent (including the Company acting as its own Paying Agent) as the Trustee may determine, to the Persons entitled thereto, of the Principal (and premium, if any) and Interest for whose payment such money has been deposited with the Trustee; but such money need not be segregated from other funds except to the extent required by law.

If the Trustee or Paying Agent is unable to apply any money or Government Securities in accordance with Section 15.01 by reason of any legal proceeding or by reason of any order or judgment of any court or governmental authority enjoining, restraining or otherwise prohibiting such application, the Company's and any Guarantor's obligations under this Indenture and the Notes shall be revived and reinstated as though no deposit had occurred pursuant to Section 15.01; provided that if the Company has made any payment of Principal of, premium, if any, or Interest on any Notes because of the reinstatement of its obligations, the Company shall be subrogated to the rights of the Holders of such Notes to receive such payment from the money or Government Securities held by the Trustee or Paying Agent.

ARTICLE 16.
MATURITY DATE, INTEREST, AND INTEREST RATE

Section 16.01 Maturity

(a) The Company promises to pay an amount in cash representing the outstanding Principal Amount of the Notes plus accrued and unpaid Interest and any other amounts due on the Stated Maturity.

Section 16.02 Interest and Interest Rate

(a) The Notes shall accrue interest at the Interest Rate per annum. Interest on the Notes shall be payable quarterly in arrears on each Interest Payment Date to Holders of record on the Regular Record Date immediately preceding such Interest Payment Date. Interest will be computed on the basis of a 360-day year comprised of twelve 30-day months and, for partial months, on the basis of the number of days actually elapsed in a 30-day month. Interest on the Notes shall accrue from the most recent date to which Interest has been paid, or if no Interest has been paid, from the Issue Date, until the Principal Amount or Redemption Price, if applicable, is paid or duly made available for payment.

(b) If prior to any Interest Payment Date, any Additional Interest has accrued pursuant to the Registration Rights Agreement or any Special Interest has accrued pursuant to Section 7.03 hereof, and not theretofore been paid in full, any such Additional Interest or Special Interest shall be due and payable on such Interest Payment Date, and shall be included in Interest payable on such Interest Payment Date and shall be paid in the manner provided for herein for the payment of Interest (unless otherwise specified in the applicable Transaction Document).

(c) Interest shall be payable on each Interest Payment Date, to each Holder on the applicable Interest Payment Date in cash ("*Cash Interest"*) and/or, at the Company's election, by delivering Freely Tradeable Common Stock of the Company (" *Common Stock Interest*"). Subject to the limitations in Section 9.02(k), all Interest shall be paid as Common Stock Interest, unless the Company delivers prior written notice to each Holder (with a copy to the Trustee) stating that the Company will pay all or a portion of any future Interest as Cash Interest and specifying the time periods during which such election shall apply and the percentages of Interest that will be paid as Cash Interest and Common Stock Interest, respectively. Such notice shall not be effective until the end of the 15th Trading Day after such notice has been delivered. For all time periods, the number of shares of Freely Tradeable Common Stock to be issued as Common Stock Interest, if any, shall equal the amount of the payment (or portion thereof) to be paid in Freely Tradeable Common Stock divided by the product of (x) 95% and (y) the simple average of the Daily VWAP of the Common Stock for the ten consecutive Trading Days ending on and including the Trading Day immediately preceding the Interest Payment Date (the "*Common Stock Interest Share Amount*").

(d) Cash Interest on any Note that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Holder of such Note on the Regular Record Date for such Interest at the office or agency of the Company maintained for such purpose. Each installment of Cash Interest on any Physical Note shall be made by check mailed to the address of the Holder specified in the Securities Register; provided, however, that, in respect of any Holder of Physical Notes with an aggregate Principal Amount in excess of $2,000,000, at the request of such Holder in writing to the Company, Cash Interest on such Holder's Notes shall be paid by wire transfer in immediately available funds to such Holder's account within the United States in accordance with the written wire transfer instruction supplied by such Holder from time to time to the Trustee and Paying Agent (if different from the Trustee) at least ten days prior to the applicable Interest Payment Date. In the case of a permanent Global Note, Cash Interest payable on any Interest Payment Date will be paid to the Depositarypursuant to the Applicable Procedures.

(e) Common Stock Interest on any Note that is payable, and is punctually paid or duly provided for, on any Interest Payment Date shall be paid to the Holder of such Note on the regular record date for such Interest by issuance of a certificate for the number of whole shares of Freely Tradeable Common Stock representing the Common Stock Interest Share Amount and shall, (x) provided the Company's transfer agent is participating in The DTC's Fast Automated Securities Transfer Program, cause its transfer agent to credit such aggregate number of shares of Freely Tradeable Common Stock to which each such Holder shall be entitled to the Holder's or its designee's balance account with DTC through its Deposit Withdrawal Agent Commission system or (y) if such transfer agent is not participating in DTC's Fast Automated Securities Transfer Program, execute, and shall deliver, to the address as specified in the Securities Register, a certificate, registered in the name of the Holder or its designee, for the number of shares of Freely Tradeable Common Stock to which such Holder shall be entitled. The Person or Persons entitled to receive such Freely Tradeable Common Stock pursuant to a payment of Common Stock Interest shall be treated for all purposes as the holder or holders of such Freely Tradeable Common Stock, as of the close of business on the applicable Interest Payment Date; provided, however, that no payment of Common Stock Interest on any Interest Payment Date when the stock transfer books of the Company shall be closed shall be effective to constitute the Person or Persons entitled to receive the shares of Freely Tradeable Common Stock upon such payment of Common Stock Interest as the holder or holders of such shares of Freely Tradeable Common Stock on such date, but such payment of Common Stock Interest shall be effective to constitute the Person or Persons entitled to receive such shares of Freely Tradeable Common Stock as the holder or holders thereof for all purposes at the close of business on the next succeeding day on which such stock transfer books are open; provided further that such payment of Common Stock Interest shall be in the amount in effect on the Interest Payment Date as if the stock transfer books of the Company had not been closed.

ARTICLE 17.
MISCELLANEOUS

Section 17.01 Trust Indenture Act Controls.

If any provision of this Indenture limits, qualifies or conflicts with the duties imposed by TIA §318(c), the imposed duties shall control.

Section 17.02 Notices.

Any notice or communication by the Company, any Guarantor or the Trustee to the others is duly given if in writing and delivered in Person or mailed by first class mail (registered or certified, return receipt requested), telecopier or overnight air courier guaranteeing next day delivery, to the others' address:

If to the Company and/or any Guarantor:

Akoustis Technologies, Inc.
9805 Northcross Center Court
Suite A
Huntersville, NC 28078
Tel: (704)-997-5735
Email: dwright@akoustis.com
Attention: General Counsel

With a copy (which shall not constitute notice) to:

K&L Gates LLP
214 North Tryon Street
47th Floor
Charlotte, NC 28202
Tel: (704) 331-7406
Email: sean.jones@klgates.com
Attention: Sean Jones, Esq.

If to the Trustee:

The Bank of New York Mellon Trust Company, N.A.
10161 Centurion Parkway N.
Jacksonville, Florida 32256
Email: Brittany.Lisotta@bnymellon.com
Fax: (904) 645-1921
Attention: Corporate Trust Administration

The Company, any Guarantor or the Trustee, by notice to the others may designate additional or different addresses for subsequent notices or communications.

All notices and communications (other than those sent to Holders) shall be deemed to have been duly given: at the time delivered by hand, if personally delivered; five Business Days after being deposited in the mail, postage prepaid, if mailed; when receipt acknowledged, if telecopied; and the next Business Day after timely delivery to the courier, if sent by overnight air courier guaranteeing next day delivery.

Any notice or communication to a Holder with respect to Global Notes, delivered in accordance with the Applicable Procedures of the Depositary and, with respect to Physical Notes, shall be mailed by first class mail, certified or registered, return receipt requested, or by overnight air courier guaranteeing next day delivery to its address shown on the register kept by the Registrar.

If a notice or communication is mailed in the manner provided above within the time prescribed, it is duly given, whether or not the addressee receives it.

If the Company or a Guarantor delivers a notice or communication to Holders, it shall send a copy to the Trustee and each Agent at the same time.

The Trustee agrees to accept and act upon instructions or directions pursuant to this Indenture sent by unsecured e-mail, pdf, facsimile transmission or other similar unsecured electronic methods; provided, however, that the Trustee shall have received an incumbency certificate listing persons designated to give such instructions or directions and containing specimen signatures of such designated persons, which such incumbency certificate shall be amended and replaced whenever a person is to be added or deleted from the listing. If the Company elects to give the Trustee e-mail or facsimile instructions (or instructions by a similar electronic method) and the Trustee in its discretion elects to act upon such instructions, the Trustee's understanding of such instructions shall be deemed controlling. The Trustee shall not be liable for any losses, costs or expenses arising directly or indirectly from the Trustee's reliance upon and compliance with such instructions notwithstanding such instructions conflict or are inconsistent with a subsequent written instruction. The Company agrees to assume all risks arising out of the use of such electronic methods to submit instructions and directions to the Trustee, including without limitation the risk of the Trustee acting on unauthorized instructions, and the risk of interception and misuse by third parties.

Section 17.03 Communication by Holders of Notes with Other Holders of Notes.

Holders may communicate pursuant to TIA § 312(b) with other Holders with respect to their rights under this Indenture or the Notes. The Company, the Guarantors, the Trustee, the Registrar and anyone else shall have the protection of TIA § 312(c).

Section 17.04 Legal Holidays.

In any case where any payment date described in this Indenture is not a Business Day, then any action to be taken on such date need not be taken on such date, but may be taken on the next succeeding Business Day with the same force and effect as if taken on such date, and no interest shall accrue in respect of the delay.

Section 17.05 Calculations.

Except as otherwise provided herein, the Company shall be responsible for making all calculations called for under this Indenture and the Notes. Neither the Trustee, acting in any capacity under this Indenture, nor the Conversion Agent shall have any liability or responsibility for any such calculations or information underlying such calculations, of for monitoring the price of the Common Stock. The Company shall make all calculations in good faith and, absent manifest error, the Company's calculations shall be final and binding on Holders of Notes. The Company shall provide a schedule of its calculations to each of the Trustee and the Conversion Agent, and each of the Trustee and Conversion Agent is entitled to rely conclusively upon the accuracy of the Company's calculations without independent verification. The Trustee shall forward the Company's calculations to any Holder of Notes upon the written request of that Holder at the sole cost and expense of the Company.

Section 17.06 Certificate and Opinion as to Conditions Precedent.

Upon any request or application by the Company or a Guarantor to the Trustee and/or the Collateral Agent to take any action under this Indenture, the Note Guarantees, the Notes, or any Collateral Document, the Company or such Guarantor shall furnish to the Trustee and/or the Collateral Agent, as applicable:

(a) an Officers' Certificate in form and substance reasonably satisfactory to the Trustee and/or Collateral Agent (which shall include the statements set forth in Section 17.07 hereof) stating that, in the opinion of the signers, all conditions precedent and covenants, if any, provided for in this Indenture, the Note Guarantees, the Notes, and any Collateral Document relating to the proposed action have been satisfied; and

(b) an Opinion of Counsel in form and substance reasonably satisfactory to the Trustee and/or the Collateral Agent (which shall include the statements set forth in Section 17.07 hereof) stating that, in the opinion of such counsel, all such conditions precedent and covenants provided for in this Indenture, the Note Guarantees, the Notes, and any Collateral Document relating to the proposed action have been satisfied.

Section 17.07 Statements Required in Certificate or Opinion.

Each certificate or opinion with respect to compliance with a condition or covenant provided for in this Indenture (other than a certificate provided pursuant to TIA § 314(a)(4)) shall comply with the provisions of TIA § 314(e) and shall include:

(a) a statement that the Person making such certificate or opinion has read such covenant or condition;

(b) 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;

(c) a statement that, in the opinion of such Person, he or she has made such examination or investigation as is necessary to enable him to express an informed opinion as to whether or not such covenant or condition has been satisfied; and

(d) a statement as to whether or not, in the opinion of such Person, such condition or covenant has been satisfied.

Section 17.08 Rules by Trustee and Agents.

The Trustee may make reasonable rules for action by or at a meeting of Holders. The Registrar or Paying Agent may make reasonable rules and set reasonable requirements for its functions.

Section 17.09 Indenture, Note Guarantees and Notes Solely Corporate Obligations.

No recourse for the payment of the principal of, or accrued and unpaid interest on, any Note or any Note Guarantee, 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 or any Guarantor in this Indenture or in any Note Guarantee or in any Note, or because of the creation of any Indebtedness represented thereby, shall be had against any past, present or future incorporator, stockholder, employee, agent, officer or director of the Company or Guarantor as such or of any successor Person, either directly or through the Company or any successor Person, 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, the Note Guarantees and the issue of the Notes.

Section 17.10 Governing Law.

THE INTERNAL LAW OF THE STATE OF NEW YORK SHALL GOVERN AND BE USED TO CONSTRUE THIS INDENTURE, THE NOTES AND THE NOTE GUARANTEES WITHOUT REGARD TO PRINCIPLES OF CONFLICTS OF LAW THAT WOULD APPLY ANY OTHER LAW.

Section 17.11 Submission to Jurisdiction.

The Company and each Guarantor hereby irrevocably submits to the jurisdiction of any New York State court sitting in the Borough of Manhattan in the City of New York or any federal court sitting in the Southern District in the Borough of Manhattan in the City of New York in respect of any suit, action or proceeding arising out of or relating to this Indenture, the Notes, and the Collateral Documents, and irrevocably accepts for itself and in respect of its property, generally and unconditionally, jurisdiction of the aforesaid courts.

Section 17.12 Waiver of Jury Trial.

EACH OF THE COMPANY, THE GUARANTORS, THE HOLDERS, THE COLLATERAL AGENT AND THE TRUSTEE HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS INDENTURE, THE NOTES OR THE TRANSACTION CONTEMPLATED HEREBY.

Section 17.13 No Adverse Interpretation of Other Agreements.

This Indenture may not be used to interpret any other indenture, loan or debt agreement of the Company or its Subsidiaries or of any other Person. Any such indenture, loan or debt agreement may not be used to interpret this Indenture.

Section 17.14 Successors.

All agreements of the Company in this Indenture and the Notes shall bind its successors. All agreements of the Trustee in this Indenture shall bind its successors. All agreements of each Guarantor in this Indenture shall bind its successors, except as otherwise provided by Section 14.04.

Section 17.15 Severability.

In case any provision in this Indenture, the Notes or a Note Guarantee 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 17.16 Counterpart Originals.

The parties may sign any number of copies of this Indenture. Each signed copy shall be an original, but all of them together represent the same agreement.

Section 17.17 Table of Contents, Headings, etc.

The Table of Contents, Cross-Reference Table and Headings of the Articles and Sections of this Indenture have been inserted for convenience of reference only, are not to be considered a part of this Indenture and shall in no way modify or restrict any of the terms or provisions hereof.

Section 17.18 Force Majeure.

In no event shall the Trustee, acting in any capacity under this Indenture, be responsible or liable for any failure or delay in the performance of its obligations hereunder arising out of or caused by, directly or indirectly, forces beyond its control, including, without limitation, strikes, work stoppages, accidents, acts of war or terrorism, civil or military disturbances, nuclear or natural catastrophes or acts of God, and interruptions, loss or malfunctions of utilities, communications or computer (software and hardware) services; it being understood that the Trustee shall use reasonable efforts which are consistent with accepted practices in the banking industry to resume performance as soon as practicable under the circumstances.

Section 17.19 Foreign Account Tax Compliance Act (FATCA)

In order to comply with applicable tax laws, rules and regulations (inclusive of directives, guidelines and interpretations promulgated by competent authorities) in effect from time to time ("*Applicable Law*"), the Company agrees (i) to use commercially reasonable efforts to provide to the Trustee, upon request, such information as it has in its possession about Holders and other applicable parties and/or transactions (including any modification to the terms of such transactions), so that the Trustee can determine whether it has tax related obligations under Applicable Law and (ii) that the Trustee shall be entitled to make any withholding or deduction from payments under the Indenture to the extent necessary to comply with Applicable Law, for which the Trustee shall not have any liability. The terms of this section shall survive the termination of this Indenture.

[Signatures on following page]

Dated as of May 14, 2018

AKOUSTIS TECHNOLOGIES, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

AKOUSTIS, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A., as Trustee and as Collateral Agent

By: /s/ R. Tarnas
Name: R. Tarnas
Title: Vice President

[*Signature Page to Indenture*]

EXHIBIT A

[FORM OF FACE OF NOTE]

[INCLUDE IF NOTE IS A RESTRICTED NOTE — THIS NOTE, THE NOTE GUARANTEE AND THE SHARES OF COMMON STOCK OF AKOUSTIS TECHNOLOGIES, INC. ISSUABLE UPON CONVERSION OF THIS NOTE HAVE NOT BEEN REGISTERED UNDER THE SECURITIES ACT OF 1933, AS AMENDED (THE "SECURITIES ACT"), OR ANY STATE SECURITIES LAWS. NEITHER THIS NOTE, THE NOTE GUARANTEE, THE SHARES OF COMMON STOCK OR OTHER SECURITIES ISSUABLE UPON CONVERSION OF THIS NOTE NOR ANY INTEREST OR PARTICIPATION HEREIN OR THEREIN MAY BE REOFFERED, SOLD, ASSIGNED, TRANSFERRED, PLEDGED, ENCUMBERED OR OTHERWISE DISPOSED OF IN THE ABSENCE OF SUCH REGISTRATION OR UNLESS SUCH TRANSACTION IS EXEMPT FROM, OR NOT SUBJECT TO, REGISTRATION. EACH PURCHASER OF THIS NOTE IS HEREBY NOTIFIED THAT THE SELLER OF THIS NOTE MAY BE RELYING ON THE EXEMPTION FROM THE PROVISIONS OF SECTION 5 OF THE SECURITIES ACT PROVIDED BY RULE 144A THEREUNDER.

THE HOLDER OF THIS NOTE, BY ITS ACCEPTANCE HEREOF, AGREES TO OFFER, SELL OR OTHERWISE TRANSFER SUCH NOTE, PRIOR TO THE EXPIRATION OF THE HOLDING PERIOD APPLICABLE TO SALES OF THIS NOTE UNDER RULE 144(K) UNDER THE SECURITIES ACT (THE "RESALE RESTRICTION TERMINATION DATE") ONLY (A) TO AKOUSTIS TECHNOLOGIES, INC. OR ANY PARENT OR SUBSIDIARY THEREOF, (B) FOR SO LONG AS THE SECURITIES ARE ELIGIBLE FOR RESALE PURSUANT TO RULE 144A UNDER THE SECURITIES ACT, TO A PERSON IT REASONABLY BELIEVES IS A "QUALIFIED INSTITUTIONAL BUYER" AS DEFINED IN RULE 144A UNDER THE SECURITIES ACT THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF A QUALIFIED INSTITUTIONAL BUYER TO WHOM NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE UNDER RULE 144A, (C) PURSUANT TO OFFERS AND SALES THAT OCCUR OUTSIDE THE U.S. WITHIN THE MEANING OF REGULATION S UNDER THE SECURITIES ACT, (D) TO A PERSON IT REASONABLY BELIEVES IS AN INSTITUTIONAL "ACCREDITED INVESTOR" AS DEFINED IN RULE 501(a)(l), (2), (3) OR (7) UNDER THE SECURITIES ACT THAT PURCHASES FOR ITS OWN ACCOUNT OR FOR THE ACCOUNT OF AN INSTITUTIONAL "ACCREDITED INVESTOR" TO WHICH NOTICE IS GIVEN THAT THE TRANSFER IS BEING MADE IN RELIANCE ON RULE 501 (a)(l), (2), (3) OR (7), (E) PURSUANT TO A REGISTRATION STATEMENT WHICH HAS BEEN DECLARED EFFECTIVE UNDER THE SECURITIES ACT, OR (F) PURSUANT TO ANOTHER AVAILABLE EXEMPTION FROM THE REGISTRATION REQUIREMENTS OF THE SECURITIES ACT, SUBJECT TO AKOUSTIS TECHNOLOGIES, INC.'S AND THE TRUSTEE'S RIGHT PRIOR TO ANY SUCH OFFER, SALE OR TRANSFER PURSUANT TO CLAUSE (F) TO REQUIRE THE DELIVERY OF AN OPINION OF COUNSEL, CERTIFICATION AND/OR OTHER INFORMATION SATISFACTORY TO EACH OF THEM, AND IN EACH OF THE FOREGOING CASES, A CERTIFICATE OF TRANSFER DULY COMPLETED AND DELIVERED BY THE TRANSFEROR TO THE TRUSTEE. THIS LEGEND WILL BE REMOVED UPON THE EARLIER OF THE TRANSFER OF THIS SECURITY PURSUANT TO CLAUSE (C) ABOVE OR UPON ANY TRANSFER OF THIS SECURITY UNDER RULE 144(K) UNDER THE SECURITIES ACT (OR ANY SUCCESSOR PROVISION).**]**

[INCLUDE IF NOTE IS A GLOBAL NOTE — THIS NOTE IS A GLOBAL NOTE WITHIN THE MEANING OF THE INDENTURE HEREINAFTER REFERRED TO AND IS REGISTERED IN THE NAME OF A DEPOSITARY OR A NOMINEE THEREOF. THIS NOTE MAY NOT BE EXCHANGED IN WHOLE OR IN PART FOR A SECURITY REGISTERED, AND NO TRANSFER OF THIS SECURITY IN WHOLE OR IN PART MAY BE REGISTERED, IN THE NAME OF ANY PERSON OTHER THAN SUCH DEPOSITARY OR A NOMINEE THEREOF, EXCEPT IN THE LIMITED CIRCUMSTANCES DESCRIBED IN THE INDENTURE.

UNLESS THIS CERTIFICATE IS PRESENTED BY AN AUTHORIZED REPRESENTATIVE OF THE DEPOSITORY TRUST COMPANY, A NEW YORK CORPORATION ("DTC"), TO THE COMPANY OR ITS AGENT FOR REGISTRATION OF TRANSFER, EXCHANGE OR PAYMENT, AND ANY CERTIFICATE ISSUED IS REGISTERED IN THE NAME OF CEDE & CO. OR IN SUCH OTHER NAME AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC (AND ANY PAYMENT HEREUNDER IS MADE TO CEDE & CO. OR TO SUCH OTHER ENTITY AS IS REQUESTED BY AN AUTHORIZED REPRESENTATIVE OF DTC), ANY TRANSFER, PLEDGE, OR OTHER USE HEREOF FOR VALUE OR OTHERWISE BY OR TO ANY PERSON IS WRONGFUL INASMUCH AS THE REGISTERED OWNER HEREOF, CEDE & CO., HAS AN INTEREST HEREIN.**]**

THE HOLDER OF THIS NOTE IS ENTITLED TO THE BENEFITS OF A REGISTRATION RIGHTS AGREEMENT AND A PLEDGE AND SECURITY AGREEMENT (AS EACH SUCH TERM IS DEFINED IN THE INDENTURE REFERRED TO ON THE REVERSE HEREOF) AND, BY ITS ACCEPTANCE HEREOF, AGREES TO BE BOUND BY AND TO COMPLY WITH THE PROVISIONS OF SUCH AGREEMENTS.

ANY TRANSFER OF ALL OR PART OF A NOTE MAY BE EFFECTED ONLY BY REGISTRATION OF SUCH TRANSFER ON THE REGISTER KEPT BY THE SECURITY REGISTRAR.

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

No. [ ] [Initially][1] $[ ]

CUSIP No. [ ]

Akoustis Technologies, Inc., a corporation duly organized and validly existing under the laws of the State of Delaware (the "**Company**," which term includes any successor corporation or other entity under the Indenture referred to on the reverse hereof), for value received hereby promises to pay to [CEDE & CO.][2] [ ][3], or registered assigns, the principal sum [as set forth in the "Schedule of Exchanges of Notes" attached hereto][4] [of $[ ]][5], which amount, taken together with the principal amounts of all other outstanding Notes, shall not, unless permitted by the Indenture, exceed $[_____] in aggregate at any time in accordance with the rules and the Applicable Procedures of the Depositary, on May 31, 2023, and interest thereon as set forth below.

This Note shall bear interest at the rate of 6.5% per year from May [__], 2018 or from the most recent date to which interest had been paid or duly provided for to, but excluding, the next scheduled Interest Payment Date until May 31, 2023. Interest is payable quarterly in arrears on February 28, May 31, August 31 and November 30, commencing on August 31, 2018, to Holders of record at the close of business on the preceding February 15, May 15, August 15 or November 15 (whether or not such day is a Business Day), respectively. Additional Interest and/or Special Interest will be payable as set forth in the within-mentioned Indenture, and any reference to interest on, or in respect of, any Note therein shall be deemed to include Additional Interest and/or Special Interest if, in such context, Additional Interest and/or Special Interest is, was or would be payable pursuant to the within-mentioned Indenture, and any express mention of the payment of Additional Interest and/or Special Interest in any provision therein shall not be construed as excluding Additional Interest and/or Special Interest in those provisions thereof where such express mention is not made.

The Company shall pay the Principal of and Interest on this Note, if and so long as such Note is a Global Note, in immediately available funds to the Depositary or its nominee, as the case may be, as the registered Holder of such Note. The Company shall pay the Principal of and Interest on this Note, if and so long as such Note is a Physical Note by check mailed to the address of the Holder of this Note specified in the Securities Register, or, upon written application by a Holder of an aggregate Principal Amount of greater than U.S. $2 million to the Registrar setting forth wire instructions not later than ten (10) days prior to the relevant payment date, such Holder may receive payment by wire transfer in immediately available funds, in such lawful money of the United States of America as at the time of payment shall be legal tender for the payment of public and private debts. The Company has initially designated the Trustee as its Paying Agent, Conversion Agent and Registrar in respect of the Notes and its agency in the Borough of Manhattan, The City of New York, as a place where Notes may be presented for payment or for registration of transfer and exchange. The Company may change any Paying Agent, Conversion Agent or Registrar without notice to any Holder. The Company or any of its Subsidiaries may act as Paying Agent or Registrar.

---

[1] Include if a global note.
[2] Include if a global note.
[3] Include if a physical note.
[4] Include if a global note.
[5] Include if a physical note.

Reference is made to the further provisions of this Note set forth on the reverse hereof, including, without limitation, provisions giving the Holder of this Note the right to convert this Note into shares of Common Stock of the Company and the right of the Holder of this Note to require the Company to repurchase this Note and upon certain events, in each case, on the terms and subject to the limitations set forth in the Indenture. Such further provisions shall for all purposes have the same effect as though fully set forth at this place. Capitalized terms used in this Note and not defined in this Note shall have the respective meanings set forth in the Indenture.

This Note, and any claim, controversy or dispute arising under or related to this Note, shall be construed in accordance with and governed by the laws of the State of New York (without regard to the conflicts of laws provisions thereof).

In the case of any conflict between this Note and the Indenture, the provisions of the Indenture shall control and govern.

This Note shall not be valid or become obligatory for any purpose until the certificate of authentication hereon shall have been signed manually or by facsimile by the Trustee or a duly authorized authenticating agent under the Indenture.

The Company will furnish to any Holder upon written request and without charge a copy of the Indenture, the Registration Rights Agreement, the Pledge and Security Agreement and any Collateral Document. Requests may be made to:

Akoustis Technologies, Inc.
9805 Northcross Center Court
Suite A
Huntersville, NC 28078
Attention: President

[*Remainder of page intentionally left blank*]

IN WITNESS WHEREOF, the Company has caused this Note to be duly executed.

AKOUSTIS TECHNOLOGIES, INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

[*Signature Page – Akoustis Technologies, Inc. - 6.5% Convertible Senior Secured Note due 2023*]

Dated:

TRUSTEE'S CERTIFICATE OF AUTHENTICATION

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.
as Trustee, certifies that this is one of the Notes described
in the within-named Indenture.

By: _____
Authorized Signatory

[*Signature Page – Akoustis Technologies, Inc. - 6.5% Convertible Senior Secured Note due 2023*]

[FORM OF REVERSE OF NOTE]

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

This Note is one of a duly authorized issue of Notes of the Company, designated as its 6.5% Convertible Senior Secured Notes due 2023 (the "**Notes**"), limited to the aggregate principal amount of $[_____], all issued or to be issued under and pursuant to an Indenture dated as of May [__], 2018 (the "**Indenture**" as it may be amended or supplemented from time to time), by and among the Company, the Guarantors listed therein, and The Bank of New York Mellon Trust Company, N.A., as trustee (the "**Trustee**") and as collateral agent (the "**Collateral Agent**") to which Indenture and all indentures supplemental thereto reference is hereby made for a description of the rights, limitations of rights, obligations, duties and immunities thereunder of the Trustee, the Company and the Holders of the Notes.

The indebtedness evidenced by the Notes are the Company's senior secured obligations and rank senior to all of the Company's existing and future unsecured indebtedness to the extent of the value of the Collateral. The Company has the right to incur capital lease obligations and purchase money indebtedness for the purpose of financing the purchase price or cost of equipment used in its and its subsidiaries' production lines and up to an additional $1 million of such indebtedness for other purposes. The Notes rank junior to any such indebtedness to the extent of the assets acquired with the proceeds thereof.

The interest rate to be borne by this Note shall be subject to increase based on the following: (i) pursuant to, and as set forth in, the Registration Rights Agreement and the Indenture, the Company may be required to pay Additional Interest and (ii) pursuant to, and as set forth in, the Indenture, the Company may be required to pay Special Interest.

The Notes may not be redeemed at the option of the Company at any time prior to May 31, 2019.

At any time and from time to time on or after May 31, 2019 the Company may, pursuant to Article 3 of the Indenture, redeem all or a portion of the Notes at a redemption price equal to 100% of the Principal Amount plus accrued and unpaid Interest on such Principal if the Closing Sale Price of the Common Stock is greater than 175% of the then effective Conversion Price for each of 20 of any 30 consecutive Trading Days immediately preceding the applicable Optional Redemption Notice.

On May 31, 2021, the Holder may, pursuant to Section 3.08 of the Indenture, elect to require the Company to redeem all (but not less than all) of the Notes at a purchase price in cash equal to 100% of the Principal Amount to be repurchased, plus accrued and unpaid Interest to, and including, the Holder Optional Redemption Date.

In case certain Events of Default shall have occurred and be continuing, the Principal of, and Interest on, all Notes may be declared, by either the Trustee or Holders of at least 25% in aggregate Principal amount of Notes then outstanding, and upon said declaration shall become, due and payable, in the manner, with the effect and subject to the conditions and certain exceptions set forth in the Indenture.

Subject to the terms and conditions of the Indenture, the Company will make all payments and deliveries in respect of the Fundamental Change Repurchase Price on the Fundamental Change Repurchase Date and the Principal amount on the Stated Maturity, as the case may be, to the Holder who surrenders a Note to a Paying Agent to collect such payments in respect of the Note. The Company shall pay cash amounts in money of the United States that at the time of payment is legal tender for payment of public and private debts.

The Indenture contains provisions permitting the Company and the Trustee in certain circumstances, without the consent of the Holders of the Notes, and in certain other circumstances, with the consent of the Majority Holders, evidenced as in the Indenture provided, to modify the terms of the Indenture and the Notes as described therein. It is also provided in the Indenture that, subject to certain exceptions, the Majority Holders may on behalf of the Holders of all of the Notes waive any past Default or Event of Default under the Indenture and its consequences.

Each Holder shall have the right to receive payment or delivery, of (x) the Principal (including the Fundamental Change Repurchase Price, if applicable) of, (y) accrued and unpaid Interest, if any, on, and (z) the consideration due upon conversion of, this Note at the place, at the respective times, at the rate and in the lawful money and/or Freely Tradeable Common Stock, as the case may be, as determined by the Company pursuant to the Indenture.

The Notes are issuable in registered form without coupons in denominations of $1,000 principal amount and integral multiples thereof. At the office or agency of the Company designated by the Company for such purpose under the Indenture, and in the manner and subject to the limitations provided in the Indenture, Notes may be exchanged for a like aggregate Principal Amount of Notes of other authorized denominations, without payment of any service charge but, if required by the Company or Trustee, with payment of a sum sufficient to cover any transfer or similar tax that may be imposed in connection therewith as a result of the name of the Holder of the new Notes issued upon such exchange of Notes being different from the name of the Holder of the old Notes surrendered for such exchange. The Trustee and the Registrar may require a Holder, among other things, to furnish appropriate endorsements and transfer documents.

Subject to the provisions of the Indenture, the Holder hereof has the right, at its option, prior to the close of business on the Business Day immediately preceding the Maturity Date, to convert any Notes or portion thereof that is $1,000 or an integral multiple thereof, into shares of Common Stock at the Conversion Rate specified in the Indenture, as adjusted from time to time as provided in the Indenture.

For any Conversion Date that occurs on or after the date that is one year after the last date of original issuance of the notes but prior to May 31, 2021 (other than a conversion in connection with a Qualifying Fundamental Change), the Company will make an Interest Make-Whole Payment to the converting Holder, payable in cash and/or Freely Tradeable Common Stock, as determined by the Company pursuant to the Indenture, equal to the sum of the remaining scheduled payments of Interest that would have been made on the Notes to be converted had such Notes remained outstanding from the Conversion Date through and including the Holder Optional Redemption Date.

Upon the occurrence of a Fundamental Change, the Holder has the right, at such Holder's option, to require the Company to repurchase for cash all of such Holder's Notes or any portion thereof (in Principal Amounts of $1,000 or integral multiples thereof) on the Fundamental Change Repurchase Date at a price equal to the Fundamental Change Repurchase Price. If any Holder elects to convert its Note in connection with a Qualifying Fundamental Change, the Company will make a Qualifying Fundamental Change Payment as provided in the Indenture.

Unless the Company shall have obtained the requisite Stockholder Approval pursuant to NASDAQ Marketplace Rule 5635(c) or the listing requirements of such other Relevant Stock Exchange, the number of shares of Common Stock the Company may deliver in respect of the Notes, including those delivered as Interest, in connection with an Interest Make-Whole Payment, or in connection with a Qualifying Fundamental Change Payment, will not exceed, and the Conversion Rate will not be adjusted beyond the amount that results in the total number of shares issuable in respect of the Notes exceeding, 19.99% of the Common Stock outstanding (as appropriately adjusted to give effect to any stock splits, reverse stock splits, stock combinations, reclassifications, reorganizations or other similar transitions occurring after the date of the Indenture) as of the close of the Trading Day immediately preceding the date of the Indenture. The Company will make a cash payment in lieu of any whole shares of Common Stock that are not able to be delivered in excess of the foregoing threshold as provided in the Indenture.

If money for the payment of Principal or Interest, if any, remains unclaimed for two years, the Trustee or Paying Agent shall pay the money back to the Company at its written request, subject to applicable unclaimed property laws. After that, Holders entitled to money must look to the Company for payment as general creditors unless applicable abandoned property law designates another person.

Pursuant to a recommendation promulgated by the Committee on Uniform Security Identification Procedures, the Company has caused CUSIP numbers to be printed on the Notes and the Trustee may use CUSIP numbers in notices of redemption or repurchase as a convenience to Holders. No representation is made as to the accuracy of such numbers either as printed on the Notes or as contained in any notice of redemption and reliance may be placed only on the other identification numbers placed thereon.

ABBREVIATIONS

The following abbreviations, when used in the inscription of the face of this Note, shall be construed as though they were written out in full according to applicable laws or regulations:

TEN COM = as tenants in common

UNIF GIFT MIN ACT = Uniform Gifts to Minors Act

CUST = Note Custodian

TEN ENT = as tenants by the entireties

JT TEN = joint tenants with right of survivorship and not as tenants in common

Additional abbreviations may also be used though not in the above list.

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

SCHEDULE OF EXCHANGES OF NOTES[6]

The initial Principal Amount of this Global Note is [ ] DOLLARS ($[ ]). The following increases or decreases in this Global Note have been made:

Date of exchange	Amount of decrease in principal amount of this Global Note	Amount of increase in principal amount of this Global Note	Principal amount of this Global Note following such decrease or increase	Signature of authorized signatory of Trustee or Note Custodian

[6] Include if a global note.

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

ATTACHMENT 1

GUARANTEE

The Guarantor listed below and its successors under the Indenture, jointly and severally with any other Guarantors, hereby irrevocably and unconditionally guarantees, on a senior secured senior basis (i) the due and punctual payment of the Principal of, premium, if any, and Interest on the Notes, whether at maturity, by acceleration or otherwise, the due and punctual payment of Interest on the overdue Principal of an Interest, if any, on the Notes, to the extent lawful, and the due and punctual performance of all other obligations of the Guarantors listed below to the Holders or the Trustee all in accordance with the terms set forth in Article 14 of the Indenture and (ii) in case of any extension of time of payment or renewal of any Notes or any such other obligations, that the same will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, whether at stated maturity, by acceleration or otherwise. Capitalized terms used herein have the meanings assigned to them in the Indenture and the Note unless otherwise indicated.

This Guarantee shall be binding upon the Guarantor listed below and its successors and assigns and shall inure to the benefit of the successors and assigns of the Trustee and the Holders and, in the event of any transfer or assignment of rights by any Holder or the Trustee, the rights and privileges herein conferred upon that party shall automatically extend to and be vested in such transferee or assignee, all subject to the terms and conditions hereof.

This Guarantee shall not be valid or obligatory for any purposes until the certificate of authentication on the Note upon which this Guarantee is noted shall have been executed by the Trustee under the Indenture by the manual signature of one of its authorized officers.

This Guarantee is subject to release upon the terms set forth in the Indenture.

The obligations of the undersigned to Holders and to the Trustee pursuant to this guarantee and the Indenture are expressly set forth in Article 14 of the Indenture and reference is hereby made to the Indenture for the precise terms of the guarantee and all other provisions of the Indenture to which this Guarantee relates.

This Guarantee shall be governed by, and construed in accordance with, the laws of the State of New York.

AKOUSTIS, INC.

By: _____
Name:
Title:

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

ATTACHMENT 2

FORM OF NOTICE OF CONVERSION

To: Akoustis Technologies, Inc.
9805 Northcross Center Court
Suite A
Huntersville, NC 28078

The Bank of New York Mellon Trust Company, N.A., as Conversion Agent
10161 Centurion Parkway N.
Jacksonville, Florida 32256
Attention: Corporate Trust Administration

The undersigned registered owner of this Note hereby exercises the option to convert this Note, or the portion hereof (that is $1,000 in principal amount or an integral multiple thereof) below designated, into shares of Common Stock in accordance with the terms of the Indenture referred to in this Note, and directs that the shares of Common Stock issuable and deliverable upon such conversion, together with any cash for any fractional share of Common Stock and cash payable for an Interest Make-Whole Payment or Qualifying Fundamental Change Payment, if applicable, and any Notes representing any unconverted Principal amount hereof, be issued and delivered to the registered Holder hereof unless a different name has been indicated below. If any shares of Common Stock or any portion of this Note not converted are to be issued in the name of a Person other than the undersigned, the undersigned will pay all documentary, stamp or similar issue or transfer taxes, if any in accordance with Section 9.02(d) and Section 9.02(e) of the Indenture. Any amount required to be paid to the undersigned on account of Interest accompanies this Note. Capitalized terms used herein but not defined shall have the meanings ascribed to such terms in the Indenture.

Dated:

Signature(s)

Signature Guarantee

Signature(s) must be guaranteed by an eligible Guarantor Institution (banks, stock brokers, savings and loan associations and credit unions) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15 if shares of Common Stock are to be issued, or Notes are to be delivered, other than to and in the name of the registered holder.

Fill in for registration of shares if to be issued, and Notes if to be delivered, other than to and in the name of the registered holder:

(Name)

(Street Address)

(City, State and Zip Code)
Please print name and address

Principal amount to be converted (if less than all): $,000

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

Social Security or Other Taxpayer Identification Number

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

ATTACHMENT 3

FORM OF REPURCHASE NOTICE

To: Akoustis Technologies, Inc.
9805 Northcross Center Court
Suite A
Huntersville, NC 28078

The Bank of New York Mellon Trust Company, N.A., as Paying Agent
10161 Centurion Parkway N.
Jacksonville, Florida 32256
Attention: Corporate Trust Administration

The undersigned registered owner of this Note hereby acknowledges receipt of a Holder Optional Redemption Notice from Akoustis Technologies, Inc. (the "**Company**") specifying the Holder Optional Redemption Date and requests and instructs the Company to pay to the registered holder hereof in accordance with Section 3.08 of the Indenture referred to in this Note (1) the entire Principal amount of this Note, and (2) if such Holder Optional Redemption Date does not fall during the period after a Regular Record Date and on or prior to the corresponding Interest Payment Date, accrued and unpaid Interest, if any, thereon to, and including, such Holder Optional Redemption Date. Capitalized terms used herein but not defined shall have the meanings ascribed to such terms in the Indenture.

In the case of Physical Notes, the certificate numbers of the Notes to be repurchased are as set forth below:

Dated:

Signature(s)

Social Security or Other Taxpayer Identification Number

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

ATTACHMENT 4

FORM OF FUNDAMENTAL CHANGE REPURCHASE NOTICE

To: Akoustis Technologies, Inc.
9805 Northcross Center Court
Suite A
Huntersville, NC 28078

The Bank of New York Mellon Trust Company, N.A., as Paying Agent
10161 Centurion Parkway N.
Jacksonville, Florida 32256
Attention: Corporate Trust Administration

The undersigned registered owner of this Note hereby acknowledges receipt of a notice from Akoustis Technologies, Inc. (the "**Company**") as to the occurrence of a Fundamental Change with respect to the Company and specifying the Fundamental Change Repurchase Date and requests and instructs the Company to pay to the registered holder hereof in accordance with Section 10.01 of the Indenture referred to in this Note (1) the entire Principal amount of this Note, or the portion thereof (that is $1,000 principal amount or an integral multiple thereof) below designated, and (2) if such Fundamental Change Repurchase Date does not fall during the period after a Regular Record Date and on or prior to the corresponding Interest Payment Date, accrued and unpaid Interest, if any, thereon to, but excluding, such Fundamental Change Repurchase Date. Capitalized terms used herein but not defined shall have the meanings ascribed to such terms in the Indenture.

In the case of Physical Notes, the certificate numbers of the Notes to be repurchased are as set forth below:

Dated:

Signature(s)

Social Security or Other Taxpayer Identification Number

Principal amount to be repurchased (if less than all): $,000

NOTICE: The above signature(s) of the Holder(s) hereof must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

AKOUSTIS TECHNOLOGIES, INC.
6.5% Convertible Senior Secured Note due 2023

ATTACHMENT 5

FORM OF ASSIGNMENT AND TRANSFER

For value received, hereby sell(s), assign(s) and transfer(s) unto (Please insert social security or Taxpayer Identification Number of assignee) the within Note, and hereby irrevocably constitutes and appoints as attorney to transfer the said Note on the books of the Company, with full power of substitution in the premises.

Dated:

Signature(s)

Signature Guarantee

Signature(s) must be guaranteed by an eligible Guarantor Institution (banks, stock brokers, savings and loan associations and credit unions) with membership in an approved signature guarantee medallion program pursuant to Securities and Exchange Commission Rule 17Ad-15 if Notes are to be delivered, other than to and in the name of the registered holder.

NOTICE: The signature on the assignment must correspond with the name as written upon the face of the Note in every particular without alteration or enlargement or any change whatever.

Exhibit 10.1

AKOUSTIS TECHNOLOGIES, INC.

6.5% Convertible Senior Secured Notes due 2023

Purchase Agreement

May 10, 2018

Oppenheimer & Co. Inc.
As Representative of the
several Initial Purchasers listed
in Schedule 1 hereto

c/o Oppenheimer & Co. Inc.
85 Broad Street
New York, New York 10004

Ladies and Gentlemen:

Akoustis Technologies, Inc., a Delaware corporation (the "**Company**") proposes to issue and sell to the several Initial Purchasers listed in Schedule 1 hereto (the "**Initial Purchasers**"), for whom you are acting as Representative (the "**Representative**"), an aggregate of $15.0 million principal amount of its 6.5% Convertible Senior Secured Notes due 2023 (the "**Notes**") and the Guarantors (as hereinafter defined) propose to issue and sell to the Initial Purchasers Guarantees (as hereinafter defined) with respect to the Notes (the Notes and the Guarantees, collectively, the "**Securities**"). The Notes will be convertible into shares (the "**Underlying Securities**") of common stock of the Company, par value $0.001 per share (the "**Common Stock**"), subject to certain limitations as set forth in the Indenture (as defined herein). The Securities will be issued pursuant to an Indenture to be dated as of the Closing Date (as defined below) (the "**Indenture**"), among the Company, the Guarantors party thereto and The Bank of New York Mellon Trust Company, N.A., as trustee (the "**Trustee**").

Pursuant to the Indenture, the Company will have the right, at its option, to pay (i) interest on the Notes, (ii) certain make-whole payments in connection with certain conversions of the Notes and (iii) certain payments in connection with conversions of the Notes in connection with a qualifying fundamental transaction (as defined in the Indenture) in cash and/or freely tradable shares (as defined hereinafter) of Common Stock, subject to certain limitations set forth in the Indenture. As used herein, the term "**freely tradable shares**" means shares of Common Stock approved for listing or inclusion upon official notice of issuance on any national securities exchange or U.S. trading market on which the Common Stock is then listed or included and (i) registered pursuant to a registration statement filed by the Company with the Securities and Exchange Commission (the "**Commission**") pursuant to the Securities Act of 1933, as amended (the "**Securities Act**"), and declared effective by the Commission and which may be immediately sold or otherwise disposed of by the Holders (as defined hereinafter) without further registration or other restriction under the Securities Act and applicable state securities laws, or (ii) issued pursuant to a transaction exempt from the registration and prospectus delivery requirements of the Securities Act which may be immediately sold or otherwise disposed of by the Holders without further registration or other restriction under the Securities Act and applicable state securities laws. Any freely tradable shares issued pursuant to the Indenture are hereinafter referred to as the "**Additional Shares**."

Pursuant to the Indenture, all existing and future subsidiaries (as hereinafter defined) of the Company will fully and unconditionally guarantee, on a senior secured basis, to each holder of the Notes and the Trustee, the payment and performance of the Company's obligations under the Indenture and the Notes (each existing subsidiary of the Company being referred to herein as a "**Guarantor"** and each such guarantee being referred to herein as a "**Guarantee**").

Pursuant to the terms of the Collateral Documents (as defined below), all of the obligations under the Securities and the Indenture will be secured, to the extent permitted by law, by a first priority lien and security interest in substantially all of the assets of the Company and its existing and future subsidiaries, subject to permitted liens or permitted encumbrances, as applicable, including a first priority lien and security interest in the capital stock of the Company's existing and future subsidiaries in favor of The Bank of New York Mellon Trust Company, N.A., as collateral agent (the "**Collateral Agent**"). As used herein, the term "**Collateral Documents**" means the agreements, documents and instruments listed on **Schedule I** hereto. Capitalized terms used herein and not otherwise defined herein have the respective meanings ascribed thereto in the Indenture or the Collateral Documents, as applicable.

Holders of the Securities and the Underlying Securities will have the registration rights set forth in a registration rights agreement applicable to the Securities and the Underlying Securities (the "**Registration Rights Agreement**"), to be executed and delivered by the Company and the Guarantors on the Closing Date (as defined below). Pursuant to the Registration Rights Agreement, the Company and the Guarantors will agree, among other things, to

(i) file a registration statement (the "**Registration Statement**") with the Commission within 90 days of the Closing Date covering the resale of the Securities and the Underlying Securities; and

(ii) use their respective best efforts to cause the Registration Statement to be declared effective within 180 days of the Closing Date.

If the Securities and the Underlying Securities are not registered for resale within that time period, or if the Company and the Guarantors fail to maintain the effectiveness and availability of the Registration Statement (subject to certain grace periods), the Company will pay additional interest at a rate per annum of 0.50% for the first 90 day period following the occurrence of the relevant event and, thereafter, at a rate per annum of 1.0% until such event is cured. Pursuant to the Registration Rights Agreement, the Company will agree to maintain the registration of the Securities and the Underlying Securities until the earliest of the date that (i) all of such securities have been sold either pursuant to the Registration Statement or Rule 144 under the Securities Act or are no longer outstanding, (ii) such securities may be sold without restriction by each holder pursuant to Rule 144 in a single transaction and certain other conditions have been satisfied, or (iii) is two years after the Registration Statement is declared effective.

This agreement (this "**Agreement**"), the Indenture, the Collateral Documents, the Registration Rights Agreement, the Securities and all agreements ancillary thereto are collectively referred to herein as the "**Transaction Documents**."

The Company and the Guarantors hereby confirm their joint and several agreement with the several Initial Purchasers concerning the purchase and sale of the Securities, as follows:

1. The Securities will be sold to the Initial Purchasers without being registered under the Securities Act, in reliance upon an exemption therefrom. The Company has prepared a preliminary offering memorandum dated May 1, 2018 (the "**Preliminary Offering Memorandum**") and will prepare an offering memorandum dated the date hereof (the "**Offering Memorandum**") setting forth information concerning the Company, the Securities and the Underlying Securities. Copies of the Preliminary Offering Memorandum have been, and copies of the Offering Memorandum will be, delivered by the Company to the Initial Purchasers pursuant to the terms of this Agreement. The Company hereby confirms that it has authorized the use of the Preliminary Offering Memorandum, the other Time of Sale Information (as defined below) and the Offering Memorandum in connection with the offering and resale of the Securities by the Initial Purchasers in the manner contemplated by this Agreement. References herein to the Preliminary Offering Memorandum, the Time of Sale Information and the Offering Memorandum shall be deemed to refer to and include any document incorporated by reference therein and any reference to "amend," "amendment" or "supplement" with respect to the Preliminary Offering Memorandum and the Offering Memorandum shall be deemed to refer to and include any documents filed after such date and incorporated by reference therein.

At or prior to 8:00 a.m. New York City time on May 10, 2018 (the "**Time of Sale**"), the Company had prepared the following information (collectively, the "**Time of Sale Information**"): the Preliminary Offering Memorandum, as supplemented and amended by the term sheet attached as **Annex A** hereto.

2. Purchase and Resale of the Securities by the Initial Purchasers.

(a) The Company and the Guarantors jointly and severally agree to issue and sell the Securities to the several Initial Purchasers as provided in this Agreement, and each Initial Purchaser, on the basis of the representations, warranties and agreements set forth herein and subject to the conditions set forth herein, agrees, severally and not jointly, to purchase from the Company and the Guarantors the respective principal amount of Securities set forth opposite such Initial Purchaser's name in Schedule 1 hereto at an aggregate price equal to 93.75% of the principal amount thereof (the "**Purchase Price**").

(b) The Company and the Guarantors understand that the Initial Purchasers intend to offer the Securities for resale on the terms set forth in the Time of Sale Information. Each Initial Purchaser, severally and not jointly, represents, warrants and agrees that:

(i) it is a qualified institutional buyer within the meaning of Rule 144A under the Securities Act (a "**QIB**") and an accredited investor within the meaning of Rule 501(a) of Regulation D under the Securities Act ("**Regulation D**");

(ii) it has not solicited offers for, or offered or sold, and will not solicit offers for, or offer or sell, the Securities by means of any form of general solicitation or general advertising within the meaning of Rule 502(c) of Regulation D or in any manner involving a public offering within the meaning of Section 4(a)(2) of the Securities Act; and

(iii) it has not solicited offers for, or offered or sold, and will not solicit offers for, or offer or sell, the Securities as part of their initial offering except within the United States to persons whom it reasonably believes to be QIBs in transactions pursuant to Rule 144A under the Securities Act ("**Rule 144A**") and in connection with each such sale, it has taken or will take reasonable steps to ensure that the purchaser of the Securities is aware that such sale is being made in reliance on Rule 144A.

(c) Each Initial Purchaser acknowledges and agrees that the Company and the Guarantors and, for purposes of the opinions to be delivered to the Initial Purchasers pursuant to Sections 6(e) and 6(g), counsel for the Company and the Guarantors and counsel for the Initial Purchasers, respectively, may rely upon the accuracy of the representations and warranties of the Initial Purchasers, and compliance by the Initial Purchasers with their agreements, contained in paragraph (b) above, and each Initial Purchaser hereby consents to such reliance.

(d) The Company and the Guarantors acknowledge and agree that the Initial Purchasers may offer and sell Securities to or through any affiliate of an Initial Purchaser and that any such affiliate may offer and sell Securities purchased by it to or through any Initial Purchaser; provided that such offers and sales shall be made in accordance with the provisions of this Agreement.

(e) Payment for the Securities shall be made by wire transfer in immediately available funds to the account specified by the Company to the Representative in the case of the Securities, at the offices of Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, New York 10020 at 10:00 a.m., New York City time, on May 14, 2018, or at such other time or place on the same or such other date, not later than the fifth business day after the date of this Agreement, as the Representative and the Company may agree upon in writing. The time and date of such payment for the Securities is referred to herein as the "**Closing Date**."

(f) Payment for the Securities to be purchased on the Closing Date shall be made against delivery to the nominee of The Depository Trust Company ("**DTC**") for the respective accounts of the several Initial Purchasers of the Securities to be purchased on the Closing Date, of one or more global notes representing the Securities (collectively, the "**Global Note**"), with any transfer taxes payable in connection with the sale of such Securities duly paid by the Company. The Global Note will be made available for inspection by the Representative at the office of Oppenheimer & Co. Inc., set forth above, not later than 1:00 p.m., New York City time, on the business day prior to the Closing Date.

(g) The Company and the Guarantors acknowledge and agree that each Initial Purchaser is acting solely in the capacity of an arm's length contractual counterparty to the Company and the Guarantors with respect to the offering of Securities contemplated hereby (including in connection with determining the terms of the offering) and not as a financial advisor or a fiduciary to, or an agent of, the Company, the Guarantors or any other person. Additionally, neither the Representative nor any other Initial Purchaser is advising the Company, any Guarantor or any other person as to any legal, tax, investment, accounting or regulatory matters in any jurisdiction. The Company and the Guarantors shall consult with their own advisors concerning such matters and shall be responsible for making its own independent investigation and appraisal of the transactions contemplated hereby, and neither the Representative nor any other Initial Purchaser shall have any responsibility or liability to the Company or the Guarantors with respect thereto. Any review by the Representative or any Initial Purchaser of the Company, the Guarantors, the transactions contemplated hereby or other matters relating to such transactions will be performed solely for the benefit of the Representative or such Initial Purchaser and shall not be on behalf of the Company or the Guarantors.

3 . Representations and Warranties of the Company and the Guarantors . The Company and the Guarantors, jointly and severally, represent and warrant to each Initial Purchaser that:

(a) *Preliminary Offering Memorandum.* The Preliminary Offering Memorandum, as of its date, did not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company and the Guarantors make no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Initial Purchaser furnished to the Company in writing by such Initial Purchaser through the Representative expressly for use in the Preliminary Offering Memorandum, it being understood and agreed that the only such information furnished by any Initial Purchaser consists of the information described as such in Section 7(b) hereof.

(b) *Time of Sale Information*. The Time of Sale Information, at the Time of Sale, did not, and as of the Closing Date, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company and the Guarantors make no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Initial Purchaser furnished to the Company in writing by such Initial Purchaser through the Representative expressly for use in such Time of Sale Information, it being understood and agreed that the only such information furnished by any Initial Purchaser consists of the information described as such in Section 7(b) hereof. No statement of material fact included in the Offering Memorandum has been omitted from the Time of Sale Information and no statement of material fact included in the Time of Sale Information that is required to be included in the Offering Memorandum has been omitted therefrom.

(c) *Additional Written Communications.* Neither the Company nor any of the Guarantors (including their respective agents and representatives, other than the Initial Purchasers in their capacity as such) has made, used, prepared, authorized, approved or referred to and will not prepare, make, use, authorize, approve or refer to any "written communication" (as defined in Rule 405 under the Securities Act) that constitutes an offer to sell or solicitation of an offer to buy the Securities (each such communication by the Company or any Guarantor or their respective agents and representatives (other than a communication referred to in clauses (i), (ii) and (iii) below) an "**Issuer Written Communication**") other than (i) the Preliminary Offering Memorandum, (ii) the Offering Memorandum, (iii) a term sheet substantially in the form of **Annex A** hereto, which constitutes part of the Time of Sale Information, and (iv) each electronic road show and any other written communications approved in writing in advance by the Representative. Each such Issuer Written Communication does not conflict with the information contained in the Time of Sale Information, and when taken together with the Time of Sale Information, did not, and at the Closing Date, will not, contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company and the Guarantors make no representation and warranty with respect to any statements or omissions made in each such Issuer Written Communication in reliance upon and in conformity with information relating to any Initial Purchaser furnished to the Company in writing by such Initial Purchaser through the Representative expressly for use in such Issuer Written Communication, it being understood and agreed that the only such information furnished by any Initial Purchaser consists of the information described as such in Section 7(b) hereof.

(d) *Offering Memorandum.* As of the date of the Offering Memorandum and as of the Closing Date, the Offering Memorandum does not and will not contain any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading; provided that the Company makes no representation and warranty with respect to any statements or omissions made in reliance upon and in conformity with information relating to any Initial Purchaser furnished to the Company in writing by such Initial Purchaser through the Representative expressly for use in the Offering Memorandum, it being understood and agreed that the only such information furnished by any Initial Purchaser consists of the information described as such in Section 7(b) hereof.

(e) *Incorporated Documents.* The documents incorporated by reference in the Offering Memorandum or the Time of Sale Information, when filed with the Commission conformed, or will conform, as the case may be, in all material respects to the requirements of the Securities Exchange Act of 1934, as amended, and the rules and regulations of the Commission thereunder (collectively, the "**Exchange Act**"), and such documents did not, or will not, as the case may be, contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements therein, in the light of the circumstances under which they were made, not misleading.

(f) *Financial Statements.* The financial statements of the Company (including all notes and schedules thereto) included or incorporated by reference in the Time of Sale Information and the Offering Memorandum present fairly the financial position of the Company and its consolidated subsidiaries at the dates indicated and the statement of operations, stockholders' equity and cash flows of the Company and its consolidated subsidiaries for the periods specified, it being understood that unaudited interim financial statements are subject to normal year-end adjustments; and such financial statements and related schedules and notes thereto, and the unaudited financial information included or incorporated by reference in the Time of Sale Information and the Offering Memorandum, have been prepared in conformity with generally accepted accounting principles ("**GAAP**"), consistently applied throughout the periods covered thereby, except as may be otherwise specified therein or to the extent unaudited interim financial statements exclude footnotes or may be condensed or summary statements. The summary and selected financial data included in the Time of Sale Information and the Offering Memorandum present fairly the information shown therein as at the respective dates and for the respective periods specified and have been presented on a basis consistent with the consolidated financial statements set forth in the Offering Memorandum and other financial information.

(g) *Independent Accountant.* Marcum LLP ("**Marcum**") whose reports are included or incorporated by reference as part of the Time of Sale Information and Offering Memorandum is and, during the periods covered by its reports, was an independent registered public accounting firm as required by the Securities Act and the published rules and regulations thereunder (the "**Rules**").

(h) *No Material Adverse Effect*. Subsequent to the respective dates as of which information is given in the Time of Sale Information and the Offering Memorandum, (i) there has not been any event which could have a Material Adverse Effect (as defined below); (ii) neither the Company nor any of its subsidiaries has sustained any loss or interference with its assets, businesses or properties (whether owned or leased) from fire, explosion, earthquake, flood or other calamity, whether or not covered by insurance, or from any labor dispute or any court or legislative or other governmental action, order or decree which would have a Material Adverse Effect; and (iii) since the date of the latest balance sheet included in the Time of Sale Information and the Offering Memorandum, neither the Company nor its subsidiaries has (A) issued any securities or incurred any liability or obligation, direct or contingent, for borrowed money, except such liabilities or obligations incurred in the ordinary course of business, (B) entered into any transaction not in the ordinary course of business or (C) declared or paid any dividend or made any distribution on any shares of its stock or redeemed, purchased or otherwise acquired or agreed to redeem, purchase or otherwise acquire any shares of its capital stock.

(i) *Organization and Good Standing.* The Company and each of its subsidiaries, including each entity (corporation, partnership, joint venture, association or other business organization) controlled directly or indirectly by the Company (each, a "**subsidiary**"), is duly organized, validly existing and in good standing under the laws of their respective jurisdictions of incorporation or organization and each such entity has all requisite power and authority to carry on its business as is currently being conducted as described in the Time of Sale Information and the Offering Memorandum, and to own, lease and operate its properties. The Company and each of its subsidiaries is duly qualified to do business and is in good standing as a foreign corporation in each jurisdiction in which the nature of the business conducted by it or location of the assets or properties owned, leased or licensed by it requires such qualification, except for such jurisdictions where the failure to so qualify individually or in the aggregate would not have a material adverse effect on (A) the assets, properties, condition, financial or otherwise, or in the results of operations, business affairs or business prospects of the Company and its subsidiaries considered as a whole (B) the ability of the Comp-any and the Guarantors to perform their obligations under any Transaction Document, (C) the validity or enforceability of any Transaction Document, (D) the attachment, perfection or priority of any of the Liens or the security interests intended to be created by the Collateral Documents, or (E) the consummation of any of the transactions contemplated under any of the Transaction Documents (each, a "**Material Adverse Effect**"); and to the Company's knowledge, no proceeding has been instituted in any such jurisdiction revoking, limiting or curtailing, or seeking to revoke, limit or curtail, such power and authority or qualification.

(j) *Capitalization.* The Company has authorized and outstanding capital stock as set forth under the caption "Capitalization" in the Time of Sale Information and the Offering Memorandum. All of the issued and outstanding shares of Common Stock have been duly and validly issued and are fully paid and nonassessable. There are no statutory preemptive or other similar rights to subscribe for or to purchase or acquire any shares of Common Stock of the Company or any of its subsidiaries or any such rights pursuant to its certificate of incorporation or by-laws or any agreement or instrument to or by which the Company or any of its subsidiaries is a party or bound. Except as disclosed in the Time of Sale Information and the Offering Memorandum and except for the Additional Shares, there is no outstanding option, warrant or other right calling for the issuance of, and there is no commitment, plan or arrangement to issue, any share of stock of the Company or any of its subsidiaries or any security convertible into, or exercisable or exchangeable for, such stock. The exercise price of each employee option to acquire Common Stock (each, a "**Company Stock Option**") is no less than the fair market value of a share of Common Stock as determined on the date of grant of such Company Stock Option. All grants of Company Stock Options were validly issued and properly approved by the board of directors of the Company in material compliance with all applicable laws and the terms of the plans under which such Company Stock Options were issued and were recorded on the Company Financial Statements in accordance with GAAP, and no such grants involved any "back dating", "forward dating," "spring loading" or similar practices with respect to the effective date of grant. The Common Stock and the Securities conform in all material respects to all statements in relation thereto contained in the Time of Sale Information and the Offering Memorandum. All of the issued shares of capital stock of, or other ownership interests in, each Guarantor have been duly and validly authorized and issued and are fully paid and, in the case of stock, non-assessable and are owned, directly or indirectly, by the Company, free and clear of any lien, charge, mortgage, pledge, security interest, claim, limitation on voting rights, equity, trust or other encumbrance, preferential arrangement, defect or restriction of any kind whatsoever, other than Permitted Liens.

(k) *Due Authorization.* The Company and the Guarantors have the full right, power and authority to execute and deliver this Agreement and the other Transaction Documents and to perform their obligations hereunder and thereunder; and all action required to be taken for the due and proper authorization, execution and delivery by it of each of the Transaction Documents and the consummation by it of the transactions contemplated thereby or by the Time of Sale Information and the Offering Memorandum has been duly and validly taken.

(l) *Purchase Agreement.* This Agreement has been duly authorized, executed and delivered by the Company and the Guarantors.

(m) *The Securities.* The Securities to be issued and sold by the Company and the Guarantors hereunder have been duly authorized by the Company and the Guarantors and, when duly executed, authenticated, issued and delivered as provided in the Indenture and paid for as provided herein, will be duly and validly issued and outstanding and will constitute valid and legally binding obligations of each of the Company and the Guarantors enforceable against the Company and the Guarantors in accordance with their terms, except as enforceability may be limited by applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium or similar laws affecting creditors' rights generally or by equitable principles relating to enforceability (collectively, the "**Enforceability Exceptions**"), and will be entitled to the benefits provided by the Indenture, the Collateral Documents and the Registration Rights Agreement.

(n) *The Indenture, the Collateral Documents and the Registration Rights Agreement*. Each of the Indenture, the Collateral Documents and the Registration Rights Agreement have been duly authorized by the Company and the Guarantors and, when duly executed and delivered in by each of the parties thereto, will constitute a valid and legally binding agreement of each of the Company and the Guarantors, enforceable against each of the Company and the Guarantors in accordance with its terms, except as enforceability may be limited by the Enforceability Exceptions.

(o) *The Underlying Securities; Additional Shares*. Upon issuance, authentication and delivery of the Securities in accordance with this Agreement and the Indenture, the Securities will be convertible into the Underlying Securities, subject to certain conditions set forth in, and in accordance with the terms of, the Securities and the Indenture; the Company has duly authorized and reserved for issuance by all necessary corporate action 4,444,217 shares of Common Stock (appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction occurring after the date hereof) (the "**Maximum Share Reserve"**) for issuance upon conversion of the Securities and for issuance as Additional Shares. 3,000,000 shares of the Maximum Share Reserve (appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction occurring after the date hereof) shall be reserved exclusively for issuance upon conversion of the Securities (the "**Maximum Conversion Share Reserve**"). Up to all of the remaining 1,444,217 shares (appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction occurring after the date hereof) of the Maximum Share Reserve may be reserved for issuance as Additional Shares (the "**Maximum Additional Share Reserve**"). When issued upon conversion of the Securities in accordance with the terms of the Securities and the Indenture, the Underlying Securities will be validly issued, fully paid and non-assessable, free and clear of any pledge, lien, encumbrance, security interest or other claim; and the issuance of such Underlying Securities will not be subject to any preemptive or similar rights. When issued in accordance with the terms of the Securities and the Indenture, the Additional Shares will be validly issued, fully paid and non-assessable, free and clear of any pledge, lien, encumbrance, security interest or other claim; and the issuance of such Additional Shares will not be subject to any preemptive or similar rights.

(p) *Descriptions of the Transaction Documents.* There is no document, contract or other agreement required to be described in Time of Sale Information or the Offering Memorandum, which is not described as required by the Securities Act or Rules. Each description of a contract, document or other agreement in the Time of Sale Information or the Offering Memorandum accurately reflects, in all respects, the terms of the underlying contract, document or other agreement. Each contract, document or other agreement described in the Time of Sale Information or the Offering Memorandum or incorporated by reference is in full force and effect and is valid and enforceable by and against the Company or its subsidiary, as the case may be, in accordance with its terms. When executed and delivered, the Transaction Documents will conform in all material respect to the descriptions thereof in the Time of Sale Information and the Offering Memorandum.

(q) *No Violation or Default.* Neither the Company nor any subsidiary (i) is in violation of its certificate or articles of incorporation, by-laws, certificate of formation, limited liability company agreement, partnership agreement or other organizational documents, (ii) is in default under, and no event has occurred which, with notice or lapse of time, or both, would constitute a default under, or result in the creation or imposition of any lien, charge, mortgage, pledge, security interest, claim, limitation on voting rights, equity, trust or other encumbrance, preferential arrangement, defect or restriction of any kind whatsoever, upon, any property or assets of the Company or any subsidiary pursuant to, any bond, debenture, note, indenture, mortgage, deed of trust, loan agreement or other agreement or instrument to which it is a party or by which it is bound or to which any of its properties or assets is subject or (iii) is in violation of any statute, law, rule, regulation, ordinance, directive, judgment, decree or order of any judicial, regulatory or other legal or governmental agency or body, foreign or domestic, except (in the case of clauses (ii) and (iii) above) for violations or defaults that could not (individually or in the aggregate) reasonably be expected to have a Material Adverse Effect.

(r) *No Conflicts; No Approvals.* The execution, delivery and performance by the Company and the Guarantors of each of the Transaction Documents, the issuance and sale of the Securities, the issuance of any Underlying Securities upon conversion thereof, the issuance of the Additional Shares, and the consummation of the transactions contemplated by the Transaction Documents or the Time of Sale Information and the Offering Memorandum will not (i) give rise to a right to terminate or accelerate the due date of any payment due under, or conflict with or result in the breach of any term or provision of, or constitute a default under, or require any consent or waiver (other than such consents or waivers which have already been obtained and are in full force and effect) under, or result in the execution or imposition of any Lien upon any properties or assets of the Company or its subsidiaries (except for Liens pursuant to the Collateral Documents) pursuant to the terms of, (x) any indenture, mortgage, deed of trust or other agreement or instrument to which the Company or any of its subsidiaries is a party or by which either the Company or its subsidiaries or any of their properties or businesses is bound, or (y) any franchise, license, permit, judgment, decree, order, statute, rule or regulation applicable to the Company or any of its subsidiaries or (ii) violate any provision of the charter or by-laws of the Company or any of its subsidiaries. No consent, approval, authorization or order of any governmental authority, or third party is required (i) for the issuance and sale by the Company and the Guarantors of the Securities to the Initial Purchasers or the issuance of the Underlying Securities and the Additional Shares, (ii) the issuance by the Guarantors of the Guarantees, or (iii) the consummation by the Company and the Guarantors of the other transactions contemplated by the Transaction Documents, except such as have been obtained and such as may be required under state securities or "Blue Sky" laws in connection with the purchase and resale of the Securities by the Initial Purchasers.

(s) *Legal Proceedings.* Other than as described in the Offering Memorandum, there are no legal or governmental proceedings pending to which the Company or any of its subsidiaries is a party or of which any property of the Company or any of its subsidiaries is the subject which, if determined adversely to the Company or any of its subsidiaries would reasonably be expected to, individually or in the aggregate, have a Material Adverse Effect; and, to the knowledge of the Company, no such proceedings are threatened or contemplated by governmental authorities or threatened by others.

(t) *Title to Property*. Except as disclosed in the Time of Sale Information and the Offering Memorandum, the Company and each of its subsidiaries has good and marketable title to all property owned by it, in each case free and clear of all Liens, other than Permitted Liens or Permitted Encumbrances, as applicable. Except as disclosed in the Time of Sale Information and the Offering Memorandum, all property held under lease by any of the Company or any of its subsidiaries is held by such company under valid, existing and enforceable leases, free and clear of all Lines, other than Permitted Liens or Permitted Encumbrances, as applicable.

(u) *Intellectual Property*. The Company and its subsidiaries own or possess adequate rights to use all patents, patent applications, patent rights, licenses, inventions, copyrights, know-how (including trade secrets and other unpatented and/or unpatentable proprietary or confidential information, systems or procedures), trademarks, trademark registrations, service marks, service mark registrations, trade names, mask work rights and other intellectual property necessary to carry on the business now operated by it or proposed to be operated by it as described in the Time of Sale Information and the Offering Memorandum (collectively, "Intellectual Property"), except where the lack of such ownership or rights to use would not have a Material Adverse Effect. Except as disclosed in the Time of Sale Information and the Offering Memorandum, there is no litigation or other proceeding pending or, to the Company's knowledge, threatened by any third party challenging or questioning the ownership, validity, or enforceability of the Company's right to use or own any Intellectual Property or asserting that the use of the Company's Intellectual Property by the Company or the operation of the Company's business infringes upon or misappropriates the Intellectual Property of any third party. Except as disclosed in the Time of Sale Information and the Offering Memorandum, neither the Company nor any subsidiary has received a written notice that any of, the Intellectual Property (x) has expired, terminated or been abandoned, or (y) is essential for the Company's business and is expected to expire or terminate or be abandoned within two (2) years from the date of this Agreement. Except as disclosed in the Time of Sale Information and the Offering Memorandum, or as would not, individually or in the aggregate have a Material Adverse Effect, to the Company's knowledge, (i) there is no infringement by third parties engaged in commercial activity of any Intellectual Property of the Company relating to the Company's business and (ii) there are no non-commercial activities being performed by any third parties which, upon commercialization thereof, would reasonably be expected to infringe on the Intellectual Property of the Company. The Company and its subsidiaries have taken all steps necessary to perfect its ownership of and interest in the Intellectual Property.

(v) *No Undisclosed Relationships.* No transaction has occurred between or among the Company and any of its officers or directors, stockholders or any affiliate or affiliates of any such officer or director or stockholder that is required to be described in and is not described in the Time of Sale Information and the Offering Memorandum.

(w) *Investment Company Act*. The Company is not and, after giving effect to the offering and sale of the Securities and the application of proceeds thereof as described in the Time of Sale Information and the Offering Memorandum, will not be required to register as an "investment company" within the meaning of the Investment Company Act of 1940, as amended, and the rules and regulations of the Commission thereunder.

(x) *Taxes.* The Company and its subsidiaries have paid all federal, state, local and foreign taxes and filed all returns required to be paid or filed through the date hereof, except as currently being contested in good faith and for which appropriate reserves have been established on the books and records of the Company to the extent required by GAAP. The provisions for taxes payable, if any, shown on the financial statements included or incorporated by reference in the Time of Sale Information and the Offering Memorandum are sufficient for all accrued and unpaid taxes, whether or not disputed, and for all periods to and including the dates of such consolidated financial statements. No material issues have been raised (and are currently pending) by any taxing authority in connection with any of the returns or taxes asserted as due from the Company or its subsidiaries, and no waivers of statutes of limitation with respect to the returns or collection of taxes have been given by or requested from the Company or its subsidiaries. The term "taxes" means all federal, state, local, foreign, and other net income, gross income, gross receipts, sales, use, ad valorem, transfer, franchise, profits, license, lease, service, service use, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, windfall profits, customs, duties or other taxes, fees, assessments, or charges of any kind whatever, together with any interest and any penalties, additions to tax, or additional amounts with respect thereto. The term "returns" means all returns, declarations, reports, statements, and other documents required to be filed by the Company and its subsidiaries in respect to taxes.

(y) *Licenses and Permits.* The Company and each of its subsidiaries possesses all necessary authorizations, approvals, consents, orders, licenses, certificates and permits of and from all governmental or regulatory bodies (collectively, the "**Permits**"), to own, lease and license its assets and properties and conduct its business, all of which are valid and in full force and effect, except where the lack of such Permits, individually or in the aggregate, would not have a Material Adverse Effect. Except as described in the Time of Sale Information and the Offering Memorandum, neither the Company nor any of its subsidiaries has received notice of any revocation or modification of any such license, certificate, permit or authorization or has any reason to believe that any such license, certificate, permit or authorization will not be renewed in the ordinary course. Except as may be required under the Securities Act and state and foreign Blue Sky laws, no other Permits are required to enter into, deliver and perform this Agreement and to issue and sell the Securities.

(z) *No Labor Disputes.* Neither the Company nor any of its subsidiaries is involved in any labor dispute nor, to the knowledge of the Company, is any such dispute threatened, which dispute would reasonably be expected have a Material Adverse Effect. To the Company's knowledge, no existing or imminent labor disturbance by the employees of any of its principal suppliers or contractors would reasonably be expected to have a Material Adverse Effect. To the Company's knowledge, there is no threatened or pending litigation between the Company or its subsidiaries and any of its executive officers which, if adversely determined, would have a Material Adverse Effect.

(aa) *Compliance with and Liability under Environmental Laws.* Except as disclosed in the Time of Sale Information and the Offering Memorandum, (i) the Company and each of its subsidiaries is in compliance in all material respects with all rules, laws and regulations relating to the use, treatment, storage and disposal of toxic substances and protection of health or the environment ("**Environmental Laws**"), which are applicable to its business; (ii) neither the Company nor its subsidiaries has received any written notice from any governmental authority or third party of an asserted claim under Environmental Laws; (iii) the Company and each of its subsidiaries has received all permits, licenses or other approvals required of it under applicable Environmental Laws to conduct its business and is in compliance in all material respects with all terms and conditions of any such permit, license or approval; and (iv) no property which is or has been owned, leased or occupied by the Company or its subsidiaries has been designated as a Superfund site pursuant to the Comprehensive Environmental Response, Compensation of Liability Act of 1980, as amended (42 U.S.C. Section 9601, et. seq.) ("CERCLA 1980") or otherwise designated as a contaminated site under applicable state or local law. Neither the Company nor any of its subsidiaries has been named as a "potentially responsible party" under the CERCLA 1980.

(bb) *Compliance with ERISA.* The Company has fulfilled its obligations, if any, in all material respects under the minimum funding standards of Section 302 of the United States Employee Retirement Income Security Act of 1974 ("**ERISA**") and the regulations and published interpretations thereunder with respect to each "plan" as defined in Section 3(3) of ERISA and such regulations and published interpretations in which its employees are eligible to participate and each such plan is in compliance in all material respects with the presently applicable provisions of ERISA and such regulations and published interpretations. No "Reportable Event" (as defined in 12 ERISA) has occurred with respect to any "Pension Plan" (as defined in ERISA) for which the Company could have any liability.

(cc) *Disclosure Controls*. The Company has established and maintains disclosure controls and procedures (as such term is defined in Rule 13a-15 under the Exchange Act), which are designed to ensure that material information relating to the Company is made known to the Company's principal executive officer and its principal financial officer by others within the Company. Except as disclosed in the Time of Sale Information and the Offering Memorandum, such disclosure controls and procedures are effective.

The Company has carried out evaluations of the effectiveness of such disclosure controls and procedures as required by Rule 13a-15 of the Exchange Act. Based on the evaluation of its disclosure controls and procedures, except as disclosed in the Time of Sale Information and the Offering Memorandum, the Company is not aware of (i) any material weakness or significant deficiency in the design or operation of internal controls which could adversely affect the Company's ability to record, process, summarize and report financial data or any material weaknesses in internal controls; or (ii) any fraud, whether or not material, that involves management or other employees who have a role in the Company's internal controls.

(dd) *Accounting Controls.* The books, records and accounts of the Company and its subsidiaries accurately and fairly reflect in all material respects the transactions in, and dispositions of, the assets of, and the results of operations of, the Company and its subsidiaries. Except as disclosed in the Preliminary Offering Memorandum and the Offering Memorandum, the Company and each of its subsidiaries maintains a system of internal accounting controls sufficient to provide reasonable assurances that (i) transactions are executed in accordance with management's general or specific authorizations, (ii) transactions are recorded as necessary to permit preparation of financial statements in accordance with GAAP and to maintain asset accountability, (iii) access to assets is permitted only in accordance with management's general or specific authorization and (iv) the recorded accountability for assets is compared with the existing assets at reasonable intervals and appropriate action is taken with respect to any differences.

(ee) *eXtensible Business Reporting Language.* The interactive data in eXtensible Business Reporting Language included or incorporated by reference in the Time of Sale Information and the Offering Memorandum fairly presents the information called for in all material respects and has been prepared in accordance with the Commission's rules and guidelines applicable thereto.

(ff) *Insurance.* The Company and its subsidiaries are insured by insurers of recognized financial responsibility against such losses and risks and in such amounts as are customary in the businesses in which they are engaged or propose to engage after giving effect to the transactions described in the Time of Sale Information and Offering Memorandum; all policies of insurance and fidelity or surety bonds insuring the Company or any of its subsidiaries or the Company's or its subsidiaries' respective businesses, assets, employees, officers and directors are in full force and effect; the Company and each of its subsidiaries are in compliance with the terms of such policies and instruments in all material respects; and neither the Company nor any subsidiary of the Company has any reason to believe that it will not be able to renew its existing insurance coverage as and when such coverage expires or to obtain similar coverage from similar insurers as may be necessary to continue its business at a cost that is not materially greater than the current cost. Neither the Company nor any of its subsidiaries has been denied any insurance coverage which it has sought or for which it has applied.

(gg) *No Unlawful Payments.* Neither the Company nor any other person associated with or acting on behalf of the Company (including, without limitation, any director, officer, agent or employee of the Company or its subsidiaries), has , directly or indirectly, while acting on behalf of the Company or its subsidiaries (i) used any corporate funds for unlawful contributions, gifts, entertainment or other unlawful expenses relating to political activity; (ii) made any unlawful payment to foreign or domestic government officials or employees or to foreign or domestic political parties or campaigns from corporate funds; (iii) violated any provision of the Foreign Corrupt Practices Act of 1977, as amended; or (iv) made any other unlawful payment.

(hh) *Compliance with Anti-Money Laundering Laws*. The operations of the Company and its subsidiaries are and have been conducted at all times in compliance with applicable financial recordkeeping and reporting requirements of the Currency and Foreign Transactions Reporting Act of 1970, as amended, the money laundering statutes of all jurisdictions, the rules and regulations thereunder and any related or similar rules, regulations or guidelines, issued, administered or enforced by any governmental agency (collectively, the "**Money Laundering Laws**") and no action, suit or proceeding by or before any court or governmental agency, authority or body or any arbitrator involving the Company or any of its subsidiaries with respect to the Money Laundering Laws is pending, or to the best knowledge of the Company, threatened.

(ii) *No Conflicts with Sanctions Laws*. Neither the Company nor any of its subsidiaries nor, to the knowledge of the Company, any director, officer, agent, employee or affiliate of the Company or any of its subsidiaries is currently subject to any United States sanctions administered by the Office of Foreign Assets Control of the United States Treasury Department ("**OFAC**"); and the Company will not directly or indirectly use the proceeds of the offering, or lend, contribute or otherwise make available such proceeds to any subsidiary, joint venture partner or other person or entity, for the purpose of financing the activities of any person currently subject to any United States sanctions administered by OFAC.

(jj) *No Restrictions on Subsidiaries.* No subsidiary of the Company is currently prohibited, directly or indirectly, under any agreement or other instrument to which it is a party or is subject, from paying any dividends to the Company, from making any other distribution on such subsidiary's capital stock, from repaying to the Company any loans or advances to such subsidiary from the Company or from transferring any of such subsidiary's properties or assets to the Company or any other subsidiary of the Company, except for restrictions imposed by governmental laws or regulations of countries outside the United States or actions taken by companies in order to comply with such laws and regulations, including but not limited to the subordination of certain loans to creditors in the ordinary course of business, and such other restrictions that would not reasonably be likely to result in a Material Adverse Effect.

(kk) *No Broker's Fees.* Except as disclosed in the Time of Sale Information and the Offering Memorandum, neither the Company nor any of its subsidiaries is a party to any contract, agreement or understanding with any person (other than this Agreement) that would give rise to a valid claim against the Company or any of its subsidiaries or any Initial Purchaser for a brokerage commission, finder's fee or like payment in connection with the offering and sale of the Securities or any of the transactions contemplated by the Transaction Documents.

(ll) *Rule 144A Eligibility*. On the Closing Date, the Securities will not be of the same class as securities listed on a national securities exchange registered under Section 6 of the Exchange Act or quoted in an automated inter-dealer quotation system; and each of the Time of Sale Information, as of the Time of Sale, and the Offering Memorandum, as of its date, contains or will contain all the information that, if requested by a prospective purchaser of the Securities, would be required to be provided to such prospective purchaser pursuant to Rule 144A(d)(4) under the Securities Act.

(mm) *No Integration*. Neither the Company nor any of its affiliates (as defined in Rule 501(b) of Regulation D) has, directly or through any agent, sold, offered for sale, solicited offers to buy or otherwise negotiated in respect of, any security (as defined in the Securities Act), that is or will be integrated with the sale of the Securities in a manner that would require registration of the Securities under the Securities Act.

(nn) *No General Solicitation or Directed Selling Efforts*. None of the Company or any of its affiliates or any other person acting on its or their behalf (other than the Initial Purchasers, as to which no representation is made) has (i) solicited offers for, or offered or sold, the Securities by means of any form of general solicitation or general advertising within the meaning of Rule 502(c) of Regulation D or in any manner involving a public offering within the meaning of Section 4(a)(2) of the Securities Act or (ii) engaged in any directed selling efforts within the meaning of Regulation S under the Securities Act ("**Regulation S**"), and all such persons have complied with the offering restrictions requirement of Regulation S.

(o o) *Securities Law Exemptions*. To the Company's knowledge, neither the Company nor any (i) director or executive officer of the Company, (ii) other officer of the Company participating in the offering of the Securities, (iii) any beneficial owner of 20% or more of the Company's outstanding voting equity securities, calculated on the basis of voting power, or (iv) promoter connected with the Company in any capacity on the date hereof (collectively, "**Insiders**") is subject to any of the "Bad Actor" disqualifications described in Rule 506(d)(1)(i) to (viii) under the Securities Act (a "**Disqualification Event**"), except for a Disqualification Event covered by Rule 506(d)(2)(i) or (d)(3) of the Securities Act. The Company is not disqualified from relying on Rule 506 of Regulation D under the Securities Act ("**Rule 506**") for any of the reasons stated in Rule 506(d) in connection with the issuance and sale of the Securities to the Initial Purchasers pursuant to this Agreement. The Company has exercised reasonable care, including without limitation, conducting a factual inquiry that is appropriate in light of the circumstances, into whether any such disqualification under Rule 506(d) exists. Any outstanding securities of the Company (of any kind or nature) that were issued in reliance on Rule 506 at any time on or after September 23, 2013 have been issued in compliance with Rule 506(d) and (e). Assuming the accuracy of the representations and warranties of the Initial Purchasers contained in Section 2(b) and their compliance with their agreements set forth therein, it is not necessary, in connection with the issuance and sale of the Securities to the Initial Purchasers and the offer, resale and delivery of the Securities by the Initial Purchasers in the manner contemplated by this Agreement, the Time of Sale Information and the Offering Memorandum, to register the Securities under the Securities Act or to qualify the Indenture under the Trust Indenture Act of 1939, as amended.

(p p) *No Stabilization.* The Company has not taken, directly or indirectly, any action designed to or that could reasonably be expected to cause or result in any stabilization or manipulation of the price of the Securities or the Underlying Securities.

(q q) *Margin Rules*. Neither the issuance, sale and delivery of the Securities nor the application of the proceeds thereof by the Company as described in the Time of Sale Information and the Offering Memorandum will violate Regulation T, U or X of the Board of Governors of the Federal Reserve System or any other regulation of such Board of Governors.

(r r) *Forward-Looking Statements.* No forward-looking statement (within the meaning of Section 27A of the Securities Act and Section 21E of the Exchange Act) contained in the Time of Sale Information or the Offering Memorandum has been made or reaffirmed without a reasonable basis or has been disclosed other than in good faith.

(ss) *Statistical and Market Data.* The statistical and market related data included or incorporated by reference in the Time of Sale Information or the Offering Memorandum are based on or derived from sources that the Company believes to be reliable and accurate in all material respects.

(tt) *Sarbanes-Oxley Act*. The Company is in compliance in all material respects with all applicable provisions of the Sarbanes-Oxley Act of 2002, as amended (the "**Sarbanes-Oxley Act**"), any related rules and regulations promulgated by the Commission and corporate governance requirements under applicable NASDAQ Stock Market LLC ("**NASDAQ**") regulations. There is and has been no failure on the part of the Company or any of its directors or officers, in their capacities as such, to comply in all material respects with any provision of the Sarbanes-Oxley Act, including, without limitation, Section 402 related to loans and Sections 302 and 906 related to certifications.

(u u) *Off Balance Sheet Arrangements.* Except as described in the Time of Sale Information and the Offering Memorandum, there are no material off-balance sheet arrangements (as defined in Item 303 of Regulation S-K) that have or are reasonably likely to have a material current or future effect on the Company's financial condition, revenues or expenses, changes in financial condition, results of operations, liquidity, capital expenditures or capital resources.

(vv) *No Registration Rights; Lock-Ups.* No person or entity has any right to require, or cause the Company or the Guarantors to effect, registration of shares of Common Stock or other securities of the Company or any Guarantor because of the consummation of the transactions contemplated by the Transaction Documents, except for persons and entities who have expressly waived such right in writing or who have been given timely and proper written notice and have failed to exercise such right within the time or times required under the terms and conditions of such right. Each director and executive officer of the Company listed on Schedule 2 hereto has delivered to the Representative an enforceable written lock-up agreement in the form attached to this Agreement as **Exhibit A** hereto ("**Lock-Up Agreement**").

(ww) *NASDAQ*. The Company has taken no action designed to, or likely to have the effect of, terminating the registration of the Common Stock under the Exchange Act or the listing of the Common Stock on the NASDAQ Capital Market, nor has the Company received any notification that the Commission or the NASDAQ Capital Market is contemplating terminating such registration or listing.

(xx) *Audit Committee*. The Company's board of directors has validly appointed an audit committee whose composition satisfies the requirements of the NASDAQ and the board of directors and/or the audit committee has adopted a charter that satisfies the requirements of the NASDAQ.

(yy) *No Prohibited Activities*. Except as described in the Time of Sale Information and the Offering Memorandum and as preapproved in accordance with the requirements set forth in Section 10A of the Exchange Act, Marcum has not been engaged by the Company to perform any "prohibited activities" (as defined in Section 10A of the Exchange Act).

(zz) *Approvals*. Each approval, consent, order, authorization, designation, declaration or filing of, by or with any regulatory, administrative or other governmental body necessary in connection with the execution and delivery by the Company and the Guarantors of the Transaction Documents and the consummation of the transactions therein contemplated required to be obtained or performed by the Company (except such additional steps as may be required by the Financial Industry Regulatory Authority ("**FINRA**") or NASDAQ or as may be necessary to qualify the Securities for public offering by the Initial Purchasers under the state securities or Blue Sky laws) has been obtained or made and is in full force and effect.

(aaa) *Collateral Documents*. Each of the Collateral Documents, once executed and delivered, will be effective to create in favor of the Collateral Agent for the benefit of the secured parties named therein, legal, valid and enforceable liens on, and security interests in, all property pledged or granted as Collateral pursuant to the Collateral Documents. When (i) the Mortgages are recorded in the official real property records of the County and State where the real property which comprises a part of the Collateral (the "**Mortgage Collateral**") is located, and all filing fees and mortgage recording taxes payable with respect thereto have been paid in full, (ii) financing statements and other filings in appropriate form are filed in the offices specified in Section 2 to the Perfection Certificate, and (iii) the Collateral Agent has taken possession or control of any Collateral (which possession or control shall be given to the Collateral Agent to the extent possession or control by the Collateral Agent is required by the applicable Collateral Document), the liens created by the Collateral Documents shall constitute fully perfected, and as the Mortgage Collateral first priority, liens on, and security interests in, all right, title and interest of the Grantors in the Collateral, to the extent that under applicable law such security interest in the Collateral (other than Mortgage Collateral) can be perfected by such filings or such possession or control and to the extent that under applicable law such security interest in the Mortgage Collateral can be perfected by such recording, in each case subject to no Liens other than Permitted Liens (as to all Collateral other than the Mortgage Collateral) or Permitted Encumbrances (as to the Mortgage Collateral).

(bbb) *Solvency*. All indebtedness represented by the Securities is being incurred for proper purposes and in good faith. On the Closing Date, after giving pro forma effect to this offering and the use of proceeds therefrom as indicated in the "Use of Proceeds" section of the Time of Sale Information and the Offering Memorandum, the Company and each Guarantor (i) will be solvent, (ii) will have sufficient capital for carrying on its business and (iii) will be able to pay its debts as they mature. As used in this paragraph, the term "Solvent" means, with respect to a particular date, that on such date (i) the present fair market value (or present fair saleable value) of the assets of the Company and each Guarantor is not less than the total amount required to pay the liabilities of the Company and each Guarantor on its total existing debts and liabilities (including contingent liabilities) as they become absolute and matured; (ii) the Company and each Guarantor is able to pay its debts and other liabilities, contingent obligations and commitments as they mature and become due in the normal course of business; (iii) assuming consummation of the issuance of the Securities, neither the Company nor any Guarantor is incurring debts or liabilities beyond its ability to pay as such debts and liabilities mature; (iv) neither the Company nor any Guarantor is engaged in any business or transaction, and does not propose to engage in any business or transaction, for which its property would constitute unreasonably small capital after giving due consideration to the prevailing practice in the industry in which the Company or any Guarantor is engaged; and (v) neither the Company nor any Guarantor is otherwise insolvent under the standards set forth in applicable laws.

(ccc) *Certificates*. Each certificate signed by any officer of the Company, or any subsidiary thereof, delivered to the Initial Purchasers shall be deemed a representation and warranty by the Company or any such subsidiary thereof (and not individually by such officer) to the Initial Purchasers with respect to the matters covered thereby. All information certified by an officer of the Company in the Perfection Certificate, dated as of the Closing Date, and delivered by such officer on behalf of the Company, is and will be true and correct as of any Closing Date.

4 . Further Agreements of the Company and the Guarantors. The Company and the Guarantors jointly and severally covenant and agree with each Initial Purchaser that:

(a) *Delivery of Copies*. The Company will deliver to the Initial Purchasers and counsel for the Initial Purchasers as many copies of the Preliminary Offering Memorandum, any other Time of Sale Information, any Issuer Written Communication and the Offering Memorandum (including all amendments and supplements thereto) as the Representative may reasonably request.

(b) *Offering Memorandum, Amendments or Supplements*. Before finalizing the Offering Memorandum or making or distributing any amendment or supplement to any of the Time of Sale Information or the Offering Memorandum or filing with the Commission any document that will be incorporated by reference therein, the Company will furnish to the Representative and counsel for the Initial Purchasers a copy of the proposed Offering Memorandum or such amendment or supplement or document to be incorporated by reference therein for review, and will not distribute any such proposed Offering Memorandum, amendment or supplement or file any such document with the Commission to which the Representative reasonably objects except as required by law.

(c) *Additional Written Communications.* Before making, preparing, using, authorizing, approving or referring to any Issuer Written Communication, the Company will furnish to the Representative and counsel for the Initial Purchasers a copy of such written communication for review and will not make, prepare, use, authorize, approve or refer to any such written communication to which the Representative reasonably objects.

(d) *Notice to the Representative.* The Company will advise the Representative promptly, and confirm such advice in writing, in the event that it becomes aware (i) of the issuance by any governmental or regulatory authority of any order preventing or suspending the use of any of the Time of Sale Information, any Issuer Written Communication or the Offering Memorandum or the Company's receipt of notification of the initiation or threatening of any proceeding for that purpose; (ii) of the occurrence or development of any event at any time prior to the completion of the initial offering of the Securities as a result of which any of the Time of Sale Information, any Issuer Written Communication or the Offering Memorandum as then amended or supplemented would include any untrue statement of a material fact or omit to state a material fact necessary in order to make the statements therein, in the light of the circumstances existing when such Time of Sale Information, Issuer Written Communication or the Offering Memorandum is delivered to a purchaser, not misleading; and (iii) of the receipt by the Company of any notice with respect to any suspension of the qualification of the Securities for offer and sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose; and the Company will use its reasonable best efforts to prevent the issuance of any such order preventing or suspending the use of any of the Time of Sale Information, any Issuer Written Communication or the Offering Memorandum or suspending any such qualification of the Securities and, if any such order is issued, will use its reasonable best efforts to obtain as soon as possible the withdrawal thereof.

(e) *Ongoing Compliance of the Offering Memorandum and Time of Sale Information*. (1) If at any time prior to the earlier of one year from the date hereof and completion of the initial offering of the Securities (i) any event or development shall occur or condition shall exist as a result of which the Offering Memorandum as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances existing when the Offering Memorandum is delivered to a purchaser, not misleading or (ii) it is necessary to amend or supplement the Offering Memorandum to comply with law, the Company will promptly notify the Initial Purchasers thereof and forthwith prepare and, subject to paragraph (b) above, furnish to the Initial Purchasers such amendments or supplements to the Offering Memorandum (or any document to be filed with the Commission and incorporated by reference therein) as may be necessary so that the statements in the Offering Memorandum as so amended or supplemented (or including such document to be incorporated by reference therein) will not, in the light of the circumstances existing when the Offering Memorandum is delivered to a purchaser, be misleading or so that the Offering Memorandum will comply with law and (2) if at any time prior to the Closing Date (i) any event or development shall occur or condition shall exist as a result of which any of the Time of Sale Information as then amended or supplemented would include any untrue statement of a material fact or omit to state any material fact necessary in order to make the statements therein, in the light of the circumstances under which they were made, not misleading or (ii) it is necessary to amend or supplement any of the Time of Sale Information to comply with law, the Company will promptly notify the Initial Purchasers thereof and forthwith prepare and, subject to paragraph (b) above, furnish to the Initial Purchasers such amendments or supplements to any of the Time of Sale Information (or any document to be filed with the Commission and incorporated by reference therein) as may be necessary so that the statements in any of the Time of Sale Information as so amended or supplemented will not, in light of the circumstances under which they were made, be misleading.

(f) *Blue Sky Compliance.* The Company shall cooperate with the Representative and its counsel in endeavoring to qualify the Securities and the Underlying Securities for offer and sale in connection with the offering under the laws of such jurisdictions as the Representative may designate and shall endeavor to maintain such qualifications in effect so long as required for the distribution of the Securities; provided, however, that the Company shall not be required in connection therewith, as a condition thereof, to qualify as a foreign corporation or to execute a general consent to service of process in any jurisdiction or subject itself to taxation as doing business in any jurisdiction.

(g) *Clear Market.* Without the prior written consent of Oppenheimer & Co. Inc., for a period of 90 days after the date of this Agreement, the Company and each of its individual directors and executive officers listed on Schedule 2 hereto shall not issue, sell or register with the Commission (other than on Form S-8 or on any successor form), or otherwise dispose of, directly or indirectly, any equity securities of the Company (or any securities convertible into, exercisable for or exchangeable for equity securities of the Company), except for (A) the Securities to be sold hereunder, the Underlying Securities issuable upon conversion of the Securities and Additional Shares issuable pursuant to the terms of the Indenture, (B) the issuance of shares of Common Stock upon the exercise of warrants and other contractual rights to purchase shares of Common Stock outstanding on the date of this Agreement, and (C) the issuance of awards for and shares of Common Stock pursuant to the Company's existing stock option plan or bonus plan as described in the Time of Sale Information and Offering Memorandum.

(h) *Use of Proceeds.* The Company will apply the net proceeds from the offering of the Securities in the manner set forth under "Use of Proceeds" in the Time of Sale Information and the Offering Memorandum.

(i) *No Stabilization.* Except as disclosed in the Time of Sale Information and the Offering Memorandum, the Company will not take, directly or indirectly, any action designed to or that would reasonably be expected to cause or result in any stabilization or manipulation of the price of the Securities and will not take any action prohibited by Regulation M under the Exchange Act in connection with the distribution of the Securities contemplated hereby.

(j) *Underlying Securities; Additional Shares.* The Company will reserve and keep available at all times, free from pre-emptive rights, a number of shares of Common Stock equal to the Maximum Share Reserve (less any number of shares theretofore issued as Underlying Securities or Additional Shares) for the purpose of enabling the Company to satisfy all obligations to issue the Underlying Securities upon conversion of the outstanding Securities and, if the Company so elects, to issue the Additional Shares. The Company shall use the Maximum Conversion Share Reserve exclusively for the issuance of the Underlying Securities (assuming that the maximum increase to the conversion rate upon a Dilutive Issuance pursuant to Section 9.04(f) of the Indenture applies) and may use the Maximum Additional Share Reserve for the issuance of Additional Shares. No Additional Shares shall be issued by the Company to the extent that the shares of Common Stock remaining in the Maximum Share Reserve would, after giving effect to such issuance, be less than the remaining Underlying Securities that could then be issued pursuant to the Notes (calculated as provided in the prior sentence). For the avoidance of doubt, the Maximum Share Reserve (and, as a result, the Maximum Additional Share Reserve) may be increased by the Company to the extent that the Company obtains the requisite Stockholder Approval pursuant to NASDAQ Marketplace Rule 5635(c) or the listing requirements of any other Relevant Stock Exchange.

(k) *Exchange Listing.* The Company will use its best efforts to effect and maintain the listing of the Underlying Securities and any Additional Shares issued by the Company on the NASDAQ Market.

(l) *Conversion Price.* Between the date hereof and the Closing Date, the Company will not do or authorize any act or thing that would result in an adjustment of the conversion price.

(m) *Supplying Information*. While the Securities remain outstanding and are "restricted securities" within the meaning of Rule 144(a)(3) under the Securities Act, the Company will, during any period in which the Company is not subject to and in compliance with Section 13 or 15(d) of the Exchange Act, furnish to holders of the Securities, prospective purchasers of the Securities designated by such holders and securities analysts, in each case upon request, the information required to be delivered pursuant to Rule 144A(d)(4) under the Securities Act.

(n) *DTC.* The Company will assist the Initial Purchasers in arranging for the Securities to be eligible for clearance and settlement through DTC.

(o) *No Resales by the Company*. During the period from the Closing Date until one year after the Closing Date, the Company will not, and will not permit any of its affiliates (as defined in Rule 144 under the Securities Act) to, resell any of the Securities that have been acquired by any of them, except for Securities purchased by the Company or any of its affiliates and resold in a transaction registered under the Securities Act.

(p) *No Integration*. Neither the Company nor any of its affiliates (as defined in Rule 501(b) of Regulation D) will, directly or through any agent, sell, offer for sale, solicit offers to buy or otherwise negotiate in respect of, any security (as defined in the Securities Act), that is or will be integrated with the sale of the Securities in a manner that would require registration of the Securities under the Securities Act.

(q) *No General Solicitation or Directed Selling Efforts*. None of the Company or any of its affiliates or any other person acting on its or their behalf (other than the Initial Purchasers, as to which no covenant is given) will (i) solicit offers for, or offer or sell, the Securities by means of any form of general solicitation or general advertising within the meaning of Rule 502(c) of Regulation D or in any manner involving a public offering within the meaning of Section 4(a)(2) of the Securities Act or (ii) engage in any directed selling efforts within the meaning of Regulation S, and all such persons will comply with the offering restrictions requirement of Regulation S.

(r) *No Public Announcements*. Prior to the Closing Date, the Company will issue no press release or other communications directly or indirectly and hold no press conference with respect to the Company, the condition, financial or otherwise, or the earnings, business affairs or business prospects of any of them, or the offering of the Securities, without the prior written consent of the Representative, which shall not be unreasonably delayed or withheld, unless in the judgment of the Company and its counsel, and after notification to the Representative, such press release or communication is required by law.

(s) *Performance of Transaction Documents*. The Company and the Guarantors shall do and perform all things required to be done and performed under the Transaction Documents prior to and after the Closing Date.

5. Certain Agreements of the Initial Purchasers. Each Initial Purchaser hereby represents and agrees that it has not and will not use, authorize use of, refer to, or participate in the planning for use of, any written communication that constitutes an offer to sell or the solicitation of an offer to buy the Securities other than (i) the Preliminary Offering Memorandum and the Offering Memorandum, (ii) a written communication that contains no "issuer information" (as defined in Rule 433(h)(2) under the Securities Act) that was not included (including through incorporation by reference) in the Preliminary Offering Memorandum or the Offering Memorandum, (iii) the term sheet attached hereto as **Annex A** or any written communication prepared pursuant to Section 4(c) above (including any electronic road show), (iv) any written communication prepared by such Initial Purchaser and approved by the Company in advance in writing or (v) any written communication relating to or that contains the terms of the Securities and/or other information that was included (including through incorporation by reference) in the Preliminary Offering Memorandum or the Offering Memorandum. No Initial Purchaser nor any of its affiliates or any other person acting on its or their behalf will solicit offers for, or offer or sell, the Securities by means of any form of general solicitation or general advertising within the meaning of Rule 502(c) of Regulation D or in any manner involving a public offering within the meaning of Section 4(a)(2) of the Securities Act.

6 . Conditions of Initial Purchasers' Obligations. The obligation of each Initial Purchaser to purchase the Securities on the Closing Date, as provided herein is subject to the performance by the Company and the Guarantors of their covenants and other obligations hereunder and to the following additional conditions:

(a) *Representations and Warranties.* The representations and warranties of the Company and the Guarantors contained in this Agreement, in each of the other Transaction Documents, in the Perfection Certificate and in the certificates delivered pursuant to Section 6(c) shall be true and correct when made and on and as of the Closing Date, as if made on such date, except for representations and warranties that speak solely as of an earlier date, which shall be true and correct as of such earlier date. The Company and the Guarantors and each other party to the Transaction Documents (other than the Initial Purchasers) shall have performed all covenants and agreements and satisfied all the conditions on their respective parts required to be performed or satisfied at or before such Closing Date.

(b) *No Material Adverse Change.* The Representative shall be reasonably satisfied that since the respective dates as of which information is given in the Time of Sale Information and the Offering Memorandum, (i) there shall not have been any material change in the capital stock of the Company or any material change in the indebtedness (other than in the ordinary course of business) of the Company, (ii) except as set forth in or contemplated by the Time of Sale Information or the Offering Memorandum, no material oral or written agreement or other transaction shall have been entered into by the Company that is not in the ordinary course of business or that could reasonably be expected to result in a material reduction in the future earnings of the Company, (iii) no loss or damage (whether or not insured) to the property of the Company shall have been sustained that had or could reasonably be expected to have a Material Adverse Effect, (iv) no legal or governmental action, suit or proceeding affecting the Company or any of its properties that is material to the Company or that affects or would reasonably be expected to affect the transactions contemplated by the Transaction Documents shall have been instituted or threatened and (v) there shall not have been any material change in the assets, properties, condition (financial or otherwise), or in the results of operations, business affairs or business prospects of the Company or its subsidiaries considered as a whole that makes it impractical or inadvisable in the Representative's reasonable judgment to proceed with the purchase or offering of the Securities as contemplated hereby.

(c) *Officer's Certificate.* The Representative shall have received on and as of the Closing Date, a certificate, on behalf of the Company and the Guarantors, of the chief executive officer and the chief financial officer and chief accounting officer of the Company and the Guarantors: (i) confirming that such officers has carefully reviewed the Time of Sale Information and the Offering Memorandum and, to the knowledge of such officer, the representations set forth in Sections 3(b) and 3(d) hereof are true and correct, (ii) confirming that the other representations and warranties of the Company and the Guarantors in the Transaction Documents are true and correct and that the Company and the Guarantors have complied in all material respects with all agreements and satisfied all conditions on its part to be performed or satisfied hereunder at or prior to the Closing Date, and (iii) to the effect set forth in paragraphs (a) and (b) above.

(d) *Comfort Letters.* On the date of this Agreement and on the Closing Date, Marcum LLP shall have furnished to the Representative, at the request of the Company, letters, dated the respective dates of delivery thereof and addressed to the Initial Purchasers, in form and substance reasonably satisfactory to the Representative, containing statements and information of the type customarily included in accountants' "comfort letters" to the Initial Purchasers with respect to the financial statements and certain financial information contained or incorporated by reference in the Time of Sale Information and the Offering Memorandum; provided, that the letter delivered on the Closing Date, shall use a "cut-off" date no more than three business days prior to such Closing Date.

(e) *Opinion and 10b-5 Statement of Counsel for the Company and the Guarantors.* K&L Gates LLP, counsel for the Company and the Guarantors, shall have furnished to the Representative, at the request of the Company, its written opinion and 10b-5 statement, dated the Closing Date, and addressed to the Initial Purchasers, in form and substance reasonably satisfactory to the Representative.

(f) *Opinion and 10b-5 Statement of Intellectual Property Counsel for the Company and the Guarantors.* OGAWA Professional Corporation, intellectual property counsel for the Company and the Guarantors, shall have furnished to the Representative, a written opinion and 10b-5 statement, dated the Closing Date, and addressed to the Initial Purchasers, in form and substance reasonably satisfactory to the Representative.

(g) *10b-5 Statement of Counsel for the Initial Purchasers.* The Representative shall have received on and as of the Closing Date, a 10b-5 statement of Lowenstein Sandler LLP, counsel for the Initial Purchasers, with respect to such matters as the Representative may reasonably request, and such counsel shall have received such documents and information as it may reasonably request to enable it to pass upon such matters.

(h) *No Legal Impediment to Issuance.* No action shall have been taken and no statute, rule, regulation or order shall have been enacted, adopted or issued by any federal, state or foreign governmental or regulatory authority that would, as of the Closing Date, prevent the issuance or sale of the Securities or the performance of the other transactions contemplated by the Transaction Documents; and no injunction or order of any federal, state or foreign court shall have been issued that would, as of the Closing Date, prevent the issuance or sale of the Securities or the performance of the other transactions contemplated by the Transaction Documents.

(i) *Good Standing*. The Representative shall have received on and as of the Closing Date, satisfactory evidence of the good standing of the Company and the Guarantors in their respective jurisdictions of organization and their good standing as a foreign entity in such other jurisdictions as the Representative may reasonably request, in each case in writing or any standard form of telecommunication from the appropriate governmental authorities of such jurisdictions.

(j) *DTC.* The Securities shall have been designated TRACE securities in accordance with the rules and regulations adopted by FINRA relating to trading in the TRACE Market and all agreements set forth in the representation letter of the Company and the Guarantors to DTC relating to the approval of the Securities by DTC for "book-entry" transfer shall have been complied with.

(k) *Exchange Listing.* An application for the listing of a number of shares of Common Stock equal to the Maximum Share Reserve shall have been approved for listing on the NASDAQ Market, subject to official notice of issuance.

(l) *Lock-up Agreements*. The "lock-up" agreements, each substantially in the form of **Exhibit A** hereto, between the Representative and the executive officers and directors of the Company relating to sales and certain other dispositions of shares of Common Stock or certain other securities, delivered to the Representative on or before the date hereof, shall be in full force and effect on the Closing Date.

(m) *Registration Rights Agreement*. On or prior to the Closing Date, the Company and the Guarantors shall have executed and delivered to the Initial Purchasers the Registration Rights Agreement.

(n) *Insurance Policies*. The Company shall have delivered evidence satisfactory to the Initial Purchasers and the Collateral Agent that the insurance policies required by the Indenture and any Collateral Document are in full force and effect together with, in respect of those insurance policies maintained with respect to the properties of the Guarantors, certificates naming the Collateral Agent, on behalf of the secured parties, as an additional insured and/or loss payee and stating that cancellation, material addition in amount or material change in coverage shall not be effective until 30 days after written notice to the Collateral Agent.

(o) *Payment of Collateral Fees*. The Company shall have delivered evidence acceptable to the Initial Purchasers of payment or arrangements for payment by the Company or the Guarantors of all applicable recording taxes, fees, charges, costs and expenses required for the recording of the Collateral Documents.

(p) *Delivery of Pledged Shares*. The Company shall have delivered all certificates, agreements or instruments representing or evidencing capital stock pledged to the Collateral Agent (the "**Pledged Shares**") accompanied by instruments of transfer and stock powers undated and endorsed in blank.

(q) *Collateral Agent Deliveries*. The Collateral Agent shall have received (with a copy for each of the Initial Purchasers) on the Closing Date:

(i) appropriately completed copies of Uniform Commercial Code financing statements naming the Company and each Guarantor as a debtor and the Collateral Agent as the secured party, or other similar instruments or documents to be filed under the UCC of all jurisdictions as may be necessary to perfect the security interests of the Collateral Agent pursuant to the Collateral Agreements;

(ii) appropriately completed copies of Uniform Commercial Code Form UCC-3 termination statements, if any, necessary to release all Liens (other than Permitted Liens or Permitted Encumbrances, as applicable) of any Person in any collateral described in any security agreement previously granted by any Person;

(iii) certified copies of Uniform Commercial Code Requests for Information or Copies (Form UCC-11), or a similar search report certified by a party acceptable to the Initial Purchasers, dated a date reasonably near to the Closing Date, listing all effective financing statements which name the Company or any Guarantor (under its present name and any previous names) as the debtor, together with copies of such financing statements (none of which shall cover any collateral described in any Collateral Document, other than such financing statements that evidence Permitted Liens or permitted Encumbrances, as applicable); and

(iv) such other approvals, opinions, or documents as the Collateral Agent may reasonably request in form and substance reasonably satisfactory to the Collateral Agent.

(r) *Liens*. The Initial Purchasers and its counsel shall be reasonably satisfied that (i) the Liens granted to the Collateral Agent, for the benefit of the secured parties in the Collateral is of the priority described in the Time of Sale Information and the Offering Memorandum; and (ii) no Lien exists on any of the Collateral other than the Liens created in favor of the Collateral Agent, for the benefit of the secured parties, pursuant to the Collateral Documents, in each case subject only to Permitted Liens or Permitted Encumbrances, as applicable.

(s) *Transaction Documents*. Each of the Transaction Documents shall have been executed and delivered by all parties thereto (other than the Initial Purchasers), and the Initial Purchasers shall have received a fully executed original of each Transaction Document. The terms of each Transaction Document shall conform in all material respects to the description thereof in the Time of Sale Information and the Offering Memorandum.

(t) *Additional Documents*. On or prior to the Closing Date, the Company and the Guarantors shall have furnished to the Representative such further certificates and documents as the Representative may reasonably request.

All opinions, letters, certificates and evidence mentioned above or elsewhere in this Agreement shall be deemed to be in compliance with the provisions hereof only if they are in form and substance reasonably satisfactory to counsel for the Initial Purchasers.

7. Indemnification and Contribution.

(a) *Indemnification of the Initial Purchasers*. The Company and the Guarantors jointly and severally agree to indemnify and hold harmless each Initial Purchaser, its officers and employees and each person, if any, who controls any Initial Purchaser within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act against any and all losses, claims, damages and liabilities, joint or several (including any reasonable investigation, legal and other expenses incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claim asserted), to which they, or any of them, may become subject under the Securities Act, the Exchange Act or other federal or state law or regulation, at common law or otherwise, insofar as such losses, claims, damages or liabilities arise out of or are based upon any untrue statement or alleged untrue statement of a material fact contained in the Preliminary Offering Memorandum, any of the other Time of Sale Information, any Issuer Written Communication any road show as defined in Rule 433(h) under the Securities Act (a "road show") or the Offering Memorandum (or any amendment or supplement thereto), any amendment thereof or supplement thereto, or in any Blue Sky application or other information or other documents executed by the Company filed in any state or other jurisdiction to qualify any or all of the Securities under the securities laws thereof (any such application, document or information being hereinafter referred to as a "Blue Sky Application") or arise out of or are based upon any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading; provided, however, that such indemnity shall not inure to the benefit of any Initial Purchaser (or any person controlling such Initial Purchaser) on account of any losses, claims, damages or liabilities arising from the sale of the Securities to any person by such Initial Purchaser if such untrue statement or omission or alleged untrue statement or omission was made in such Preliminary Offering Memorandum, any of the other Time of Sale Information, any Issuer Written Communication, any road show or the Offering Memorandum or such amendment or supplement thereto, or in any Blue Sky Application in reliance upon and in conformity with information furnished by any Initial Purchaser, it being understood and agreed that the only such information furnished by any Initial Purchaser consists of the Initial Purchasers' Information (as hereinafter defined). This indemnity agreement will be in addition to any liability which the Company and the Guarantors may otherwise have.

(b) *Indemnification of the Company.* Each Initial Purchaser, severally and not jointly, agrees to indemnify and hold harmless the Company, each Guarantor and each person, if any, who controls the Company within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act, each director of the Company or a Guarantor, and each officer of the Company or a Guarantor, against any losses, claims, damages or liabilities to which such party may become subject, under the Securities Act or otherwise, insofar as such losses, claims, damages or liabilities (or actions in respect thereof) arise out of or are based upon an untrue statement or alleged untrue statement of a material fact contained in the Preliminary Offering Memorandum, any of the other Time of Sale Information (including any of the other Time of Sale Information that has subsequently been amended), any Issuer Written Communication, any road show or the Offering Memorandum (or any amendment or supplement thereto), or arise out of or are based upon the omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein not misleading, in each case to the extent, but only to the extent, that such untrue statement or alleged untrue statement or omission or alleged omission was made in the Preliminary Offering Memorandum, any of the other Time of Sale Information (including any of the other Time of Sale Information that has subsequently been amended), any Issuer Written Communication, any road show or the Offering Memorandum (or any amendment or supplement thereto) in reliance upon and in conformity with information furnished by any Initial Purchaser, it being understood and agreed that the only such information furnished by any Initial Purchaser consists of the Initial Purchasers' Information (as hereinafter defined); provided, however, that the obligation of each Initial Purchaser to indemnify the Company and the Guarantors (including any controlling person, director or officer thereof) shall be limited to the amount of the discount and commissions applicable to the Securities to be purchased by such Initial Purchaser hereunder. The Parties hereto acknowledge and agree that, for all purposes of this Agreement, the "**Initial Purchasers' Information**" shall consist solely of the following information in the Preliminary Offering Memorandum and the Offering Memorandum: the statements set forth in the sixth paragraph, the seventh paragraph, the fourth sentence of the eighth paragraph and the ninth paragraph under the section entitled "Plan of Distribution" in the Preliminary Offering Memorandum and the Offering Memorandum.

(c) *Notice and Procedures.* Any party that proposes to assert the right to be indemnified under this Section 7 will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim is to be made against an indemnifying party or parties under this Section, notify each such indemnifying party of the commencement of such action, suit or proceeding, enclosing a copy of all papers served. No indemnification provided for in Section 7(a) or 7(b) shall be available to any party who shall fail to give notice as provided in this Section 7(c) if the party to whom notice was not given was unaware of the action, suit or proceeding to which such notice would have related and was prejudiced by the failure to give such notice but the omission so to notify such indemnifying party of any such action, suit or proceeding shall not relieve it from any liability that it may have to any indemnified party for contribution or otherwise than under this Section. In case any such action, suit or proceeding shall be brought against any indemnified party and it shall notify the indemnifying party of the commencement thereof, the indemnifying party shall be entitled to participate in, and, to the extent that it shall wish, jointly with any other indemnifying party similarly notified, to assume the defense thereof, with counsel reasonably satisfactory to such indemnified party, and after notice from the indemnifying party to such indemnified party of its election so to assume the defense thereof and the approval by the indemnified party of such counsel, the indemnifying party shall not be liable to such indemnified party for any legal or other expenses, except as provided below and except for the reasonable costs of investigation subsequently incurred by such indemnified party in connection with the defense thereof. The indemnified party shall have the right to employ its counsel in any such action, but the fees and expenses of such counsel shall be at the expense of such indemnified party unless (i) the employment of counsel by such indemnified party has been authorized in writing by the indemnifying parties, (ii) the indemnified party shall have been advised in writing by counsel that there may be one or more legal defenses available to it which are different from or in addition to those available to the indemnifying party (in which case the indemnifying parties shall not have the right to direct the defense of such action on behalf of the indemnified party) or (iii) the indemnifying parties shall not have employed counsel to assume the defense of such action within a reasonable time after notice of the commencement thereof, in each of which cases the fees and expenses of counsel shall be at the expense of the indemnifying parties, provided that the indemnifying party shall not be obligated to pay for the expenses of more than one counsel for all indemnified parties as a group. An indemnifying party shall not be liable for any settlement of any action, suit, and proceeding or claim effected without its written consent, which consent shall not be unreasonably withheld or delayed.

(d) *Contribution.* In order to provide for just and equitable contribution in circumstances in which the indemnification provided for in Section 7(a) or 7(b) is due in accordance with its terms but for any reason is unavailable to or insufficient to hold harmless an indemnified party in respect to any losses, liabilities, claims, damages or expenses referred to therein, then each indemnifying party shall contribute to the aggregate losses, liabilities, claims, damages and expenses (including any investigation, legal and other expenses reasonably incurred in connection with, and any amount paid in settlement of, any action, suit or proceeding or any claims asserted, but after deducting any contribution received by any person entitled hereunder to contribution from any person who may be liable for contribution) incurred by such indemnified party, as incurred, in such proportion as is appropriate to reflect the relative benefits received by the Company and the Guarantors on the one hand and the Initial Purchasers on the other hand from the offering of the Securities pursuant to this Agreement or, if such allocation is not permitted by applicable law, in such proportion as is appropriate to reflect not only the relative benefits referred to above but also the relative fault of the Company and the Guarantors on the one hand and the Initial Purchasers on the other hand in connection with the statements or omissions which resulted in such losses, liabilities, claims, damages or expenses, as well as any other relevant equitable considerations. The Company, the Guarantors and the Initial Purchasers agree that it would not be just and equitable if contribution pursuant to this Section 7 were determined by pro rata allocation (even if the Initial Purchasers were treated as one entity for such purpose) or by any other method of allocation which does not take account of the equitable considerations referred to above. The aggregate amount of losses, liabilities, claims, damages and expenses incurred by an indemnified party and referred to above shall be deemed to include any legal or other expenses reasonably incurred by such indemnified party in investigating, preparing or defending against any litigation, or any investigation or proceeding by any governmental agency or body, commenced or threatened, or any claim whatsoever based upon any such untrue or alleged untrue statement or omission or alleged omission. Notwithstanding the provisions of this Section 7, no Initial Purchaser (except as may be provided in the Agreement Among Initial Purchasers) shall be required to contribute any amount in excess of the underwriting discounts and commissions applicable to the Securities purchased by such Initial Purchaser. No person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) shall be entitled to contribution from any person who was not guilty of such fraudulent misrepresentation. For purposes of this Section 7, each person, if any, who controls an Initial Purchaser within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act shall have the same rights to contribution as such Initial Purchaser, and each director of the Company or a Guarantor, each officer of the Company or a Guarantor, and each person, if any, who controls the Company within the meaning of the Section 15 of the Securities Act or Section 20 of the Exchange Act, shall have the same rights to contribution as the Company and the Guarantors. Any party entitled to contribution will, promptly after receipt of notice of commencement of any action, suit or proceeding against such party in respect of which a claim for contribution may be made against another party or parties under this Section 7, notify such party or parties from whom contribution may be sought, but the omission so to notify such party or parties from whom contribution may be sought shall not relieve the party or parties from whom contribution may be sought from any other obligation it or they may have hereunder or otherwise than under this Section 7. No party shall be liable for contribution with respect to any action, suit, proceeding or claim settled without its written consent. The Initial Purchasers' obligations to contribute pursuant to this Section 7 are several in proportion to their respective underwriting commitments and not joint.

(e) *Non-Exclusive Remedies.* The remedies provided for in this Section 7 are not exclusive and shall not limit any rights or remedies which may otherwise be available to any Indemnified Person at law or in equity.

8. Effectiveness of Agreement. This Agreement shall become effective upon the execution and delivery hereof by the parties hereto.

9. Termination. (a) This Agreement may be terminated with respect to the Securities to be purchased on the Closing Date, by the Representative by notifying the Company at any time at or before the Closing Date, in the absolute discretion of the Representative if: (i) in the judgment of the Representative, there has occurred any material adverse change in the securities markets or any event, act or occurrence that has materially disrupted, or in the reasonable opinion of the Representative, will in the future materially disrupt, the securities markets or there shall be such a material adverse change in general financial, political or economic conditions or the effect of international conditions on the financial markets in the United States is such as to make it, in the judgment of the Representative, inadvisable or impracticable to market the Securities or enforce contracts for the sale of the Securities; (ii) there has occurred any outbreak or material escalation of hostilities or acts of terrorism or other calamity or crisis the effect of which on the financial markets of the United States is such as to make it, in the judgment of the Representative, inadvisable or impracticable to market the Securities or enforce contracts for the sale of the Securities; (iii) trading of any securities issued or guaranteed by the Company shall have been suspended on the NASDAQ Capital Market; (iv) trading in the Common Stock or any securities of the Company has been suspended or materially limited by the Commission or trading generally on the New York Stock Exchange, Inc. or the NASDAQ Capital Market has been suspended or materially limited, or minimum or maximum ranges for prices for securities shall have been fixed, or maximum ranges for prices for securities have been required, by any of said exchanges or by such system or by order of the Commission, FINRA, or any other governmental or regulatory authority; (v) a banking moratorium has been declared by any state or federal authority; or (vi) in the reasonable judgment of the Representative, there has been, since the time of execution of this Agreement or since the respective dates as of which information is given in the Offering Memorandum, any Material Adverse Effect.

(b) If this Agreement is terminated pursuant to any of its provisions, the Company and the Guarantors shall not be under any liability to any Initial Purchaser, and no Initial Purchaser shall be under any liability to the Company or any Guarantor, except that (y) if this Agreement is terminated by the Representative or the Initial Purchasers because of any failure, refusal or inability on the part of the Company or any Guarantor to comply with the terms or to fulfill any of the conditions of this Agreement, the Company will reimburse the Initial Purchasers for all reasonable out-of-pocket expenses (including the reasonable fees and disbursements of their counsel) incurred by them in connection with the proposed purchase and sale of the Securities or in contemplation of performing their obligations hereunder, subject to the provisions of Section 11 of this Agreement, and (z) no Initial Purchaser who shall have failed or refused to purchase the Securities agreed to be purchased by it under this Agreement, without some reason sufficient hereunder to reasonably justify cancellation or termination of its obligations under this Agreement, shall be relieved of liability to the Company or the Guarantors, or to the other Initial Purchaser for damages occasioned by its failure or refusal.

10. Defaulting Initial Purchaser. If any Initial Purchaser shall default in its obligation to purchase on the Closing Date, the Securities agreed to be purchased hereunder on such date, the Representative shall have the right, within 36 hours thereafter, to make arrangements for one or more of the non-defaulting Initial Purchasers, or any other initial purchasers, to purchase such Securities on the terms contained herein. If, however, the Representative shall not have completed such arrangements within such 36-hour period, then the Company shall be entitled to a further period of thirty-six hours within which to procure another party or other parties satisfactory to the Initial Purchasers to purchase such Securities on such terms. If, after giving effect to any arrangements for the purchase of the Securities of a defaulting Initial Purchaser or Initial Purchasers by the Representative and the Company as provided above, the aggregate number of Securities which remains unpurchased on the Closing Date, does not exceed 20% of the aggregate number of all the Securities that all the Initial Purchasers are obligated to purchase on such date, then the Company shall have the right to require each non-defaulting Initial Purchaser to purchase the number of Securities which such Initial Purchaser agreed to purchase hereunder at such date and, in addition, to require each non-defaulting Initial Purchaser to purchase its pro rata share (based on the number of Securities which such Initial Purchaser agreed to purchase hereunder) of the Securities of such defaulting Initial Purchaser or Initial Purchasers for which such arrangements have not been made; but nothing herein shall relieve a defaulting Initial Purchaser from liability for its default. In any such case, either the Representative or the Company shall have the right to postpone the Closing Date, for a period of not more than seven days in order to effect any necessary changes and arrangements (including any necessary amendments or supplements to the Time of Sale Information or the Offering Memorandum or any other documents), and the Company agrees to promptly amend the Time of Sale Information or the Offering Memorandum which in the opinion of the Company and the Initial Purchasers and their counsel may thereby be made necessary.

The provisions of this Section 10 shall not in any way affect the liability of any defaulting Initial Purchaser to the Company, the Guarantors or the nondefaulting Initial Purchasers arising out of such default. The term "Initial Purchaser" as used in this Agreement shall include any person substituted under this Section 10 with like effect as if such person had originally been a party to this Agreement with respect to such Securities.

11. Payment of Expenses. Subject to the provisions of Section 9, whether or not the transactions contemplated by the Transaction Documents are consummated, the Company and the Guarantors will jointly and severally pay or cause to be paid all costs and expenses incident to the performance of its obligations hereunder, including without limitation, (i) the costs incident to the authorization, issuance, sale, preparation and delivery of the Securities and any taxes payable in that connection; (ii) the costs incident to the preparation and printing of the Preliminary Offering Memorandum, any other Time of Sale Information, any Issuer Written Communication and the Offering Memorandum, (including all exhibits, amendments and supplements thereto) and the distribution thereof; (iii) the costs of reproducing and distributing the Transaction Documents; (iv) the fees and expenses of the Company's and the Guarantors' counsel and independent accountants; (v) the fees and expenses incurred in connection with the registration or qualification and determination of eligibility for investment of the Securities under the laws of such jurisdictions as the Representative may designate and the preparation, printing and distribution of a Blue Sky Memorandum (including the related fees and expenses of counsel for the Initial Purchasers (not to exceed $5,000)); (vi) any fees charged by ratings agencies for rating the Securities; (vii) the fees and expenses of the Trustee, any collateral agent and any paying agent (including the related fees and expenses of counsel to such parties); (viii) all costs and expenses in connection with the creation and perfection of the Collateral Documents (including without limitation, filing and recording fees, search fees, taxes and costs of title policies), (ix) all expenses and application fees incurred in connection with the approval of the Securities for book-entry transfer by DTC; (x) all expenses incurred by the Company in connection with any "road show" presentation to potential investors; (xi) all expenses and application fees related to the listing of the Underlying Securities on NASDAQ and (xii) all reasonable out of pocket costs and expenses incident to the offering and the performance of the obligations of the Representative under this Agreement, including, without limitation, the fees and expenses of one counsel to the Initial Purchasers; provided, however, that the fees and expenses of counsel to the Initial Purchasers to be reimbursed by the Company pursuant to this paragraph shall not exceed $300,000 in the aggregate. Subject to the provisions of Section 9, the Initial Purchasers agree to pay, whether or not the transactions contemplated hereby are consummated or this Agreement is terminated, all costs and expenses incident to the performance of the obligations of the Initial Purchasers under this Agreement not payable by the Company and the Guarantors pursuant to the preceding sentence, including, without limitation, the fees and expenses of counsel for the Initial Purchasers.

12. Persons Entitled to Benefit of Agreement. This Agreement shall inure to the benefit of and be binding upon the parties hereto and their respective successors and the officers and directors and any controlling persons referred to in Section 7 hereof. Nothing in this Agreement is intended or shall be construed to give any other person any legal or equitable right, remedy or claim under or in respect of this Agreement or any provision contained herein. No purchaser of Securities from any Initial Purchaser shall be deemed to be a successor merely by reason of such purchase.

13. Survival. The respective indemnities, rights of contribution, representations, warranties and agreements of the Company, the Guarantors and the Initial Purchasers contained in this Agreement or made by or on behalf of the Company, the Guarantors or the Initial Purchasers pursuant to this Agreement or any certificate delivered pursuant hereto shall survive the delivery of and payment for the Securities and shall remain in full force and effect, regardless of any termination of this Agreement or any investigation made by or on behalf of the Company or the Guarantors or the Initial Purchasers.

14. Certain Defined Terms. For purposes of this Agreement, (a) except where otherwise expressly provided, the term "affiliate" has the meaning set forth in Rule 405 under the Securities Act; (b) the term "business day" means any day other than a day on which banks are permitted or required to be closed in New York City; and (c) the term "subsidiary" has the meaning set forth in Rule 405 under the Securities Act.

15. Miscellaneous.

(a) *Notices.* Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section prior to 5:00 p.m. (Eastern time) on a business day, (ii) the business day after the date of transmission, if such notice or communication is delivered via email at the email address specified in this Agreement later than 5:00 p.m. (Eastern time) on any date and earlier than 11:59 p.m. (Eastern time) on such date, (iii) the business day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. Notices to the Initial Purchasers shall be given to each of the Representative as follows: c/o Oppenheimer & Co. Inc., 85 Broad Street, New York, New York 10004 Attention: Equity Capital Markets, email address: ecmexecution@opco.com, with a copy to Oppenheimer & Co. Inc., 85 Broad Street, New York, New York 10004, Attention: General Counsel, email address: peter.vogelsang@opco.com, with a copy (which shall not constitute notice hereunder) to Lowenstein Sandler LLP, 1251 Avenue of the Americas, New York, New York 10020, Attention: John D. Hogoboom, email address: jhogoboom@lowenstein.com. Notices to the Company and the Guarantors shall be given to them c/o Akoustis Technologies, Inc., 9805 Northcross Center Court, Suite A Huntersville, NC 28078, Attention: Chief Executive Officer, email address: jshealy@akoustis.com, with a copy to c/o Akoustis Technologies, Inc., 9805 Northcross Center Court, Suite A Huntersville, NC 28078, Attention: General Counsel, email address: dwright@akoustis.com, with a copy (which shall not constitute notice hereunder) to K&L Gates LLP, 214 North Tryon Street, 47th Floor, Charlotte, NC 28202, Attention: Sean M. Jones, email address: sean.jones@klgates.com.

(b) *Governing Law.* This Agreement and any claim, controversy or dispute arising under or related to this Agreement shall be governed by and construed in accordance with the laws of the State of New York applicable to agreements made and to be performed in such state.

(c) *Patriot Act.* In accordance with the requirements of the USA Patriot Act (Title III of Pub. L. 107-56 (signed into law October 26, 2001)), the Initial Purchasers are required to obtain, verify and record information that identifies their respective clients, including the Company and the Guarantors, which information may include the name and address of their respective clients, as well as other information that will allow the Initial Purchasers to properly identify their respective clients.

(d) *Counterparts.* This Agreement may be signed in counterparts (which may include counterparts delivered by any standard form of telecommunication), each of which shall be an original and all of which together shall constitute one and the same instrument.

(e) *Amendments or Waivers.* No amendment or waiver of any provision of this Agreement, nor any consent or approval to any departure therefrom, shall in any event be effective unless the same shall be in writing and signed by the parties hereto.

(f) *Headings.* The headings herein are included for convenience of reference only and are not intended to be part of, or to affect the meaning or interpretation of, this Agreement.

(g) *Xtract Research LLC*. The Company hereby agrees that the Initial Purchasers may provide copies of the Preliminary Offering Memorandum and the Final Offering Memorandum relating to the offering of the Securities and any other agreements or documents relating thereto, including, without limitation, trust indentures, to Xtract Research LLC ("**Xtract**") following the completion of the offering for inclusion in an online research service sponsored by Xtract, access to which is restricted to "qualified institutional buyers" as defined in Rule 144A under the Securities Act.

[signature pages follows]

If the foregoing is in accordance with your understanding, please indicate your acceptance of this Agreement by signing in the space provided below.

Very truly yours,

AKOUSTIS TECHNOLOGIES, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

AKOUSTIS, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

Accepted: As of the date first written above

OPPENHEIMER & CO. INC.

For itself and on behalf of the
several Initial Purchasers listed
in Schedule 1 hereto.

By: OPPENHEIMER & CO. INC.

By: /s/ Eric Helenek
Name: Eric Helenek
Title: Managing Director

[Signature Page – Purchase Agreement]

Schedule 1

Initial Purchaser	Principal Amount of Securities to be Purchased
Oppenheimer & Co. Inc.	$ 9,750,000
Drexel Hamilton, LLC	5,250,000
Total	$ 15,000,000

Schedule 2

Jeffrey B. Shealy
John T. Kurtzweil
David M. Aichele
Steven P. DenBaars
Arthur E. Geiss
Jeffrey K. McMahon
Steven P. Miller
Jerry D. Neal
Suzanne B. Rudy

Annex A

Time of Sale Information

TERM SHEET

The information in this pricing term sheet, dated May 10, 2018, supplements the preliminary offering memorandum, dated May 1, 2018 (the "Preliminary Offering Memorandum") related to Company offering of 6.5% Convertible Senior Secured Notes due 2023 (the "Notes"), and supersedes the information in the Preliminary Offering Memorandum to the extent inconsistent with the information in the Preliminary Offering Memorandum. In all other respects, this term sheet is qualified in its entirety by reference to the Preliminary Offering Memorandum. Terms used herein but not defined herein shall have the respective meanings as set forth in the Preliminary Offering Memorandum.

Issuer:	Akoustis Technologies, Inc.
Ticker / Exchange for Common Stock:	AKTS NASDAQ Capital Market (the "NASDAQ")
Pricing Date:	May 10, 2018
Trade Date:	May 10, 2018
Closing Date:	May 14, 2018
Notes:	6.5% Convertible Senior Secured Notes due 2023
Aggregate Principal Amount Offered:	$15.0 million
Issue Price:	100%, plus accrued interest, if any, from the Closing Date
Maturity:	May 31, 2023
Interest Rate; Payment:	6.5%. At the Company's option, interest may be paid in cash and/or freely tradable shares of the Company's common stock, subject to certain limitations, valued at 95% of the volume weighted average price of the common stock for the ten Trading Days ending on and including the Trading Day immediately preceding the interest payment date. Subject to the limitation described below under "Share Limitation," interest payments will be made all in shares of common stock unless the Company gives written notice to the holders that it intends to make future interests payments either all or partially in cash. Such notice will not be effective until the end of the 15th Trading Day after such notice is given.
Interest Payment Dates:	February 28, May 31, August 31 and November 30, commencing August 31, 2018
Last Reported Sale:	$5.93 per share
Conversion Premium:	10.5% above the last reported sale price of our common stock on May 9, 2018
Conversion Price:	$6.55 per share

Initial Conversion Rate:	152.6718 shares of common stock per $1,000 principal amount of Notes
Adjustment to Conversion Rate:	In the event that the Company issues, or is deemed to issue, shares of common stock, other than Excluded Securities (as hereinafter defined) for a consideration per share (the "Trigger Price") less than the conversion price in effect immediately prior to the such issuance or deemed issuance (a "Dilutive Issuance"), then immediately after such Dilutive Issuance, the conversion rate then in effect shall be adjusted to reduce the conversion price to an amount equal to the higher of (i) the Trigger Price or (ii) $5.00 (appropriately adjusted for any stock dividend, stock split, stock combination, reclassification or other similar transaction occurring after the Closing Date). As used herein, "Excluded Securities" means (i) capital stock, rights, warrants or options to subscribe for or purchase common stock or Convertible Securities (as hereinafter defined) ("Options") issued to directors, officers, employees or consultants of the Company or a Guarantor in connection with their service as directors of the Company or a Guarantor, their employment by the Company or a Guarantor or their retention as consultants by the Company or a Guarantor pursuant to an employee benefit plan approved by the Board of Directors of the Company or the Compensation Committee of the Board of Directors of the Company, (ii) shares of common stock issued upon the conversion or exercise of Options or any stock or securities (other than Options) directly or indirectly convertible into or exercisable or exchangeable for shares of common stock ("Convertible Securities") that were issued and outstanding immediately preceding the execution and delivery of the Purchase Agreement (the "Effective Time"), provided such securities are not amended after the Effective Time to increase the number of shares of common stock issuable thereunder, lower the exercise or conversion price thereof or extend the term thereof, (iii) securities issued pursuant to the Purchase Agreement and shares of common stock issued in respect of such securities, (iv) shares of common stock issued or issuable by reason of a dividend, stock split or other distribution on shares of common stock (but only to the extent that such a dividend, stock split or distribution results in an adjustment in the conversion rate pursuant to the other provisions of the Notes), and (v) capital stock, Options or Convertible Securities issued as consideration for an acquisition or strategic transaction (including a joint venture, technology license agreement or other similar strategic arrangement relating to the Company's business and operations) approved by a majority of the disinterested directors of the Company, provided that any such issuance shall only be a person or entity (or to the equityholders of an entity) which is, itself or through its subsidiaries, an operating company in a business which the Board of Directors of the Company in the good faith exercise of its business judgement believes is synergistic with the business of the Company and shall provide to the Company additional benefits in addition to the investment of funds, but shall not, for the purposes of this clause (v), include a transaction in which the Company is issuing securities primarily for the purpose of raising capital or to an entity whose primary business is investing in securities.

Make-Whole Provision:	If a holder elects to convert the Notes at any time on or after the date that is one year after the last date of original issuance of the notes and prior to May 31, 2021, the holder will also receive a make-whole payment equal to the remaining scheduled interest payments that would have been made on the Notes converted had such notes remained outstanding through the put date (as defined below). Subject to the limitation described below under "Share Limitation," at the Company's option, make-whole payments may be paid in cash and/or freely tradable shares of the Company's common stock valued at 95% of the volume weighted average price of the common stock for the ten Trading Days ending on and including the Trading Day immediately preceding the conversion date. See "Description of Notes—Conversion Rights—Interest Make-Whole Payment upon Conversion" in the Preliminary Offering Memorandum. Subject to the limitation described below under "Share Limitation," make-whole payments will be made all in shares of common stock unless the Company gives written notice to the holders that it intends to make future make-whole payments either all or partially in cash. Such notice will not be effective until the end of the 15th Trading Day after such notice is given. Notwithstanding the forgoing, if in connection with any conversion a holder received a fundamental change payment (as hereinafter defined), then such holder will not receive the additional payment with respect to such Note.
Record Dates:	February 15, May 15, August 15 and November 15
Ranking:	The Notes will be secured by a perfected first priority lien (subject to permitted liens) on substantially all of the Company's and its subsidiaries' assets, including the Canandaigua, New York manufacturing facility of the Company's subsidiary, Akoustis, Inc., the Company's and its subsidiaries' U.S. patents and trademarks, and a pledge of the Company's equity interest in Akoustis, Inc. The Notes are senior secured obligations. The notes will be the Company's senior secured obligations and will rank senior to all of the Company's existing and future unsecured indebtedness to the extent of the value of the collateral. The Company has the right to incur capital lease obligations and purchase money indebtedness for the purpose of financing the purchase price or cost of equipment used in its and its subsidiaries' production lines and up to an additional $1 million of such indebtedness for other purposes. The notes will rank junior to that indebtedness to the extent of the assets acquired with the proceeds thereof.
Guarantees	The guarantors and any successor of any guarantor under the indenture, jointly and severally with any other guarantors, will irrevocably and unconditionally guaranteed, on a senior basis, the following: ● the due and punctual payment of the principal of, premium, if any, and interest on the Notes, whether at maturity of the Notes, by acceleration or otherwise; the due and punctual payment of interest on any overdue principal or interest, if any, on the Notes, to the extent lawful; and the due and punctual performance of all other obligations of the guarantors and any successor of the guarantor to the holders or to the trustee; and ● in case of any extension of time of payment or renewal of any Notes or any such other obligations, that the obligations will be promptly paid in full when due or performed in accordance with the terms of the extension or renewal, whether at maturity of the notes, by acceleration or otherwise. All of the Company's now owned and hereafter acquired direct and indirect subsidiaries are and will be guarantors under the indenture.

Put Right:	The holders of the Notes will have a one-time right, effective on May 31, 2021 (the "put date"), exercisable prior thereto in the manner described in the indenture, to require the Company to repurchase for cash all (but not less than all) of their Notes at a purchase price equal to 100% of the principal amount of the notes to be repurchased, plus accrued and unpaid interest to, and including, the put date.
Share Limitation:	The number of shares the Company may deliver in respect of the Notes, including those delivered in lieu of cash interest, in connection with an interest make-whole payment, or in a fundamental change payment (as hereinafter defined) will not exceed 19.99% of the Company's common stock outstanding (as adjusted for stock splits, reverse stock splits, stock combinations, reclassifications and reorganizations) as of the close of the Trading Day immediately preceding the date of the indenture that governs the notes without shareholder approval or as otherwise required pursuant to the listing requirements of the NASDAQ Capital Market or such other national securities exchange on which the common stock is then listed. The Company will not be required to make any cash payments in lieu of any fractional shares.
Additional Debt:	The Company and its subsidiaries will be permitted to incur certain additional indebtedness as described in the Preliminary Offering Memorandum under "Description of Notes—Limitation on Incurrence of Additional Indebtedness."
Use of Proceeds:	The Company estimates that the net proceeds from this offering will be approximately $13.5 million, after deducting fees and estimated expenses. The Company intends to use the net proceeds to fund its operations, including R&D and the commercialization of its technology, as well as for working capital and other general corporate purposes.
Registration Rights:	The Company will enter into a registration rights agreement with the initial purchasers pursuant to which it will agree to file within 90 days of the closing date a registration statement covering the resale of the Securities and the shares of common stock issuable upon the conversion of the Notes. The Company will also agree to use its best efforts to cause this registration statement to be declared effective within 180 days of the closing date. If the Company fails to perform its obligations under the registration rights agreement, the Company will pay additional interest at a rate per annum of 0.50% for the first 90 day period following the occurrence of the relevant event and, thereafter, at a rate per annum of 1.0% until such event is cured. The Company will maintain the registration of such securities until the earliest of the date that (i) all of such securities have been sold either pursuant to the registration statement or Rule 144 or are no longer outstanding, (ii) such securities may be sold without restriction by each holder pursuant to Rule 144 in a single transaction and certain other conditions have been satisfied, or (iii) is two years after the registration statement is declared effective by the SEC. In order to have their securities included in the registration statement, holders will be required to complete a notice and questionnaire, to provide additional specified information upon the Company's request, and to observe certain other requirements set forth in the registration rights agreement.
Initial Purchasers:	Oppenheimer & Co. Inc. and Drexel Hamilton, LLC
Listing:	None

CUSIP Number:	00973N AA0
Payment in Connection With Conversion Upon a Qualifying Fundamental Change:	If the "effective date" (as hereinafter defined) of a "qualifying fundamental change" (as hereinafter defined) occurs prior to the maturity date of the Notes and a holder elects to convert its Notes in connection with such qualifying fundamental change, the Company will, under certain circumstances, make a payment to the holder of the Notes so surrendered for conversion equal to $130 per $1,000 of aggregate principal of Notes surrendered for conversion (a "fundamental change payment"). A "qualifying fundamental change" means any transaction or event that constitutes a fundamental change defined below in clause (1), (2) or (4) of the definition of "fundamental change" under "Description of Notes—Fundamental Change Permits Holders to Require Us to Repurchase Notes" in the Preliminary Offering Memorandum, after giving effect to any exceptions or exclusions from such definition, but without regard to the proviso in clause (2) of the definition thereof. A conversion of Notes will be deemed for these purposes to be "in connection with" such qualifying fundamental change if the relevant conversion date occurs during the period from, and including, the effective date of the qualifying fundamental change up to, and including, the business day immediately prior to the related fundamental change repurchase date (or, in the case of a qualifying fundamental change that would have been a fundamental change but for the proviso in clause (2) of the definition thereof, the 35th Trading Day immediately following the effective date of such qualifying fundamental change) (such period, the "qualifying fundamental change period"). Upon surrender of Notes for conversion in connection with a qualifying fundamental change the Company will deliver shares of common stock as described under "Description of Notes—Conversion Rights—Settlement upon Conversion" in the Preliminary Offering Memorandum. However, for any conversion of Notes following the effective date of such qualifying fundamental change, the conversion obligation will be calculated by the Company based solely on the "stock price" (as defined below) for the transaction and will be deemed to be an amount of cash per $1,000 principal amount of converted Notes equal to the conversion rate, multiplied by such stock price. The Company will notify the trustee, the conversion agent (if other than the trustee) and holders, in writing, of the effective date of any qualifying fundamental change no later than five business days after such effective date. If the holders of common stock receive in exchange for their common stock only cash in a qualifying fundamental change described in clause (2) of the definition of fundamental change, the stock price shall be the cash amount paid per share. Otherwise, the stock price shall be the average of the closing sale prices of the common stock over the five consecutive Trading Day period ending on, and including, the Trading Day immediately preceding the relevant effective date. The Company will have the option to pay any fundamental change payment in cash and/or freely tradable shares of the Company's common stock, subject to certain limitations, valued at 95% of the stock price determined as described above. Subject to the limitation described below above under "Share Limitation," any fundamental change interest payments will be made all in shares of common stock unless the Company gives written notice to the holders that it intends to make future fundamental change payments either all or partially in cash. Such notice will not be effective until the end of the 15th Trading Day after such notice is given.

This communication is intended for the sole use of the person to whom it is provided by the sender.

Purchasers should rely only on the information contained or incorporated by reference in the Preliminary Offering Memorandum, as supplemented by this final pricing term sheet, in making an investment decision with respect to the Notes. A copy of the Preliminary Offering Memorandum can be obtained by contacting your Oppenheimer & Co. sales representative.

This communication shall not constitute an offer to sell or the solicitation of an offer to buy securities, nor shall there be any sale of these securities, in any state in which such solicitation or sale would be unlawful prior to registration or qualification of these securities under the laws of any such state.

The Securities and the common stock issuable upon conversion of the Notes have not been registered under the Securities Act of 1933, as amended (the "Securities Act"), or any other state securities laws. Unless they are registered, the Securities and any common stock issuable upon conversion of the Notes may be offered only in transactions exempt from or not subject to registration under the Securities Act or any other state securities laws. Accordingly, the Notes are only being offered to "qualified institutional buyers" (as defined in Rule 144A under the Securities Act). Purchasers will receive certain registration rights as described above.

ANY DISCLAIMERS OR OTHER NOTICES THAT MAY APPEAR BELOW ARE NOT APPLICABLE TO THIS COMMUNICATION AND SHOULD BE DISREGARDED. SUCH DISCLAIMERS OR OTHER NOTICES WERE AUTOMATICALLY GENERATED AS A RESULT OF THIS COMMUNICATION BEING SENT VIA BLOOMBERG OR ANOTHER EMAIL SYSTEM

Exhibit A

Form of Lock Up Agreement

May 10, 2018

Oppenheimer & Co. Inc.
85 Broad Street
New York, New York 10004

Re: Akoustis Technologies, Inc.

Ladies and Gentlemen:

In order to induce Oppenheimer & Co. Inc. ("**Oppenheimer**") to enter into a certain definitive agreement (the "**Purchase Agreement**") with Akoustis Technologies, Inc., a Delaware corporation (the "**Company**"), providing for the purchase and resale (the "**Placement**") by the several Initial Purchasers named in the Schedule 1 to the Purchase Agreement (the "**Initial Purchasers**"), of Convertible Senior Secured Notes of the Company (the "**Securities**"). Capitalized terms used herein and not otherwise defined shall have the meanings set forth in the Purchase Agreement.

In consideration of the Initial Purchasers' agreement to purchase and make the Placement of the Securities, and for other good and valuable consideration receipt of which is hereby acknowledged, the undersigned hereby agrees that, without the prior written consent of the Representative on behalf of the Initial Purchasers, the undersigned will not, during the period ending ninety (90) days after the date of the final offering memorandum (the "**Offering Memorandum**") relating to the Placement (the "**Lock-Up Period**"), the undersigned will not, without the prior written consent of Oppenheimer, directly or indirectly, (i) offer, sell, assign, transfer, pledge, contract to sell, or otherwise dispose of, any of the Company's shares of Common Stock, par value $0.001 per share ("**Common Stock**"), or securities convertible into or exercisable or exchangeable for any equity securities of the Company (including, without limitation, shares of Common Stock or any such securities which may be deemed to be beneficially owned by the undersigned in accordance with the rules and regulations promulgated under the Securities Act of 1933, as the same may be amended or supplemented from time to time (the "**Securities Act**" and such shares or securities, the "**Beneficially Owned Shares**")), (ii) enter into any swap, hedge or other agreement or arrangement that transfers in whole or in part, the economic risk of ownership of any Beneficially Owned Shares, Common Stock or securities convertible into or exercisable or exchangeable for any equity securities of the Company, or (iii) engage in any short selling of any Beneficially Owned Shares, Common Stock or securities convertible into or exercisable or exchangeable for any equity securities of the Company.

In addition, the undersigned hereby waives, from the date hereof until the expiration of the Lock-Up Period, any and all rights, if any, to request or demand registration pursuant to the Securities Act of any shares of Common Stock or securities convertible into or exercisable or exchangeable for any equity securities of the Company that are registered in the name of the undersigned or that are Beneficially Owned Shares. In order to enable the aforesaid covenants to be enforced, the undersigned hereby consents to the placing of legends and/or stop transfer orders with the transfer agent of the Common Stock with respect to any shares of Common Stock, securities convertible into or exercisable or exchangeable for any equity securities of the Company or Beneficially Owned Shares.

Notwithstanding the foregoing, and subject to the conditions below, the undersigned may transfer the Beneficially Owned Shares in the transactions listed as (i)-(iv) below without the prior written consent of Oppenheimer, provided that (1) prior to each such transfer, each donee, trustee, distributee or transferee, as the case may be, shall execute and deliver to Oppenheimer a lock-up letter substantially in the form hereof, (2) no such transfer shall involve a disposition for value, (3) each such transfer shall not be required to be reported in any public report, announcement or filing made or to be made with the Securities and Exchange Commission or otherwise during the Lock-Up Period and (4) the undersigned does not otherwise voluntarily effect any public filing, announcement or report regarding any such transfer during the Lock-Up Period:

(i) as a bona fide gift or gifts;

(ii) to any trust for the direct or indirect benefit of the undersigned or the immediate family of the undersigned, or if the undersigned is a trust, to its grantor or beneficiaries pursuant to its terms;

(iii) to any beneficiary of the undersigned pursuant to a will or other testamentary document or applicable laws of descent;

(iv) to any corporation, partnership, limited liability company or other entity that controls, is controlled by or is under common control with the undersigned; or

(v) as a distribution to limited partners, members or stockholders of the undersigned.

Furthermore, notwithstanding the restrictions imposed herein, the undersigned may, without the prior written consent of Oppenheimer, (1) exercise an option to purchase shares of Common Stock granted under any stock incentive plan or stock purchase plan of the Company; provided that the underlying shares of Common Stock shall continue to be subject to the restrictions on transfer imposed by this Letter Agreement, (2) establish a trading plan pursuant to Rule 10b5-1 under the Securities Exchange Act of 1934, as amended (the "**Exchange Act**") for the transfer of Common Stock (a "**Trading Plan**"); provided that (a) the Trading Plan shall not provide for or permit any transfers, sales or other dispositions of Common Stock during the Lock-Up Period and (b) no filing or other public announcement, whether under the Exchange Act or otherwise, shall be required or shall be made by the undersigned or the Company in connection with the Trading Plan during the Lock-Up Period and, before the Trading Plan is established, the Company shall have provided to the Representative written confirmation that no such filing or public announcement shall be required or shall be made by the Company in connection with the Trading Plan during the Lock-Up Period, (3) transfer, sell or dispose of shares of Common Stock upon the vesting of restricted shares or restricted stock units (including performance share units) that vest during the Lock-Up Period in order to satisfy tax withholding obligations incurred in connection therewith (and make any related filings in connection with such transfer, sale or disposition that are required under the Exchange Act), and (4) transfer, sell or dispose of shares of Common Stock held by the undersigned pursuant to a Trading Plan existing on the date of this Agreement (and make any related filings in connection with such transfer, sale or disposition that are required under the Exchange Act).

This letter agreement shall automatically terminate upon the earlier of (i) May 31, 2018, in the event that the Purchase Agreement is not executed by that date, (ii) the termination of the Purchase Agreement if such agreement is terminated prior to the consummation of the Placement in accordance with its terms, or (iii) either Oppenheimer, on the one hand, or the Company, on the other hand, advising the other in writing, prior to the execution of the Purchase Agreement, that it has determined not to proceed with the Placement.

(Remainder of page intentionally left blank. Signature page to follow.)

This letter agreement has been executed as of the date first written above.

[Signatory]

By: _____

Name:
Title:

Schedule I

COLLATERAL DOCUMENTS

Fee and Leasehold Mortgage, Assignment, Security Agreement and Fixture Filing given by Akoustis, Inc., a Delaware corporation) ("Akoustis Sub"), and The Ontario County Industrial Development Agency, a public benefit corporation of the State of New York, for the benefit of The Bank of New York Mellon Trust Company, N.A., as collateral agent (in such capacity, the "collateral agent").

Supplemental Fee and Leasehold Mortgage, Assignment, Security Agreement and Fixture Filing given by Akoustis Sub for the benefit of the collateral agent.

Pledge and Security Agreement among Akoustis Technologies, Inc. (the "Company"), Akoustis Sub and the collateral agent.

Collateral Agency Agreement among the Company, Akoustis Sub, the collateral agent and The Bank of New York Mellon Trust Company, N.A., as indenture trustee.

All other security agreements, pledge agreements, collateral assignments and other security documents or other grants or transfers for security or agreements related thereto creating or perfecting (or purporting to create or perfect) a lien in any assets securing the obligations under the notes and the guarantees, or under which rights or remedies with respect to such liens are governed, as each may be amended, restated, supplemented or otherwise modified from time to time.

Exhibit 10.2

REGISTRATION RIGHTS AGREEMENT

Oppenheimer & Co. Inc.
Drexel Hamilton, LLC
c/o Oppenheimer & Co. Inc.
85 Broad Street
New York, New York 10004

Ladies and Gentlemen:

Akoustis Technologies, Inc., a Delaware corporation (the "**Company**") proposes to issue and sell to the Initial Purchasers (as hereinafter defined), upon the terms set forth in the Purchase Agreement (as hereinafter defined) $15.0 million in aggregate principal amount of the Company's 6.5% Convertible Senior Secured Notes due 2023 (the "**Notes**"), and the Guarantors (as hereinafter defined) propose to issue and sell to the Initial Purchasers the Guarantees (as hereinafter defined and, together with the Notes, the "**Securities**"). The Notes will be guaranteed (the "**Guarantees**") by the existing and future subsidiaries of the Company (the "**Guarantors**"). The Securities will be convertible into shares (the "**Underlying Securities**") of common stock of the Company, par value $0.001 per share (the "**Common Stock**"), subject to certain limitations as set forth in the Indenture (as defined herein). The Securities will be issued pursuant to an Indenture, dated as of May 14, 2018 (as amended and supplemented from time to time in accordance with its terms, the "**Indenture**"), among the Company, the Guarantors party thereto and The Bank of New York Mellon Trust Company, N.A. as trustee (the "**Trustee**").

As an inducement to the Initial Purchasers to enter into the Purchase Agreement and in satisfaction of a condition to the obligations of the Initial Purchasers thereunder, the Company and the Guarantors agree with the Initial Purchasers for the benefit of the Holders (as hereinafter defined) from time to time of the Registrable Securities (as hereinafter defined) as follows:

1. Definitions. Capitalized terms used herein without definition shall have the meanings ascribed to them in the Purchase Agreement. References to filing a document with the Securities and Exchange Commission (the "*Commission*") shall mean to file such document with the Commission via the Commission's Electronic Data Gathering, Analysis and Reporting, or EDGAR, system. As used in this Registration Rights Agreement, the following terms shall have the respective meanings set forth in this Section 1:

"*Additional Effectiveness Deadline*" shall have the meaning specified in Section 2(b).

"*Common Stock*" means the common stock of the Company, $0.001 par value per share.

"*Effective Date*" means the date that a Registration Statement filed pursuant to Section 2(a) or Section 2(b), as applicable, is first declared effective by the Commission.

"*Effectiveness Deadline*" means the Initial Effectiveness Deadline and the Additional Effectiveness Deadline, as applicable.

"*Effectiveness Period*" shall have the meaning set forth in Section 2(a).

"*Electing Holder*" has the meaning assigned thereto in Section 3(a)(iii) hereof.

"*Exchange Act*" means the Securities Exchange Act of 1934, as amended.

"*Filing Deadline*" means: (a) with respect to the initial Registration Statement to be filed pursuant to Section 2(a), the 90th day following the Closing Date, and (b) with respect to any additional Registration Statement filed pursuant to Section 2(b), the earlier of (i) the 30th day following the date on which the Commission shall indicate as being the first date or time that such filing may be made or (ii) in the event the Commission does not so indicate, six (6) months following the Effective Date.

"*Holder*" or "*Holders*" means any person that is the record owner of Registrable Securities (and includes any person that has a beneficial interest in any Registrable Security in book-entry form).

"*Indemnified Party*" shall have the meaning set forth in Section 5(c).

"*Indemnifying Party*" shall have the meaning set forth in Section 5(c).

"*Initial Effectiveness Deadline*" means the earlier of: (i) one-hundred and eighty (180) calendar days after the Closing Date, and (ii) the fifth Trading Day following the date on which the Company is notified by the Commission that the Registration Statement filed pursuant to Section 2(a) will not be reviewed or is no longer subject to further review and comments.

"*Losses*" shall have the meaning set forth in Section 5(a).

"*Notice and Questionnaire*" means a Notice of Registration Statement and Selling Securityholder Questionnaire substantially in the form of Appendix A hereto.

"*Proceeding*" means an action, claim, suit, investigation or proceeding (including, without limitation, an investigation or partial proceeding, such as a deposition), whether commenced or threatened.

"*Prospectus*" means the prospectus included in a Registration Statement (including, without limitation, a prospectus that includes any information previously omitted from a prospectus filed as part of an effective registration statement in reliance upon Rule 430A or 430B promulgated under the Securities Act), as amended or supplemented by any prospectus supplement, with respect to the terms of the offering of any portion of the Registrable Securities covered by a Registration Statement, and all other amendments and supplements to the Prospectus, including post-effective amendments, and all material incorporated by reference or deemed to be incorporated by reference in such Prospectus.

"*Purchase Agreement*" means the Purchase Agreement, dated as of May 10, 2018, by and among the Initial Purchasers, the Company and the Guarantors, relating to the Securities.

"*Registrable Securities*" means the Securities issued pursuant to the Purchase Agreement and the Underlying Securities, together with any securities issued or issuable upon any stock split, dividend or other distribution, recapitalization or similar event, or any conversion price adjustment with respect thereto.

"*Registration Statement*" means: (i) the initial registration statement which is required to register the resale of the Registrable Securities pursuant to Section 2(a), and (ii) each additional registration statement, if any, contemplated by Section 2(b), and including, in each case, the Prospectus, amendments and supplements to each such registration statement or Prospectus, including pre- and post-effective amendments, all exhibits thereto, and all material incorporated by reference or deemed to be incorporated by reference in such registration statement.

"*Required Holders*" means the holders of at least a majority of the Registrable Securities held by Electing Holdings.

"*Rule 144*" means Rule 144 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"*Rule 144A*" means Rule 144A promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"*Rule 415*" means Rule 415 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"*Rule 424*" means Rule 424 promulgated by the Commission pursuant to the Securities Act, as such Rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the Commission having substantially the same effect as such Rule.

"*Securities*" means the Securities issued to the Initial Purchasers pursuant to the Purchase Agreement.

"*Securities Act*" means the Securities Act of 1933, as amended.

"*Trading Day*" means (i) a day on which the Common Stock is traded on a Trading Market, or (ii) if the Common Stock is not listed on a Trading Market, a day on which the Common Stock is traded in the over-the-counter market, as reported by the OTCQB market maintained by OTC Markets Group Inc. or (iii) if the Common Stock is not quoted on the OTCQB, a day on which the Common Stock is quoted in The Pink Open Market maintained by OTC Markets Group Inc.; provided, that in the event that the Common Stock is not listed or quoted as set forth in (i), (ii) and (iii) hereof, then Trading Day shall mean a business day (as defined in the Purchase Agreement).

"*Trading Market*" means whichever of The New York Stock Exchange, the NYSE American, The NASDAQ Capital Market, The NASDAQ Global Market or The NASDAQ Global Select Market on which the Common Stock is listed or quoted for trading on the date in question.

"*Underlying Securities*" means the shares of Common Stock issuable upon conversion of the Securities pursuant to the terms of the Indenture and the Securities.

2. Registration.

(a) On or prior to each Filing Deadline, the Company and the Guarantors shall prepare and file with the Commission a Registration Statement covering the resale of all Registrable Securities not already covered by an existing and effective Registration Statement for an offering to be made on a continuous or delayed basis pursuant to Rule 415. The Company and the Guarantors shall use their best efforts to cause the Registration Statement to be declared effective under the Securities Act as soon as possible but, in any event, no later than the Effectiveness Deadline, and shall use its best efforts to keep the Registration Statement continuously effective under the Securities Act until the earliest of (i) the date when all Registrable Securities covered by the Registration Statement have been sold, (ii) the date when all Registrable Securities have been sold pursuant to Rule 144, (iii) the date when all Registrable Securities covered by the Registration Statement may be sold by each Holder in a single transaction without restriction pursuant to Rule 144, as determined by counsel to the Company and the Guarantors pursuant to a written opinion letter to such effect, upon actual receipt by the Holders of a notice from the Company stating that the Company will deliver certificates without restrictive legends upon surrender by the Holders of the existing certificates, (iv) the date two years after the date that the Registration Statement is declared effective by the Commission, or (v) the date when all Registrable Securities cease to be outstanding (the "*Effectiveness Period*"*).*

(b) If for any reason the Commission does not permit all of the Registrable Securities to be included in the Registration Statement initially filed pursuant to Section 2(a), then the Company and the Guarantors shall prepare and file as soon as possible after the date on which the Commission shall indicate as being the first date or time that such filing may be made, but in any event by the 30th day following such date, or, in the event the Commission does not so indicate, no later than six (6) months after the Effective Date of the Registration Statement filed pursuant to Section 2(a), an additional Registration Statement covering the resale of all Registrable Securities not already covered by an existing and effective Registration Statement for an offering to be made on a continuous or delayed basis pursuant to Rule 415. The Company and the Guarantors shall use its best efforts to cause each such Registration Statement to be declared effective under the Securities Act as soon as possible but, in any event, no later than 180 days following the date on which the Company becomes aware that such Registration Statement is required to be filed under this Registration Rights Agreement (the "*Additional Effectiveness Deadline*" for such Registration Statement), and shall use its best efforts to keep such Registration Statement continuously effective under the Securities Act during the Effectiveness Period. To the extent the staff of the Commission does not permit all of the Registrable Securities that have not yet been covered on an effective Registration Statement (the "*Unregistered Registrable Securities*"*)* to be registered on such additional Registration Statement, the Company and the Guarantors shall file additional Registration Statements successively trying to register on each such Registration Statement the maximum number of Unregistered Registrable Securities until all of the Registrable Securities have been registered with the Commission.

(c) If: (i) a Registration Statement is not filed on or prior to its Filing Deadline, or (ii) a Registration Statement is not declared effective by the Commission on or prior to its required Effectiveness Deadline, or (iii) after its Effective Date, such Registration Statement ceases for any reason to be effective and available to the Holders as to all Registrable Securities to which it is required to cover at any time prior to the expiration of its Effectiveness Period for an aggregate of more than 15 consecutive days or more than 45 days in any 365 consecutive day period or the Company's Common Stock is not listed or included for quotation on a Trading Market for any period of more than five consecutive Trading Days, (any such failure or breach being referred to as an "*Event*" and for purposes of clauses (i) or (ii) the date on which such Event occurs, or for purposes of clause (iii) the date which such 15th consecutive day (or 45th day in the aggregate) is exceeded, being referred to as "*Event Date*"*),* then, in addition to any other rights available to the Holders: (x) on such Event Date additional interest ("*Additional Interest*") and not as a penalty, will accrue at a rate per annum of 0.50% of the principal amount of such Registrable Securities included (or to be included) in such Registration Statement for the first 90-day period following such Event Date; and (y) thereafter at a rate per annum of 1.00% of the principal amount of such Registrable Securities, *provided, that* all periods shall be tolled, with respect to a Holder, by the number of Trading Days in excess of five (5) during which such Holder fails to provide the Company with information regarding such Holder which was requested by the Company in writing in order to effect the registration of such Holder's Registrable Securities other than with respect to an Event covered by clause (iii) of this paragraph unrelated to such Holder's information. It shall be a condition precedent to the obligations of the Company to pay any Additional Interest pursuant to this Section 2 with respect to the Registrable Securities of any Holder that such Holder shall furnish to the Company such information regarding itself and the Registrable Securities held by it as contemplated by the preceding sentence. In the event the Company fails to pay Additional Interest in a timely manner, such Additional Interest shall bear interest at the rate of one percent (1.0%) per month (prorated for partial months) until paid in full.

(d) The initial number of Registrable Securities included in any Registration Statement and any increase in the number of Registrable Securities included therein shall be allocated pro rata among the Electing Holders based on the number of Registrable Securities held by each Electing Holder at the time the Registration Statement covering such initial number of Registrable Securities or increase thereof is filed with the Commission. In the event that a Holder sells or otherwise transfers any of such Holder's Registrable Securities, each transferee shall be allocated a pro rata portion of the then remaining number of Registrable Securities included in such Registration Statement for such transferor. Any Registrable Securities included in a Registration Statement which remain allocated to any Person which ceases to hold any Registrable Securities covered by such Registration Statement shall be allocated to the remaining Electing Holders, pro rata based on the number of Registrable Securities then held by such Electing Holders which are covered by such Registration Statement. In no event shall the Company and the Guarantors include any securities other than Registrable Securities on any Registration Statement without the prior written consent of the Required Holders.

(e) Each Holder shall comply with the prospectus delivery requirements of the Securities Act, or an exemption therefrom, in connection with the offer or sale of any Registrable Securities pursuant to the Registration Statement. Each Holder, by such Holder's acceptance of the Registrable Securities, agrees to cooperate with the Company and the Guarantors as reasonably requested by the Company and the Guarantors in connection with the preparation and filing of any Registration Statement hereunder, unless such Holder has notified the Company and the Guarantors in writing of such Holder's election to exclude all of such Holder's Registrable Securities from such Registration Statement.

(f) In the event that Form S-3 is not available for the registration of the resale of Registrable Securities hereunder, the Company and the Guarantors shall (i) register the resale of the Registrable Securities on another appropriate form reasonably acceptable to a majority of the Required Holders and (ii) undertake to register the Registrable Securities on Form S-3 as soon as such form is available, provided that the Company and the Guarantors shall maintain the effectiveness of the Registration Statement then in effect until such time as a Registration Statement on Form S-3 covering the Registrable Securities has been declared effective by the Commission.

(g) By 9:30 am, New York City time, on the business day following the Effective Date, the Company and the Guarantors shall file with the Commission in accordance with Rule 424 under the Securities Act the final prospectus to be used in connection with sales pursuant to such Registration Statement.

(h) After the Effective Date of a Registration Statement, as soon as practicable upon the request of any Holder of Registrable Securities that is not then an Electing Holder, the Company and the Guarantors shall take any action reasonably necessary to enable such Holder to use the Prospectus forming a part thereof for resales of Registrable Securities, including, without limitation, any action necessary to identify such Holder as a selling securityholder in the Registration Statement provided, however, that nothing in this subparagraph shall relieve such Holder of the obligation to return a completed and signed Notice and Questionnaire to the Company in accordance with Section 3(a)(ii) hereof.

(i) If at any time the Securities, pursuant to Section 9.07 of the Indenture, are convertible into securities other than the Underlying Securities, the Company and the Guarantors shall cause, or cause any successor under the Indenture to cause, such securities to be included in the Registration Statement no later than the date on which the Securities may then be convertible into such securities.

3. Registration Procedures.

In connection with the Company's and the Guarantors' registration obligations hereunder, the following provisions shall apply:

(a) (i) Not less than 30 calendar days prior to the Effective Date, the Company and the Guarantors shall mail the Notice and Questionnaire to the Holders of Registrable Securities. No Holder shall be entitled to be named as a selling securityholder in the Registration Statement as of the Effective Date, and no Holder shall be entitled to use the Prospectus forming a part thereof for resales of Registrable Securities at any time, unless such Holder has returned a completed and signed Notice and Questionnaire to the Company by the deadline for response set forth therein; provided, however, Holders of Registrable Securities shall have at least 28 calendar days from the date on which the Notice and Questionnaire is first mailed to such Holders to return a completed and signed Notice and Questionnaire to the Company.

(ii) After the Effective Date, the Company and the Guarantors shall, upon the request of any Holder of Registrable Securities that is not then an Electing Holder, promptly send a Notice and Questionnaire to such Holder. The Company and the Guarantors shall not be required to take any action to name such Holder as a selling securityholder in the Registration Statement or to enable such Holder to use the Prospectus forming a part thereof for resales of Registrable Securities until such Holder has returned a completed and signed Notice and Questionnaire to the Company. If a Notice and Questionnaire is delivered to the Company during a Grace Period specified in Section 3(c) hereof, the Company shall not be obligated to take action to name the Holder delivering such Notice and Questionnaire as a selling security holder in the Registration Statement until the termination of such Grace Period.

(iii) The term "Electing Holder" shall mean any Holder of Registrable Securities that has returned a completed and signed Notice and Questionnaire to the Company in accordance with Section 3(a)(i) or 3(a)(ii) hereof.

(b) The Company and the Guarantors shall (i) prepare and file with the Commission such amendments, including post-effective amendments, to each Registration Statement and the Prospectus used in connection therewith as may be necessary to keep such Registration Statement continuously effective as to the applicable Registrable Securities for its Effectiveness Period and prepare and file with the Commission such additional Registration Statements in order to register for resale under the Securities Act all of the Registrable Securities; (ii) cause the related Prospectus to be amended or supplemented by any required Prospectus supplement or "issuer free writing prospectus" (as defined by Rule 405 promulgated by the Commission pursuant to the Securities Act) so that such Prospectus does not contain an untrue statement of a material fact or omit to state a material fact required to be stated therein, and as so supplemented or amended to be filed pursuant to Rule 424; (iii) respond as promptly as reasonably possible to any comments received from the Commission with respect to each Registration Statement or any amendment thereto and, as promptly as reasonably possible provide the Electing Holders true and complete copies of all correspondence from and to the Commission relating to such Registration Statement that pertains to the Electing Holders as selling securityholders but not any comments that would result in the disclosure to the Electing Holders of material and non-public information concerning the Company and the Guarantors; and (iv) comply in all material respects with the provisions of the Securities Act and the Exchange Act with respect to the Registration Statements and the disposition of all Registrable Securities covered by each Registration Statement.

(c) The Company and the Guarantors shall notify the Holders as promptly as reasonably possible, but in no event later than 5:30 p.m. Eastern time, of the following Trading Day, (i)(A) when a Registration Statement, Prospectus, any Prospectus supplement or post-effective amendment to a Registration Statement is proposed to be filed; (B) when the Commission notifies the Company or the Guarantors whether there will be a "review" of such Registration Statement and whenever the Commission comments in writing on such Registration Statement (the Company and the Guarantors shall provide true and complete copies thereof and all written responses thereto to each of the Electing Holders that pertain to the Electing Holders as a Selling Stockholder or to the Plan of Distribution, but not information which the Company or the Guarantors believe would constitute material and non-public information); and (C) with respect to each Registration Statement or any post-effective amendment, when the same has become effective; (ii) of any request by the Commission or any other Federal or state governmental authority for amendments or supplements to a Registration Statement or Prospectus or for additional information that pertains to the Electing Holders as Selling Stockholders or the Plan of Distribution; (iii) of the issuance by the Commission of any stop order suspending the effectiveness of a Registration Statement covering any or all of the Registrable Securities or the initiation of any Proceedings for that purpose, including pursuant to Section 8A of the Securities Act; (iv) of the receipt by the Company or the Guarantors of any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction, or the initiation or threatening of any Proceeding for such purpose; and (v) of the occurrence of any event or passage of time that makes the financial statements included in a Registration Statement ineligible for inclusion therein or any statement made in such Registration Statement or Prospectus or any document incorporated or deemed to be incorporated therein by reference untrue in any material respect or that requires any revisions to such Registration Statement, Prospectus or other documents so that, in the case of such Registration Statement or the Prospectus, as the case may be, it will not contain any untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading. Notwithstanding anything to the contrary herein, at any time after the Effective Date of the initial Registration Statement, the Company and the Guarantors may delay the disclosure of material, non-public information concerning the Company and the Guarantors the disclosure of which at the time is not, in the good faith opinion of the board of directors of the Company and its counsel, in the best interest of the Company and the Guarantors and, in the opinion of counsel to the Company, otherwise required (a "*Grace Period*"); provided, that the Company shall promptly (i) notify the Initial Purchasers and the Holders in writing of the existence of material, non-public information giving rise to a Grace Period (provided that in each notice the Company will not disclose the content of such material, non-public information to the Initial Purchasers or the Holders) and the date on which the Grace Period will begin, and (ii) notify the Initial Purchasers and the Holders in writing of the date on which the Grace Period ends; and, provided further, that such Grace Periods shall not exceed an aggregate of forty-five (45) days in any 12 month period, (ii) each such Grace Period shall not exceed fifteen (15) consecutive days and (iii) that the first day of any Grace Period must be at least five (5) Trading Days after the last day of any prior Grace Period. For purposes of determining the length of a Grace Period above, the Grace Period shall begin on and include the date the Initial Purchasers and the Holders receive the notice referred to in clause (i) and shall end on and include the later of the date the Initial Purchasers and the Holders receive the notice referred to in clause (ii) and the date referred to in such notice.

(d) The Company and the Guarantors shall use their best efforts to avoid the issuance of, or, if issued, obtain the withdrawal of (i) any order suspending the effectiveness of a Registration Statement, or (ii) any suspension of the qualification (or exemption from qualification) of any of the Registrable Securities for sale in any jurisdiction, at the earliest practicable moment.

(e) The Company and the Guarantors shall furnish to each Electing Holder, without charge, at least one conformed copy of each Registration Statement and each amendment thereto and all exhibits to the extent requested by such Person (including those previously furnished or incorporated by reference) promptly after the filing of such documents with the Commission; provided, that the Company and the Guarantors shall have no obligation to provide any document pursuant to this clause that is available on the EDGAR system.

(f) The Company and the Guarantors shall promptly deliver to each Electing Holder, without charge, as many copies of each Prospectus or Prospectuses (including each form of prospectus) and each amendment or supplement thereto as such Persons may reasonably request. The Company and the Guarantors hereby consents to the use of such Prospectus and each amendment or supplement thereto by each of the selling Electing Holders in connection with the offering and sale of the Registrable Securities covered by such Prospectus and any amendment or supplement thereto.

(g) Prior to any public offering of Registrable Securities, the Company and the Guarantors shall use their best efforts to register or qualify or cooperate with the selling Electing Holders in connection with the registration or qualification (or exemption from such registration or qualification) of such Registrable Securities for offer and sale under the securities, Blue Sky or other laws of all applicable jurisdictions or governmental authorities or agencies within the United States and to keep each such registration or qualification (or exemption therefrom) effective during the Effectiveness Period and to do any and all other acts or things necessary or advisable to enable the disposition in such jurisdictions of the Registrable Securities covered by the Registration Statements; *provided*, that the Company and the Guarantors shall not be required to qualify generally to do business in any jurisdiction where it is not then so qualified or subject the Company or the Guarantors to any material tax in any such jurisdiction where it is not then so subject. The Company and the Guarantors shall promptly notify the Initial Purchasers and each Holder who holds Registrable Securities of the receipt by the Company or the Guarantors of any notification with respect to the suspension of the registration or qualification of any of the Registrable Securities for sale under the securities or "blue sky" laws of any jurisdiction in the United States or its receipt of notice of the initiation or threatening of any proceeding for such purpose.

(h) Unless any Registrable Securities shall be in book-entry only form, the Company and the Guarantors shall cooperate with the Electing Holders to facilitate the timely preparation and delivery of certificates representing Registrable Securities to be delivered to a transferee pursuant to the Registration Statements, which certificates shall be free, to the extent permitted by applicable law, of all restrictive legends, and to enable such Registrable Securities to be in such denominations and registered in such names as any such Electing Holders may request.

(i) Upon the occurrence of any event contemplated by Section 3(c)(v), as promptly as reasonably possible, the Company and the Guarantors shall prepare a supplement or amendment, including a post-effective amendment, to the affected Registration Statements or a supplement to the related Prospectus or any document incorporated or deemed to be incorporated therein by reference, and file any other required document so that, as thereafter delivered, no Registration Statement nor any Prospectus will contain an untrue statement of a material fact or omit to state a material fact required to be stated therein or necessary to make the statements therein, in light of the circumstances under which they were made, not misleading.

(j) The Company and the Guarantors may require each selling Electing Holder to furnish a certified statement as to the number of Securities and shares of Common Stock beneficially owned by such Electing Holder and any Affiliate thereof.

(k) As long as any Holder owns Registrable Securities, the Company shall timely file (or obtain extensions in respect thereof and file within the applicable grace period) all reports required to be filed by the Company after the date hereof pursuant to Section 13 (a) or 15(d) of the Exchange Act. As long as any Holder owns Registrable Securities, if the Company is not required to file reports pursuant to Section 13(a) or 15(d) of the Exchange Act, it will prepare and furnish to the Holders and make publicly available in accordance with Rule 144(c) promulgated under the Securities Act annual and quarterly financial statements, together with a discussion and analysis of such financial statements in form and substance similar to those that would otherwise be required to be included in reports required by Section 13 (a) or 15(d) of the Exchange Act, as well as any other information required thereby, in the time period that such filings would have been required to have been made under the Exchange Act. The Company and the Guarantors will take such further action as any Holder may reasonably request, all to the extent required from time to time to enable such Person to sell Registrable Securities without registration under the Securities Act within the limitation of the exemptions provided by Rule 144 and 144A (including the requirements of Rule 144A(d)(4)) promulgated under the Securities Act.

(l) The Company and the Guarantors shall promptly secure the listing of all of the Underlying Securities upon each national securities exchange and automated quotation system, if any, upon which the Common Stock is then listed (subject to official notice of issuance) and shall maintain, in accordance with the Securities, such listing of all Registrable Securities from time to time issuable under the terms of the Transaction Documents. The Company and the Guarantors shall maintain the Common Stock's authorization for quotation on one or more Trading Markets. Neither the Company nor any of its subsidiaries shall take any action which would be reasonably expected to result in the delisting or suspension of the Common Stock on each applicable Trading Market. The Company and the Guarantors shall pay all fees and expenses in connection with satisfying their obligations under this Section 3(l).

(m) If requested by an Electing Holder, the Company and the Guarantors shall (i) as soon as practicable, incorporate in a prospectus supplement or post-effective amendment such information as such Electing Holder reasonably requests to be included therein relating to the sale and distribution of Registrable Securities, including, without limitation, information with respect to the number of Registrable Securities being offered or sold, the purchase price being paid therefor and any other terms of the offering of the Registrable Securities to be sold in such offering; (ii) as soon as practicable make all required filings of such prospectus supplement or post-effective amendment after being notified of the matters to be incorporated in such prospectus supplement or post-effective amendment; and (iii) as soon as practicable, supplement or make amendments to any Registration Statement if reasonably requested by an Electing Holder holding any Registrable Securities.

(n) The Company and the Guarantors shall otherwise use their best efforts to comply with all applicable rules and regulations of the Commission in connection with any registration hereunder.

(o) Within two (2) business days after a Registration Statement which covers Registrable Securities is declared effective by the Commission, the Company and the Guarantors shall deliver, and shall cause legal counsel for the Company to deliver, to the transfer agent for such Registrable Securities confirmation that such Registration Statement has been declared effective by the Commission which confirmation shall authorize and direct such transfer agent to issue such Registrable Securities without legend upon sale or other disposition by the holder of such Registrable Securities under the Registration Statement.

(p) If any Electing Holder is deemed to be or reasonably believes it may be deemed or alleged to be, an underwriter or is required under applicable securities laws to be described in the Registration Statement as an underwriter, at the reasonable request of any Electing Holder, the Company and the Guarantors shall use their reasonable best efforts to furnish to such Electing Holder, on the date of the effectiveness of the Registration Statement and thereafter from time to time on such dates as any Electing Holder may reasonably request (i) a letter, dated such date, from the Company's independent certified public accountants in form and substance as is customarily given by independent certified public accountants to underwriters in an underwritten public offering, addressed to the Electing Holders, and (ii) an opinion, dated as of such date, of counsel representing the Company and the Guarantors for purposes of such Registration Statement, in form, scope and substance as is customarily given in an underwritten public offering, addressed to the Electing Holders.

(q) Upon the written request of any Electing Holder in connection with such Electing Holder's due diligence requirements, if any, the Company and the Guarantors shall make available for inspection by (i) any Electing Holder, (ii) such Electing Holder's legal counsel and (iii) one firm of accountants or other agents retained by the Electing Holders (collectively, the "**Inspectors**"), all pertinent financial and other records, and pertinent corporate documents and properties of the Company and the Guarantors (collectively, the "**Records**"), as shall be reasonably deemed necessary by each Inspector, and cause the Company's and the Guarantors' officers, directors and employees to supply all information which any Inspector may reasonably request; provided, however, that each Inspector shall agree to hold in strict confidence and shall not make any disclosure (except to an Electing Holder) or use of any Record or other information which the Company and the Guarantors determines in good faith to be confidential, and of which determination the Inspectors are so notified, unless (a) the disclosure of such Records is necessary to avoid or correct a misstatement or omission in any Registration Statement or is otherwise required under the Securities Act, (b) the release of such Records is ordered pursuant to a final, non-appealable subpoena or order from a court or government body of competent jurisdiction, or (c) the information in such Records has been made generally available to the public other than by disclosure in violation of this Registration Rights Agreement or any other Transaction Document. Each Electing Holder agrees that it shall, upon learning that disclosure of such Records is sought in or by a court or governmental body of competent jurisdiction or through other means, give prompt notice to the Company and the Guarantors and allow the Company and the Guarantors, at their expense, to undertake appropriate action to prevent disclosure of, or to obtain a protective order for, the Records deemed confidential. Nothing herein (or in any other confidentiality agreement between the Company and any Holder) shall be deemed to limit the ability of the Holders to sell Registrable Securities in a manner which is otherwise consistent with applicable laws and regulations.

(r) Neither the Company, any Guarantor nor any of their respective affiliates shall identify any Holder as an underwriter in any public disclosure or filing with the Commission or any Trading Market without the prior written consent of such Holder. If the Company or any Guarantor is required by law to identify a Holder as an underwriter in any public disclosure or filing with the Commission or any Trading Market, it must notify such Holder in advance and such Holder shall have the option, in its sole discretion, to consent to such identification as an underwriter within 5 business days or such Holder shall be deemed to have consented to have its Registrable Securities removed from the applicable Registration Statement.

(s) The Company and the Guarantors shall use their reasonable best efforts to cause the Registrable Securities covered by a Registration Statement to be registered with or approved by such other governmental agencies or authorities as may be necessary to consummate the disposition of such Registrable Securities in the United States.

(t) The Company shall make generally available to its security holders as soon as practical, but not later than ninety (90) days after the close of the period covered thereby, an earnings statement (in form complying with, and in the manner provided by, the provisions of Rule 158 under the Securities Act) covering a twelve-month period beginning not later than the first day of the Company's fiscal quarter next following the effective date of a Registration Statement.

4. Registration Expenses. All fees and expenses incident to the Company's and the Guarantors' performance of their obligations under this Registration Rights Agreement (excluding any underwriting discounts and selling commissions) shall be borne by the Company and the Guarantors whether or not any Registrable Securities are sold pursuant to a Registration Statement. The fees and expenses referred to in the foregoing sentence shall include, without limitation, (i) all registration and filing fees (including, without limitation, fees and expenses (A) with respect to filings required to be made with the Trading Market on which the Common Stock is then listed for trading, and (B) in compliance with applicable state securities or Blue Sky laws), (ii) printing expenses (including, without limitation, expenses of printing certificates for Registrable Securities and of printing prospectuses if the printing of prospectuses is reasonably requested by the holders of a majority of the Registrable Securities included in the Registration Statement), (iii) messenger, telephone and delivery expenses, (iv) fees and disbursements of counsel for the Company, and (v) fees and expenses of all other Persons retained by the Company in connection with the consummation of the transactions contemplated by this Registration Rights Agreement. The Company shall also reimburse the Electing Holders for the reasonable fees and disbursements of a single counsel in an amount up to $10,000, who shall be Lowenstein Sandler, LLP unless another firm shall be selected by the Required Holders, in connection with the registration, filing or qualification pursuant to Sections 2 and 3 of this Registration Rights Agreement for each such registration, filing or qualification.

5. Indemnification.

(a) Indemnification by the Company and the Guarantors. The Company and each of the Guarantors shall, notwithstanding any termination of this Registration Rights Agreement, jointly and severally indemnify and hold harmless each Electing Holder, the officers, directors, agents, investment advisors, partners, members, shareholders, trustees and employees of each of them, each Person who controls any such Electing Holder (within the meaning of Section 15 of the Securities Act or Section 20 of the Exchange Act) and the officers, directors, agents, trustees and employees of each such controlling Person, to the fullest extent permitted by applicable law, from and against any and all losses, claims, damages, liabilities, costs (including, without limitation, reasonable costs of preparation and reasonable attorneys' fees) and expenses (collectively, "*Losses*"), as incurred, arising out of or relating to (i) any misrepresentation or breach of any representation or warranty made by the Company or any Guarantor in this Registration Rights Agreement or any other certificate, instrument or document contemplated hereby, (ii) any breach of any covenant, agreement or obligation of the Company or any Guarantor contained in this Registration Rights Agreement or any other certificate, instrument or document contemplated hereby, or (iii) any untrue or alleged untrue statement of a material fact contained in any Registration Statement, any Prospectus or any form of prospectus or in any amendment or supplement thereto or in any preliminary prospectus, or any issuer free writing prospectus or arising out of or relating to any omission or alleged omission of a material fact required to be stated therein or necessary to make the statements therein (in the case of any Prospectus or form of prospectus or supplement thereto or any issuer free writing prospectus, in light of the circumstances under which they were made) not misleading, except to the extent, but only to the extent, that such untrue statements or omissions are based solely upon information regarding such Electing Holder or its intended method of distribution furnished in writing to the Company and the Guarantors by such Electing Holder expressly for use therein. The Company and the Guarantors shall notify the Electing Holders promptly of the institution, threat or assertion of any Proceeding of which the Company or the Guarantors are aware in connection with the transactions contemplated by this Registration Rights Agreement.

(b) Indemnification by Electing Holders. Each Electing Holder agrees, as a consequence of the inclusion of any of such Electing Holder's Registrable Securities in a Registration Statement, notwithstanding any termination of this Registration Rights Agreement, severally and not jointly, to indemnify and hold harmless the Company and the Guarantors, and the directors, officers, agents and employees of each, and each Person who controls the Company (within the meaning of Section 15 of the Securities Act and Section 20 of the Exchange Act), and the directors, officers, agents or employees of such controlling Persons, to the fullest extent permitted by applicable law, from and against all Losses, as incurred, arising solely out of or based solely upon any untrue statement of a material fact contained in any Registration Statement, any Prospectus, or any form of prospectus, or in any amendment or supplement thereto, or arising solely out of or based solely upon any omission of a material fact required to be stated therein or necessary to make the statements therein not misleading to the extent, but only to the extent that, such untrue statements or omissions are based solely upon information regarding such Electing Holder or its intended method of distribution furnished in writing to the Company and the Guarantors by such Electing Holder expressly for use therein. In no event shall the liability of any selling Electing Holder hereunder be greater in amount than the dollar amount of the net proceeds received by such electing Holder upon the sale of the Registrable Securities giving rise to such indemnification obligation. Such indemnity shall remain in full force and effect regardless of any investigation made by or on behalf of the Company and the Guarantors and shall survive the transfer of the Registrable Securities by the Initial Purchasers or any Holder pursuant to Section 6(e).

(c) Conduct of Indemnification Proceedings. If any Proceeding shall be brought or asserted against any Person entitled to indemnity hereunder (an "*Indemnified Party*"), such Indemnified Party shall promptly notify the Person from whom indemnity is sought (the "*Indemnifying Party*") in writing, and the Indemnifying Party shall assume the defense thereof, including the employment of counsel reasonably satisfactory to the Indemnified Party and the payment of all fees and expenses incurred in connection with defense thereof; provided, that the failure of any Indemnified Party to give such notice shall not relieve the Indemnifying Party of its obligations or liabilities pursuant to this Registration Rights Agreement, except (and only) to the extent that it shall be finally determined by a court of competent jurisdiction (which determination is not subject to appeal or further review) that such failure shall have proximately and materially adversely prejudiced the Indemnifying Party.

An Indemnified Party shall have the right to employ separate counsel in any such Proceeding and to participate in the defense thereof, but the fees and expenses of such counsel shall be at the expense of such Indemnified Party or Parties unless: (1) the Indemnifying Party has agreed in writing to pay such fees and expenses; (2) the Indemnifying Party shall have failed promptly to assume the defense of such Proceeding and to employ counsel reasonably satisfactory to such Indemnified Party in any such Proceeding; or (3) the named parties to any such Proceeding (including any impleaded parties) include both such Indemnified Party and the Indemnifying Party, and such Indemnified Party shall have been advised by counsel that a conflict of interest is likely to exist if the same counsel were to represent such Indemnified Party and the Indemnifying Party (in which case, if such Indemnified Party notifies the Indemnifying Party in writing that it elects to employ separate counsel at the expense of the Indemnifying Party, the Indemnifying Party shall not have the right to assume the defense thereof and such counsel shall be at the expense of the Indemnifying Party), *provided*, that the Indemnifying Party shall not be liable for the fees and expenses of more than one separate firm of attorneys at any time for all Indemnified Parties (in addition to any local counsel). The Indemnifying Party shall not be liable for any settlement of any such Proceeding effected without its written consent, which consent shall not be unreasonably withheld. No Indemnifying Party shall, without the prior written consent of the Indemnified Party, effect any settlement of any pending Proceeding in respect of which any Indemnified Party is a party, unless such settlement includes an unconditional release of such Indemnified Party from all liability on claims that are the subject matter of such Proceeding and does not contain any admission of wrongdoing by such Indemnified Party.

All fees and expenses of the Indemnified Party (including reasonable fees and expenses to the extent incurred in connection with investigating or preparing to defend such Proceeding in a manner not inconsistent with this Section) shall be paid to the Indemnified Party, as incurred, within fifteen Trading Days of written notice thereof to the Indemnifying Party (regardless of whether it is ultimately determined that an Indemnified Party is not entitled to indemnification hereunder; provided, that the Indemnifying Party may require such Indemnified Party to undertake to reimburse all such fees and expenses to the extent it is finally judicially determined that such Indemnified Party is not entitled to indemnification hereunder).

(d) Contribution. If a claim for indemnification under Section 5(a) or 5(b) is unavailable to an Indemnified Party (by reason of public policy or otherwise), then each Indemnifying Party, in lieu of indemnifying such Indemnified Party, shall contribute to the amount paid or payable by such Indemnified Party as a result of such Losses, in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party on the one hand and Indemnified Party on the other hand in connection with the actions, statements or omissions that resulted in such Losses as well as any other relevant equitable considerations. The relative fault of such Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission of a material fact, has been taken or made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the parties' relative intent, knowledge, access to information and opportunity to correct or prevent such action, statement or omission. The amount paid or payable by a party as a result of any Losses shall be deemed to include, subject to the limitations set forth in Section 5(c), any reasonable attorneys' or other reasonable fees or expenses incurred by such party in connection with any Proceeding to the extent such party would have been indemnified for such fees or expenses if the indemnification provided for in this Section was available to such party in accordance with its terms.

The parties hereto agree that it would not be just and equitable if contribution pursuant to this Section 5(d) were determined by pro rata allocation or by any other method of allocation that does not take into account the equitable considerations referred to in the immediately preceding paragraph. Notwithstanding the provisions of this Section 5(d), no Electing Holder shall be required to contribute, in the aggregate, any amount in excess of the amount by which the proceeds actually received by such Electing Holder from the sale of the Registrable Securities subject to the Proceeding exceeds the amount of any damages that such Electing Holder has otherwise been required to pay by reason of such untrue or alleged untrue statement or omission or alleged omission.

The indemnity and contribution agreements contained in this Section are in addition to any other liability that the Indemnifying Parties may have to the Indemnified Parties.

6. Miscellaneous.

(a) Specific Performance. The parties hereto acknowledge that there would be no adequate remedy at law if the Company and the Guarantors fail to perform any of their respective obligations hereunder and that the Initial Purchasers and the Holders from time to time may be irreparably harmed by any such failure, and accordingly agree that the Initial Purchasers and such Holders, in addition to any other remedy to which they may be entitled at law or in equity and without limiting the remedies available to the Electing Holders under Section 3(c) hereof, shall be entitled to compel specific performance of the obligations of the Company and the Guarantors under this Registration Rights Agreement in accordance with the terms and conditions of this Registration Rights Agreement, in any court of the United States or any State thereof having jurisdiction. The parties agree that the sole monetary damages for a violation of the terms of this Registration Rights Agreement with respect to which liquidated damages are expressly provided shall be such liquidated damages.

(b) Compliance. Each Electing Holder covenants and agrees, as a consequence of the inclusion of any of such Electing Holder's Registrable Securities in a Registration Statement, that from and after receipt of written notice from the Company that it no longer meets the issuer conditions for the use of Rule 172, it will comply with the prospectus delivery requirements of the Securities Act as applicable to it in connection with sales of Registrable Securities pursuant to the Registration Statement.

(c) Discontinued Disposition. Each Electing Holder agrees, as a consequence of the inclusion of any of such Electing Holder's Registrable Securities in a Registration Statement, that, upon receipt of a notice from the Company of the occurrence of any event of the kind described in Section 3(c), such Electing Holder will forthwith discontinue disposition of such Registrable Securities under the Registration Statement until such Electing Holder's receipt of the copies of the supplemented Prospectus and/or amended Registration Statement or until it is advised in writing (the "*Advice*") by the Company that the use of the applicable Prospectus may be resumed, and, in either case, has received copies of any additional or supplemental filings that are incorporated or deemed to be incorporated by reference in such Prospectus or Registration Statement. The Company may provide appropriate stop orders to enforce the provisions of this paragraph. Notwithstanding anything to the contrary, the Company shall cause its transfer agent to deliver unlegended shares of Common Stock or Securities to a transferee of an Electing Holder in connection with any sale of Registrable Securities with respect to which an Electing Holder has entered into a contract for sale in accordance with the terms of this Registration Rights Agreement, prior to the Electing Holder receipt of the notice of a Grace Period and for which the Electing Holder has not yet settled.

(d) Notices. Any and all notices or other communications or deliveries required or permitted to be provided hereunder shall be in writing and shall be deemed given and effective on the earliest of (i) the date of transmission, if such notice or communication is delivered via email at the email address specified in this Section prior to 5:00 p.m. (Eastern time) on a business day, (ii) the business day after the date of transmission, if such notice or communication is delivered via email at the email address specified in this Registration Rights Agreement later than 5:00 p.m. (Eastern time) on any date and earlier than 11:59 p.m. (Eastern time) on such date, (iii) the business day following the date of mailing, if sent by nationally recognized overnight courier service, or (iv) upon actual receipt by the party to whom such notice is required to be given. The address for such notices and communications shall be as follows:

If to the Company or the Guarantors:	Akoustis Technologies, Inc. 9805 Northcross Center Court Suite A Huntersville, NC 28078 Tel: (704) 274-3601 Attention: Drew Wright, General Counsel Email address: dwright@akoustis.com
with a copy (which shall not constitute notice) to:	K&L Gates LLP 214 North Tryon Street 47th Floor Charlotte, NC 28202 Tel: (704) 331-7406 Attention: Sean M. Jones, Esq. Email address: sean.jones@klgates.com
If to the Initial Purchasers:	c/o Oppenheimer & Co. Inc. 85 Broad Street New York, New York 10004 Tel: (212) 667-7300 Attention: Equity Capital Markets Email address: ecmexecution@opco.com

With copies (which shall not constitute notice) to:	Oppenheimer & Co. Inc. 85 Broad Street, New York, New York 10004 Tel: (212) 667-7300 Attention: Equity Capital Markets Email address: ecmexecution@opco.com and Lowenstein Sandler LLP 1251 Avenue of the Americas New York, New York 10020 Tel: (973) 597-2500 Attention: John D. Hogoboom Email address: jhogoboom@lowenstein.com
If to a registered Holder:	To the address of such Holder as it appears in the stock transfer books of the Company;

or such other address as may be designated in writing hereafter, in the same manner, by such Person. Notwithstanding the foregoing, notices given to Holders (i) that beneficially own Securities may be given through the facilities of DTC or any successor depository and (ii) may be given by email at the email address provided by such Holder in accordance with the provisions of the Notice and Questionnaire.

(e) Parties in Interest. The parties to this Registration Rights Agreement intend that all Holders of Registrable Securities shall be entitled to receive the benefits of this Registration Rights Agreement and that any Electing Holder shall be bound by the terms and provisions of this Registration Rights Agreement by reason of such election with respect to the Registrable Securities which are included in a Registration Statement. All the terms and provisions of this Registration Rights Agreement shall be binding upon, shall inure to the benefit of and shall be enforceable by the respective successors and assigns of the parties hereto and any Holder from time to time of the Registrable Securities, including, without limitation, and without the need for an express assignment, subsequent Holders and the indemnified persons referred to in Section 5 hereof. In the event that any transferee of any Holder of Registrable Securities shall acquire Registrable Securities, in any manner, whether by gift, bequest, purchase, operation of law or otherwise, such transferee shall, without any further writing or action of any kind, be entitled to receive the benefits of and, if an Electing Holder, be conclusively deemed to have agreed to be bound by and to perform all of the terms and provisions of this Registration Rights Agreement to the aforesaid extent.

The Initial Purchasers (even if the Initial Purchasers are not Holders of Registrable Securities) shall be third party beneficiaries to the agreements made hereunder between the Company and the Guarantors, on the one hand, and the Holders, on the other hand, and shall have the right to enforce such agreements directly to the extent they deem such enforcement necessary or advisable to protect their rights or the rights of Holders hereunder. Each Holder of Registrable Securities shall be a third party beneficiary to the agreements made hereunder between the Company and the Guarantors, on the one hand, and the Initial Purchasers, on the other hand, and shall have the right to enforce such agreements directly to the extent it deems such enforcement necessary or advisable to protect its rights hereunder.

(f) Execution and Counterparts. This Registration Rights Agreement may be executed in any number of counterparts, each of which when so executed shall be deemed to be an original and, all of which taken together shall constitute one and the same Agreement. In the event that any signature is delivered by facsimile transmission, such signature shall create a valid binding obligation of the party executing (or on whose behalf such signature is executed) the same with the same force and effect as if such facsimile signature were the original thereof.

(g) Governing Law. **ALL QUESTIONS CONCERNING THE CONSTRUCTION, VALIDITY, ENFORCEMENT AND INTERPRETATION OF THIS REGISTRATION RIGHTS AGREEMENT SHALL BE GOVERNED BY AND CONSTRUED AND ENFORCED IN ACCORDANCE WITH THE INTERNAL LAWS OF THE STATE OF NEW YORK WITHOUT REGARD TO PRINCIPLES OF CONFLICT OF LAW THAT WOULD APPLY TO ANY OTHER LAW.** Each party agrees that all Proceedings concerning the interpretations, enforcement and defense of the transactions contemplated by this Registration Rights Agreement and any other Transaction Documents (whether brought against a party hereto or its respective Affiliates, employees or agents) may be commenced in the state and federal courts sitting in the City of New York, Borough of Manhattan (the "*New York Courts*"). Each party hereto hereby irrevocably submits to the non-exclusive jurisdiction of the New York Courts for the adjudication of any dispute hereunder or in connection herewith or with any transaction contemplated hereby or discussed herein (including with respect to the enforcement of any of the Transaction Documents), and hereby irrevocably waives, and agrees not to assert in any Proceeding, any claim that it is not personally subject to the jurisdiction of any such New York Court, or that such Proceeding has been commenced in an improper or inconvenient forum. Each party hereto hereby irrevocably waives personal service of process and consents to process being served in any such Proceeding by mailing a copy thereof via registered or certified mail or overnight delivery (with evidence of delivery) to such party at the address in effect for notices to it under this Registration Rights Agreement and agrees that such service shall constitute good and sufficient service of process and notice thereof. Nothing contained herein shall be deemed to limit in any way any right to serve process in any manner permitted by law. **EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATING TO THIS REGISTRATION RIGHTS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.**

(h) Cumulative Remedies. The remedies provided herein are cumulative and not exclusive of any remedies provided by law.

(i) Severability. If any term, provision, covenant or restriction of this Registration Rights Agreement is held by a court of competent jurisdiction to be invalid, illegal, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions set forth herein shall remain in full force and effect and shall in no way be affected, impaired or invalidated, and the parties hereto shall use their reasonable efforts to find and employ an alternative means to achieve the same or substantially the same result as that contemplated by such term, provision, covenant or restriction. It is hereby stipulated and declared to be the intention of the parties that they would have executed the remaining terms, provisions, covenants and restrictions without including any of such that may be hereafter declared invalid, illegal, void or unenforceable.

(j) Headings. The headings in this Registration Rights Agreement are for convenience of reference only and shall not limit or otherwise affect the meaning hereof.

(k) Amendment of Registration Rights. Provisions of this Registration Rights Agreement may be amended and the observance thereof may be waived (either generally or in a particular instance and either retroactively or prospectively), only with the written consent of the Company, the Guarantors and the Required Holders; provided, however, any amendment to this Registration Rights Agreement that adversely or disproportionately affects any Holder shall require the prior written consent of such Holder. Any amendment or waiver effected in accordance with this Section 6(k) shall be binding upon each Initial Purchaser, each Holder, the Company and the Guarantors. No such amendment shall be effective to the extent that it applies to less than all of the holders of the Registrable Securities.

(l) Consents. All consents and other determinations required to be made by the Initial Purchasers pursuant to this Registration Rights Agreement shall be made, unless otherwise specified in this Registration Rights Agreement, by the Required Holders.

(m) Limitation on Obligations. The obligations of each Holder hereunder are several and not joint with the obligations of any other Holder, and no provision of this Registration Rights Agreement is intended to confer any obligations on any Holder vis-a-vis any other Holder. Nothing contained herein, and no action taken by any Holder pursuant hereto, shall be deemed to constitute the Holders as a partnership, an association, a joint venture or any other kind of entity, or create a presumption that the Holders are in any way acting in concert or as a group with respect to such obligations or the transactions contemplated herein.

[SIGNATURES ON NEXT PAGE]

If the foregoing is in accordance with your understanding, please indicate your acceptance of this Agreement by signing in the space provided below.

Very truly yours,

AKOUSTIS TECHNOLOGIES, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

AKOUSTIS, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

Accepted: As of the date first written above

OPPENHEIMER & CO. INC.

For itself and on behalf of the
several Initial Purchasers listed
in Schedule 1 to the Purchase Agreement.

By: OPPENHEIMER & CO. INC.

By: /s/ Eric Helenek
Name: Eric Helenek
Title: Managing Director

Exhibit 10.3

PLEDGE AND SECURITY AGREEMENT

dated as of May 14, 2018

among

AKOUSTIS TECHNOLOGIES, INC.,

EACH OF THE OTHER GRANTORS PARTY HERETO

and

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.

as Collateral Agent

TABLE OF CONTENTS

Schedules:

Exhibits:

This **PLEDGE AND SECURITY AGREEMENT** , dated as of May 14, 2018 (as amended, restated, supplemented or otherwise modified from time to time, this "**Agreement**"), among **AKOUSTIS TECHNOLOGIES, INC.**, a Delaware corporation (the "**Company**"), **EACH SUBSIDIARY OF THE COMPANY** , whether as an original signatory hereto or as an Additional Grantor (as herein defined) (together with the Company, each, a "**Grantor**"), and **THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.**, as collateral agent for the Secured Parties (as herein defined) (in such capacity, together with its agents, successors and assigns, the "**Collateral Agent**").

RECITALS:

WHEREAS, Grantors are party to that certain Indenture, dated as of the date hereof, among Company, as issuer, the guarantors named therein, as guarantors, and The Bank of New York Mellon Trust Company, N.A., as in its capacity as trustee (the " **Trustee**") (as amended, restated, supplemented or otherwise modified from time to time, the "**Indenture**"), pursuant to which the Company issued its 6.5% Convertible Senior Secured Notes due 2023;

WHEREAS, in consideration of the purchase of the Notes by the Holders as set forth in the Indenture, each Grantor has agreed to secure such Grantor's obligations under the Indenture and the Note Documents; and

WHEREAS, pursuant to the terms and conditions of the Collateral Agency Agreement dated as of even date herewith, among Collateral Agent, the Trustee and each of the Grantors (as amended, restated, supplemented or otherwise modified from time to time, the "**Collateral Agency Agreement** "), the Grantors have agreed to grant to Collateral Agent, for the benefit of the Holders and the other Secured Parties (as defined below) the security interests set forth below;

NOW, THEREFORE, in consideration of the premises and the agreements, provisions and covenants herein contained, each Grantor and Collateral Agent agree as follows:

SECTION 1 -- DEFINITIONS; GRANT OF SECURITY.

1.1 General Definitions. Capitalized terms used but not defined in this Agreement shall have the meanings ascribed to them in the Indenture. In this Agreement, the following terms shall have the following meanings:

"Account Debtor" shall mean each Person who is obligated on a Receivable or any Supporting Obligation related thereto.

"Accounts" shall mean all "accounts" as defined in Article 9 of the UCC.

"Additional Grantors" shall have the meaning assigned in Section 5.3.

"Agreement" shall have the meaning set forth in the preamble.

"Assigned Agreements" shall mean all agreements and contracts to which such Grantor is a party as of the date hereof, or to which such Grantor becomes a party after the date hereof, as each such agreement may be amended, supplemented or otherwise modified from time to time.

"Cash Proceeds" shall have the meaning assigned in Section 7.6.

"Chattel Paper" shall mean all "chattel paper" as defined in Article 9 of the UCC, including, without limitation, "electronic chattel paper" or "tangible chattel paper", as each term is defined in Article 9 of the UCC.

"Collateral" shall have the meaning assigned in Section 2.1.

"Collateral Account" shall have the meaning assigned in Section 4.3(b)(v).

"Collateral Agent" shall have the meaning set forth in the preamble.

"Collateral Records" shall mean books, records, ledger cards, files, correspondence, customer lists, blueprints, technical specifications, manuals, computer software, computer printouts, tapes, disks and related data processing software and similar items that at any time evidence or contain information relating to any of the Collateral or are otherwise necessary or helpful in the collection thereof or realization thereupon.

"Collateral Support" shall mean all property (real or personal) assigned, hypothecated or otherwise securing any of the Collateral and shall include any security agreement or other agreement granting a lien or security interest in such real or personal property.

"Commercial Tort Claims" shall mean all "commercial tort claims" as defined in Article 9 of the UCC and as listed on Schedule 4.8 (as such schedule may be amended or supplemented from time to time).

"Commodities Accounts" (i) shall mean all "commodity accounts" as defined in Article 9 of the UCC and (ii) shall include, without limitation, all of the accounts listed on Schedule 4.4 under the heading "Commodities Accounts" (as such schedule may be amended or supplemented from time to time).

"Copyright Licenses" shall mean any and all agreements providing for the granting of any right in or to Copyrights (whether such Grantor is licensee or licensor thereunder).

"**Copyright Security Agreement**" means each Copyright Security Agreement executed and delivered by Grantors, or any of them, and Collateral Agent, in substantially the form of Exhibit C.

"Copyrights" shall mean all United States and foreign copyrights, all mask works fixed in semiconductor chip products (as defined under 17 U.S.C. 901 of the U.S. Copyright Act), whether registered or unregistered, now or hereafter in force throughout the world, all registrations and applications therefor including, without limitation, the copyrights and applications referred to in Schedule 4.7(A) (as such schedule may be amended or supplemented from time to time), all rights corresponding thereto throughout the world, all extensions and renewals of any thereof, the right to sue for past, present and future infringements of any of the foregoing, and all proceeds of the foregoing, including, without limitation, licenses, royalties, income, payments, claims, damages, and proceeds of suit.

"Documents" shall mean all "documents" as defined in Article 9 of the UCC.

"Deposit Accounts" (i) shall mean all "deposit accounts" as defined in Article 9 of the UCC and (ii) shall include, without limitation, all of the accounts listed on Schedule 4.4 under the heading "Deposit Accounts" (as such schedule may be amended or supplemented from time to time).

"Equipment" shall mean: (i) all "equipment" as defined in Article 9 of the UCC, (ii) all machinery, manufacturing equipment, data processing equipment, computers, office equipment, furnishings, furniture, appliances, fixtures and tools (in each case, regardless of whether characterized as equipment under the UCC) and (iii) all accessions or additions thereto, all parts thereof, whether or not at any time of determination incorporated or installed therein or attached thereto, and all replacements therefor, wherever located, now or hereafter existing, including any fixtures.

"General Intangibles" (i) shall mean all "general intangibles" as defined in Article 9 of the UCC, including "payment intangibles" also as defined in Article 9 of the UCC and (ii) shall include, without limitation, all interest rate or currency protection or hedging arrangements, all tax refunds, all licenses, permits, concessions and authorizations and all Assigned Agreements (in each case, regardless of whether characterized as general intangibles under the UCC).

"Goods" (i) shall mean all "goods" as defined in Article 9 of the UCC and (ii) shall include, without limitation, all Inventory and Equipment (in each case, regardless of whether characterized as goods under the UCC).

"Grantors" shall have the meaning set forth in the preamble.

"Indenture" shall have the meaning set forth in the preamble.

"Instruments" shall mean all "instruments" as defined in Article 9 of the UCC.

"Insurance" shall mean: (i) all insurance policies covering any or all of the Collateral (regardless of whether Collateral Agent is the loss payee thereof) and (ii) any key man life insurance policies.

"Intellectual Property" shall mean, collectively, the Copyrights, the Copyright Licenses, the Patents, the Patent Licenses, the Trademarks, the Trademark Licenses, the Trade Secrets and the Trade Secret Licenses.

"Inventory" shall mean: (i) all "inventory" as defined in Article 9 of the UCC and (ii) all goods held for sale or lease or to be furnished under contracts of service or so leased or furnished, all raw materials, work in process, finished goods, and materials used or consumed in the manufacture, packing, shipping, advertising, selling, leasing, furnishing or production of such inventory or otherwise used or consumed in any Grantor's business; all goods in which any Grantor has an interest in mass or a joint or other interest or right of any kind; and all goods which are returned to or repossessed by any Grantor, all computer programs embedded in any goods and all accessions thereto and products thereof (in each case, regardless of whether characterized as inventory under the UCC).

"Investment Accounts" shall mean the Collateral Account, Securities Accounts, Commodities Accounts and Deposit Accounts.

"Investment Related Property" shall mean: (i) all "investment property" (as such term is defined in Article 9 of the UCC) and (ii) all of the following (regardless of whether classified as investment property under the UCC): all Pledged Equity Interests, Pledged Debt, the Investment Accounts and certificates of deposit.

"Letter of Credit Right" shall mean "letter-of-credit right" as defined in Article 9 of the UCC.

"Majority Holders" shall have the meaning set forth in the Indenture.

"Material Adverse Effect" means a material adverse effect on (i) the business, operations, properties, assets, condition (financial or otherwise) of Company and its Subsidiaries taken as a whole; (ii) the ability of any Grantor to fully and timely perform its Secured Obligations; (iii) the legality, validity, binding effect or enforceability against a Grantor of a Notes Document to which it is a party; or (iv) the ability of the Collateral Agent or any Secured Party to enforce its rights and remedies under any Note Document.

"Material Real Estate Asset" shall mean any Real Estate Asset located in the United States which, together with all other Real Estate Assets located in the same county as such Real Estate Asset, has a fair market value greater than or equal to $500,000.

"Material Receivable" means one or more Receivables of the Grantors evidencing obligations in excess of $250,000.

"Money" shall mean "money" as defined in the UCC.

"Mortgages" shall mean each of (i) the Fee and Leasehold Mortgage, Assignment, Security Agreement and Fixture Filing dated as of May 14, 2018 given by Akoustis, Inc., a Delaware corporation, and The Ontario County Industrial Development Agency, a public benefit corporation of the State of New York, for the benefit of The Bank of New York Mellon Trust Company, N.A.; and (ii) the Supplemental Fee and Leasehold Mortgage, Assignment, Security Agreement and Fixture Filing dated as of May 14, 2018 given by Akoustis, Inc., a Delaware corporation, for the benefit of The Bank of New York Mellon Trust Company, N.A.

"Non-Assignable Contract" shall mean any agreement, contract or license to which any Grantor is a party that by its terms purports to restrict or prevent the assignment or granting of a security interest therein (either by its terms or by any federal or state statutory prohibition or otherwise irrespective of whether such prohibition or restriction is enforceable under Section 9-406 through 9-409 of the UCC).

"**Note Documents**" means, collectively, the Indenture, the Collateral Agency Agreement, each Note Guaranty, the Collateral Documents, the Notes and each other agreement, document or instrument executed or delivered at any time in connection therewith, as each may be amended, restated, supplemented, modified, renewed or extended from time to time.

"Patent Licenses" shall mean all agreements providing for the granting of any right in or to Patents (whether such Grantor is licensee or licensor thereunder).

"Patent Security Agreement" means each Patent Security Agreement executed and delivered by Grantors, or any of them, and Collateral Agent, in substantially the form of Exhibit D.

"Patents" shall mean all United States and foreign patents and applications for letters patent throughout the world, including, but not limited to each patent and patent application referred to in Schedule 4.7(B) (as such schedule may be amended or supplemented from time to time), all reissues, divisions, continuations, continuations-in-part, extensions, renewals, and reexaminations of any of the foregoing, all rights corresponding thereto throughout the world, and all proceeds of the foregoing including, without limitation, licenses, royalties, income, payments, claims, damages, and proceeds of suit and the right to sue for past, present and future infringements of any of the foregoing.

"Payment Intangible" shall have the meaning specified in Article 9 of the UCC.

"Pledged Debt" shall mean all Debt owed to such Grantor, including, without limitation, all Debt described on Schedule 4.4 under the heading "Pledged Debt" (as such schedule may be amended or supplemented from time to time), issued by the obligors named therein, the instruments evidencing such Debt, and all interest, cash, instruments and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such Debt.

"Pledged Equity Interests" shall mean all Pledged Stock, Pledged LLC Interests, Pledged Partnership Interests and Pledged Trust Interests.

"Pledged LLC Interests" shall mean all interests in any limited liability company including, without limitation, all limited liability company interests listed on Schedule 4.4 under the heading "Pledged LLC Interests" (as such schedule may be amended or supplemented from time to time) and the certificates, if any, representing such limited liability company interests and any interest of such Grantor on the books and records of such limited liability company or on the books and records of any securities intermediary pertaining to such interest and all dividends, distributions, cash, warrants, rights, options, instruments, securities and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such limited liability company interests.

"Pledged Partnership Interests" shall mean all interests in any general partnership, limited partnership, limited liability partnership or other partnership including, without limitation, all partnership interests listed on Schedule 4.4 under the heading "Pledged Partnership Interests" (as such schedule may be amended or supplemented from time to time) and the certificates, if any, representing such partnership interests and any interest of such Grantor on the books and records of such partnership or on the books and records of any securities intermediary pertaining to such interest and all dividends, distributions, cash, warrants, rights, options, instruments, securities and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such partnership interests.

"Pledged Stock" shall mean all shares of capital stock owned by such Grantor, including, without limitation, all shares of capital stock described on Schedule 4.4 under the heading "Pledged Stock" (as such schedule may be amended or supplemented from time to time), and the certificates, if any, representing such shares and any interest of such Grantor in the entries on the books of the issuer of such shares or on the books of any securities intermediary pertaining to such shares, and all dividends, distributions, cash, warrants, rights, options, instruments, securities and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such shares.

"Pledged Trust Interests" shall mean all interests in a Delaware business trust or other trust including, without limitation, all trust interests listed on Schedule 4.4 under the heading "Pledged Trust Interests" (as such schedule may be amended or supplemented from time to time) and the certificates, if any, representing such trust interests and any interest of such Grantor on the books and records of such trust or on the books and records of any securities intermediary pertaining to such interest and all dividends, distributions, cash, warrants, rights, options, instruments, securities and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such trust interests.

"Pledge Supplement" shall mean any supplement to this Agreement in substantially the form of Exhibit A.

"Proceeds" shall mean: (i) all "proceeds" as defined in Article 9 of the UCC, (ii) payments or distributions made with respect to any Investment Related Property and (iii) whatever is receivable or received when Collateral or proceeds are sold, exchanged, collected or otherwise disposed of, whether such disposition is voluntary or involuntary.

"Real Estate Asset" shall mean, at any time a determination, any interest (fee, leasehold or otherwise) then owned by any Grantor in any land, any improvements, structures or buildings erected or located on such land, and any equipment located thereon which is so related to such land, improvements, structures or buildings that it is deemed to be a fixture or otherwise forms part of the real property under the law of the applicable jurisdiction.

"Receivables" shall mean all rights to payment, whether or not earned by performance, for goods or other property sold, leased, licensed, assigned or otherwise disposed of, or services rendered or to be rendered, including, without limitation all such rights constituting or evidenced by any Account, Chattel Paper, Instrument, General Intangible or Investment Related Property, together with all of Grantor's rights, if any, in any goods or other property giving rise to such right to payment and all Collateral Support and Supporting Obligations related thereto and all Receivables Records.

"Receivables Records" shall mean (i) all original copies of all documents, instruments or other writings or electronic records or other Records evidencing the Receivables, (ii) all books, correspondence, credit or other files, Records, ledger sheets or cards, invoices, and other papers relating to Receivables, including, without limitation, all tapes, cards, computer tapes, computer discs, computer runs, record keeping systems and other papers and documents relating to the Receivables, whether in the possession or under the control of any Grantor or any computer bureau or agent from time to time acting for any Grantor or otherwise, (iii) all evidences of the filing of financing statements and the registration of other instruments in connection therewith, and amendments, supplements or other modifications thereto, notices to other creditors or secured parties, and certificates, acknowledgments, or other writings, including, without limitation, lien search reports, from filing or other registration officers, (iv) all credit information, reports and memoranda relating thereto and (v) all other written or nonwritten forms of information related in any way to the foregoing or any Receivable.

"Record" shall have the meaning specified in Article 9 of the UCC.

"Secured Obligations" shall mean all obligations (whether or not constituting future advances, obligatory or otherwise) of all Grantors from time to time arising under or in respect of this Agreement, the Indenture and the other Notes Documents (including the obligations to pay principal, interest and all other charges, fees, expenses, commissions, reimbursements, premiums, indemnities and other payments related to or in respect of the obligations contained in this Agreement, the Indenture and the other Note Documents), in each case whether (a) such obligations are direct or indirect, joint or several, absolute or contingent, reduced to judgment or not, liquidated or unliquidated, disputed or undisputed, legal or equitable, due or to become due whether at stated maturity, by acceleration or otherwise; (b) arising in the regular course of business or otherwise; (c) for payment or performance; (d) discharged, stayed or otherwise affected by any bankruptcy, insolvency, reorganization or similar proceeding with respect to any Grantor or any other person; or (e) now existing or hereafter arising (including interest and other obligations arising or accruing after the commencement of any bankruptcy, insolvency, reorganization or similar proceeding with respect to any Grantor or any other person, or that would have arisen or accrued but for the commencement of such proceeding, even if such obligation or the claim therefor is not enforceable or allowable in such proceeding).

"Secured Parties" means the Holders, the Trustee and the Collateral Agent and their respective agents.

"Securities" shall mean any stock, shares, partnership interests, voting trust certificates, certificates of interest or participation in any profit-sharing agreement or arrangement, options, warrants, bonds, debentures, notes, or other evidences of indebtedness, secured or unsecured, convertible, subordinated or otherwise, or in general any instruments commonly known as "securities" or any certificates of interest, shares or participations in temporary or interim certificates for the purchase or acquisition of, or any right to subscribe to, purchase or acquire, any of the foregoing.

"Securities Accounts" (i) shall mean all "securities accounts" as defined in Article 8 of the UCC and (ii) shall include, without limitation, all of the accounts listed on Schedule 4.4 under the heading "Securities Accounts" (as such schedule may be amended or supplemented from time to time).

"Supporting Obligation" shall mean all "supporting obligations" as defined in Article 9 of the UCC.

"Tax Code" shall mean the United States Internal Revenue Code of 1986, as amended from time to time.

"Trademark Licenses" shall mean any and all agreements providing for the granting of any right in or to Trademarks (whether such Grantor is licensee or licensor thereunder).

"**Trademark Security Agreement** " means each Trademark Security Agreement executed and delivered by Grantors, or any of them, and Collateral Agent, in substantially the form of Exhibit E.

"Trademarks" shall mean all United States, state and foreign trademarks, trade names, corporate names, company names, business names, fictitious business names, internet domain names, trade styles, service marks, certification marks, collective marks, logos, other source or business identifiers, designs and general intangibles of a like nature, all registrations and applications for any of the foregoing including, but not limited to the registrations and applications referred to in Schedule 4.7(C) (as such schedule may be amended or supplemented from time to time), all extensions or renewals of any of the foregoing, all of the goodwill of the business connected with the use of and symbolized by the foregoing, the right to sue for past, present and future infringement or dilution of any of the foregoing or for any injury to goodwill, and all proceeds of the foregoing, including, without limitation, licenses, royalties, income, payments, claims, damages, and proceeds of suit.

"Trade Secret Licenses" shall mean any and all agreements providing for the granting of any right in or to Trade Secrets (whether such Grantor is licensee or licensor thereunder).

"Trade Secrets" shall mean all trade secrets and all other confidential or proprietary information and know-how now or hereafter owned or used in, or contemplated at any time for use in, the business of such Grantor (all of the foregoing being collectively called a **"Trade Secret"**), whether or not such Trade Secret has been reduced to a writing or other tangible form, including all documents and things embodying, incorporating, or referring in any way to such Trade Secret, the right to sue for past, present and future infringement of any Trade Secret, and all proceeds of the foregoing, including, without limitation, licenses, royalties, income, payments, claims, damages, and proceeds of suit.

"UCC" shall mean the Uniform Commercial Code as in effect from time to time in the State of New York or, when the context implies, the Uniform Commercial Code as in effect from time to time in any other applicable jurisdiction.

"United States" shall mean the United States of America.

1.2 Definitions; Interpretation. All capitalized terms used herein (including the preamble and recitals hereto) and not otherwise defined herein shall have the meanings ascribed thereto in the Indenture or, if not defined therein, in the UCC. References to "Sections," "Exhibits" and "Schedules" shall be to Sections, Exhibits and Schedules, as the case may be, of this Agreement unless otherwise specifically provided. Section headings in this Agreement are included herein for convenience of reference only and shall not constitute a part of this Agreement for any other purpose or be given any substantive effect. Any of the terms defined herein may, unless the context otherwise requires, be used in the singular or the plural, depending on the reference. The use herein of the word "include" or "including", when following any general statement, term or matter, shall not be construed to limit such statement, term or matter to the specific items or matters set forth immediately following such word or to similar items or matters, whether or not non-limiting language (such as "without limitation" or "but not limited to" or words of similar import) is used with reference thereto, but rather shall be deemed to refer to all other items or matters that fall within the broadest possible scope of such general statement, term or matter. If any conflict or inconsistency exists between this Agreement and the Indenture, the Indenture shall govern. All references herein to provisions of the UCC shall include all successor provisions under any subsequent version or amendment to any Article of the UCC.

SECTION 2 -- GRANT OF SECURITY.

2.1 Grant of Security. Each Grantor hereby grants to Collateral Agent, for its benefit and for the benefit of the other Secured Parties, a security interest and continuing lien on all of such Grantor's right, title and interest in, to and under all property of such Grantor including, but not limited to the following, in each case whether now owned or existing or hereafter acquired or arising and wherever located (all of which being hereinafter collectively referred to as the **"Collateral"**):

(a) Accounts;

(b) Chattel Paper;

(c) Documents;

(d) Equipment;

(e) General Intangibles;

(f) Goods;

(g) Instruments;

(h) Insurance;

(i) Intellectual Property

(j) Inventory;

(k) Investment Related Property;

(l) Letter of Credit Rights;

(m) Money;

(n) Receivables and Receivable Records;

(o) Commercial Tort Claims;

(p) to the extent not otherwise included above, all Collateral Records, Collateral Support and Supporting Obligations relating to any of the foregoing; and

(q) to the extent not otherwise included above, all Proceeds, products, accessions, rents and profits of or in respect of any of the foregoing.

2.2 Certain Limited Exclusions. The Collateral will not include the following assets (such assets, the "**Excluded Property**"): (i) any rights or interest in any lease, contract, license or license agreement covering any Grantor's assets, so long as under the terms of such lease, contract, license or license agreement, or applicable law with respect thereto, the grant of a security interest or lien therein is prohibited or would render such lease, contract, license or license agreement cancelled, invalid or unenforceable (other than to the extent that any such term would be rendered ineffective pursuant to Sections 9-406, 9-407, 9-408 or 9-409 of the Uniform Commercial Code (or any successor provision or provisions) of any relevant jurisdiction or any other applicable law or principles of equity); *provided however* that in relation to clause (i) above, such security interest shall attach immediately at such time as the condition causing such abandonment, invalidation or unenforceability shall be remedied and, to the extent severable, shall attach immediately to any portion of such lease, license, contract, property rights or agreement that does not result in any of the consequences specified above; and (ii) assets owned by any Grantor on the Issue Date or thereafter acquired and any proceeds thereof that are subject to a Lien securing a purchase money obligation or capital lease obligation permitted to be incurred pursuant to the provisions of the Indenture to the extent and for so long as the contract or other agreement in which such Lien is granted (or the documentation providing for such purchase money obligation or capital lease obligation) prohibits the creation of any other lien on such assets and proceeds.

SECTION 3 -- SECURITY FOR OBLIGATIONS; GRANTORS REMAIN LIABLE.

3.1 Security for Obligations. This Agreement secures, and the Collateral is collateral security for, the payment and performance in full when due of all the Secured Obligations.

3.2 Continuing Liability Under Collateral. Notwithstanding anything herein to the contrary, (i) each Grantor shall remain liable for all obligations in respect of the Collateral and nothing contained herein is intended or shall be a delegation of such duties to Collateral Agent or any Secured Party, (ii) each Grantor shall remain liable under each of the agreements included in the Collateral, including, without limitation, any agreements relating to Pledged Equity Interests, to perform all of the obligations undertaken by it thereunder all in accordance with and pursuant to the terms and provisions thereof and neither Collateral Agent nor any Secured Party shall have any obligation or liability under any of such agreements by reason of or arising out of this Agreement or any other document related thereto nor shall Collateral Agent nor any Secured Party have any obligation to make any inquiry as to the nature or sufficiency of any payment received by it or have any obligation to take any action to collect or enforce any rights under any agreement included in the Collateral, including, without limitation, any agreements relating to Pledged Equity Interests, and (iii) the exercise by Collateral Agent of any of its rights hereunder shall not release any Grantor from any of its duties or obligations under the contracts and agreements included in the Collateral.

SECTION 4 -- REPRESENTATIONS AND WARRANTIES AND COVENANTS.

4.1 Generally.

(a) Representations and Warranties. Each Grantor hereby represents and warrants that:

(i) it owns the Collateral purported to be owned by it or otherwise has the rights it purports to have in each applicable item of the Collateral and, as to all its Collateral, whether now existing or hereafter acquired, will continue to own or have such rights in each item of the Collateral except as otherwise permitted by the Indenture, in each case free and clear of any and all Liens, rights or claims of all other Persons, other than Permitted Liens;

(ii) it has indicated on Schedule 4.1(A) (as such schedule may be amended or supplemented from time to time): (A) the type of organization of such Grantor, (B) the jurisdiction of organization of such Grantor, (C) its organizational identification number, if any, and (D) the jurisdiction where the chief executive office or principal place of business is located;

(iii) the full legal name of such Grantor is as set forth on Schedule 4.1(A) (as such schedule may be amended or supplemented from time to time) and it has not done in the last five (5) years, and does not do, business under any other name (including any trade-name or fictitious business name) except for those names set forth on Schedule 4.1(B) (as such schedule may be amended or supplemented from time to time);

(iv) except as provided on Schedule 4.1(C), it has not changed its name, jurisdiction of organization, principal place of business, chief executive office or its corporate structure in any way within the past five (5) years;

(v) upon (x) the filing of all UCC financing statements naming each Grantor as "debtor" and Collateral Agent as "secured party" and describing the Collateral in the filing offices set forth opposite such Grantor's name on Schedule 4.1(D) hereof (as such schedule may be amended or supplemented from time to time), and (y) execution of a control agreement with respect to each Deposit Account, the security interests granted to Collateral Agent hereunder constitute valid and perfected first priority Liens (subject in the case of priority only to Permitted Liens) on that portion of the Collateral that can be perfected by such filing or execution of such control agreement;

(vi) other than the financing statements filed in favor of Collateral Agent, no effective UCC financing statement, fixture filing or other instrument similar in effect under any applicable law covering all or any part of the Collateral is on file in any filing or recording office except for financing statements filed in connection with Permitted Liens;

(vii) no authorization, approval or other action by, and no notice to or filing with, any Governmental Authority or regulatory body is required for either (x) the pledge or grant by any Grantor of the Liens purported to be created in favor of Collateral Agent hereunder or (y) the exercise by Collateral Agent of any rights or remedies in respect of any Collateral (whether specifically granted or created hereunder or created or provided for by applicable law), except, in each case, (A) for the filings contemplated by clause (v) above, (B) as may be required, in connection with the disposition of any Investment Related Property, by laws generally affecting the offering and sale of Securities, (C) as may be required in connection with Pledged Equity Interests of Foreign Subsidiaries hereunder, to the extent identified in Schedule 4.1(E) hereof (as such schedule may be amended or supplemented from time to time), and (D) such authorizations, approvals or other actions of or notices to or filings with Governmental Authorities or regulatory bodies obtained as of the date hereof; and

(viii) it does not own any "as extracted collateral" (as defined in the UCC).

(b) Covenants and Agreements. Each Grantor hereby covenants and agrees that:

(i) such Grantor shall defend the Collateral against all Persons at any time claiming any interest therein, except with respect to Permitted Liens;

(ii) it shall not knowingly produce, use or permit any Collateral to be used unlawfully or in violation of any provision of this Agreement or in material violation of any applicable statute, regulation or ordinance or any policy of insurance covering the Collateral;

(iii) it shall not change such Grantor's name, chief executive office, type of organization or jurisdiction of organization unless it shall have (A) notified Collateral Agent in writing, by executing and delivering to Collateral Agent a completed Pledge Supplement, substantially in the form of Exhibit A attached hereto, together with all applicable Supplements to Schedules thereto, at least five (5) days' prior to any such change or establishment, identifying the new name, chief executive office, type of organization or jurisdiction of organization and providing such other information in connection therewith as Collateral Agent may reasonably request and (B) taken all actions necessary or advisable to maintain the continuous validity, perfection and the same or better priority of Collateral Agent's security interest in the Collateral intended to be granted and agreed to hereby;

(iv) upon such Grantor obtaining knowledge thereof, it shall promptly notify Collateral Agent in writing of any event that would reasonably be expected to have a Material Adverse Effect on the value of any material portion of the Collateral, or the rights and remedies of Collateral Agent in relation thereto, including, without limitation, the levy of any legal process against any material portion of the Collateral;

(v) except otherwise permitted by the Notes Documents, it shall not take or permit any action which would reasonably be expected to impair, in any material respect, Collateral Agent's rights in a material portion of the Collateral; and

(vi) each Grantor will maintain its primary operating and investments accounts in the United States.

(c) Post-Closing Items. Company hereby covenants and agrees that Company shall use commercially reasonable efforts for a period of thirty (30) days following the Issue Date to deliver (or cause the applicable Grantor to deliver) duly executed control agreements in such form as may be reasonably acceptable to Collateral Agent with respect to all Deposit Accounts required to be pledged hereunder. Company shall deliver (or cause the applicable Grantor to deliver), within the timeframe set forth in Section 3.5 of the Mortgages, the items listed therein. Subject to Section 4.4.2(b), the Company further covenants and agrees that it shall, or shall cause the applicable Grantor to, use its commercially reasonable efforts to deliver as soon as practical duly executed control agreements in such form as may be reasonably acceptable to Collateral Agent with respect to all Securities Accounts owned by them on the Issue Date. Further, as soon as reasonably practical after the Issue Date provide insurance certificates naming the Collateral Agent as "loss payee" and "additional insured" on the insurance policies maintained by the Grantors. Further, promptly after the Issue Date, the Company will open the Collateral Account. The Collateral Agent shall not be responsible for determining whether Company has used "commercially reasonable efforts" hereunder.

4.2 Equipment and Inventory.

(a) Representations and Warranties. Each Grantor represents and warrants that as of the Issue Date:

(i) all of the Equipment and Inventory with a value of $250,000 in the aggregate included in the Collateral is kept only at the locations specified in Schedule 4.2 (as such schedule may be amended or supplemented from time to time);

(ii) any Goods now or hereafter produced by any Grantor included in the Collateral have been and will be produced in compliance with the requirements of the Fair Labor Standards Act, as amended; and

(iii) none of the Inventory or Equipment is in the possession of an issuer of a negotiable document (as defined in Section 7-104 of the UCC) therefor or otherwise in the possession of a bailee or a warehouseman.

(b) Covenants and Agreements. Each Grantor covenants and agrees that:

(i) it shall keep the Equipment and Inventory, with a value in excess of $250,000, until sold in the ordinary course of business and any Documents evidencing any Equipment and Inventory in the locations specified on Schedule 4.2 (as such schedule may be amended or supplemented from time to time);

(ii) it shall notify Collateral Agent in writing, by executing and delivering to Collateral Agent, no less often than quarterly, a completed Pledge Supplement, substantially in the form of Exhibit A attached hereto, together with all applicable Supplements to Schedules thereto, in the event there has been any change in the locations specified on Schedule 4.2 with respect to such Equipment, Inventory (other than Inventory sold in the ordinary course of business) and Documents, identifying such new locations and providing such other information in connection therewith as shall be necessary to perfect the Collateral Agent's security interest in such Collateral;

(iii) it shall keep correct and accurate records of the Inventory as is customarily maintained under similar circumstances by Persons of established reputation engaged in similar business, and in any event sufficient to prepare financial statements in accordance with GAAP;

(iv) it shall not deliver any Document evidencing any Equipment or Inventory (other than pursuant to a sale of Inventory in the ordinary course of business) to any Person other than (A) the issuer of such Document to claim the Goods evidenced therefor or (B) Collateral Agent; and

(v) if any Equipment or Inventory in excess of $250,000 for any location or $1,000,000 in the aggregate is in possession or control of any third party, each Grantor shall notify, and shall request, that Collateral Agent join such Grantor (upon reasonable written request and at such Grantor's cost) in notifying the third party of Collateral Agent's security interest, and use commercially reasonable efforts for a period of thirty (30) days to obtain an acknowledgment from the third party that it is holding the Equipment and Inventory for the benefit of Collateral Agent. The Collateral Agent shall not be responsible for determining whether Company has used "commercially reasonable efforts" hereunder.

4.3 Receivables.

(a) Representations and Warranties. Each Grantor represents and warrants that as of the Issue Date:

(i) each Material Receivable (A) is and will be the legal, valid and binding obligation of the Account Debtor in respect thereof, representing an unsatisfied obligation of such Account Debtor, (B) is and will be enforceable in accordance with its terms except to the extent that the enforceability thereof may be limited by applicable bankruptcy, insolvency, moratorium, reorganization and other similar laws affecting creditors' rights generally and by equitable principles (regardless of whether enforcement is sought in equity or at law), and (C) is and will be in compliance with all applicable laws, whether federal, state, local or foreign;

(ii) none of the Account Debtors in respect of any Material Receivable is the government of the United States, any agency or instrumentality thereof, any state or municipality or any foreign sovereign; and

(iii) no Material Receivable is evidenced by, or constitutes, an Instrument or Chattel Paper which has not been delivered to, or otherwise subjected to the control of, Collateral Agent to the extent required by, and in accordance with Section 4.3(c).

(b) Covenants and Agreements: Each Grantor hereby covenants and agrees that:

(i) it shall keep and maintain at its own cost and expense satisfactory and complete records of Material Receivables, including, but not limited to, the originals of all material documentation with respect thereto and records of all payments received and all credits granted thereon, all material merchandise returned and all material other dealings therewith;

(ii) during the continuance of an Event of Default, it shall mark conspicuously, with an appropriate reference to the fact that Collateral Agent has a security interest therein, all Chattel Paper, Instruments and other evidence of Material Receivables (other than any delivered to Collateral Agent as provided herein), as well as the Material Receivables Records;

(iii) other than in respect of obligations subject to good faith disputes, it shall perform in all material respects all of its obligations with respect to the Material Receivables;

(iv) other than in the ordinary course of business and while no Event of Default exists, it shall not amend, modify, terminate or waive any provision of any Material Receivable in any manner which could reasonably be expected to have a Material Adverse Effect on the value of such Material Receivable as Collateral. Other than in the ordinary course of business and so long as no Event of Default exists, such Grantor shall not (w) grant any extension or renewal of the time of payment of any Material Receivable, (x) compromise or settle any dispute, claim or legal proceeding with respect to any Material Receivable for less than the total unpaid balance thereof, (y) release, wholly or partially, any Person liable for the payment thereof, or (z) allow any material credit or discount thereon;

(v) each Grantor shall continue to collect all amounts due or to become due to such Grantor under the Material Receivables and any Supporting Obligation and diligently exercise each material right it may have under any Material Receivable, any Supporting Obligation or Collateral Support, in each case, at its own expense, and in connection with such collections and exercise, such Grantor shall take such action as such Grantor may deem necessary or advisable. Notwithstanding the foregoing, Collateral Agent (acting at the written direction of Majority Holders) shall have the right at any time during the existence of an Event of Default and, following notice to Grantors, to notify, or require any Grantor to notify, any Account Debtor of Collateral Agent's security interest in the Receivables and any Supporting Obligation and, in addition, at any time following the occurrence and during the continuation of an Event of Default, pursuant to the Note Documents Collateral Agent (acting at the written direction of Majority Holders) may: (A) direct the Account Debtors under any Receivables to make payment of all amounts due or to become due to such Grantor thereunder directly to Collateral Agent; (B) notify, or require any Grantor to notify, each Person maintaining a lockbox or similar arrangement to which Account Debtors under any Receivables have been directed to make payment to remit all amounts representing collections on checks and other payment items from time to time sent to or deposited in such lockbox or other arrangement directly to Collateral Agent; and (C) enforce, at the expense of such Grantor, collection of any such Receivables and to adjust, settle or compromise the amount or payment thereof, in the same manner and to the same extent as such Grantor might have done. If Collateral Agent notifies any Grantor that it has elected to collect the Receivables in accordance with the preceding sentence, any payments of Receivables received by such Grantor shall be forthwith (and in any event within five (5) Business Days) deposited by such Grantor in the exact form received, duly indorsed by such Grantor to Collateral Agent if required, in a collateral account (the **"Collateral Account"**), and until so turned over, all amounts and proceeds (including checks and other instruments) received by such Grantor in respect of the Receivables, any Supporting Obligation or Collateral Support shall be received in trust for the benefit of Collateral Agent hereunder and shall be segregated from other funds of such Grantor and such Grantor shall not adjust, settle or compromise the amount or payment of any Receivable, or release wholly or partly any Account Debtor or obligor thereof, or allow any credit or discount thereon; and

(vi) it shall use its commercially reasonable efforts to keep in full force and effect any Supporting Obligation or Collateral Support relating to any Material Receivable.

(c) Delivery and Control of Receivables. With respect to any Material Receivables that is evidenced by, or constitutes, Chattel Paper or Instruments, each Grantor shall cause each originally executed copy thereof to be delivered to Collateral Agent (or its agent or designee) appropriately indorsed to Collateral Agent or indorsed in blank: (i) with respect to any such Material Receivables in existence on the date hereof, on or prior to the date hereof, and (ii) with respect to any such Material Receivables hereafter arising, within twenty (20) days of such Grantor acquiring rights therein. Any Material Receivable not otherwise required to be delivered or subjected to the control of Collateral Agent in accordance with this subsection (c) shall be delivered or subjected to such control upon request of Collateral Agent (acting at the written direction of Majority Holders) during the existence of an Event of Default.

4.4 Investment Related Property; Investment Related Property Generally

(a) Covenants and Agreements. Each Grantor hereby covenants and agrees that:

(i) in the event it acquires rights in any Investment Related Property after the date hereof, it shall deliver to Collateral Agent a completed Pledge Supplement, substantially in the form of Exhibit A attached hereto, together with all applicable Supplements to Schedules thereto, reflecting such new Investment Related Property and all other Investment Related Property. Notwithstanding the foregoing, it is understood and agreed that the security interest of Collateral Agent shall attach to all Investment Related Property immediately upon any Grantor's acquisition of rights therein and shall not be affected by the failure of any Grantor to deliver a supplement to Schedule 4.4 as required hereby;

(ii) except as provided in the next sentence and except to the extent constituting Excluded Property, in the event such Grantor receives any dividends, interest or distributions on any Investment Related Property, or any securities or other property upon the merger, consolidation, liquidation or dissolution of any issuer of any Investment Related Property, then (A) such dividends, interest or distributions and securities or other property shall be included in the definition of Collateral without further action and (B) such Grantor shall immediately take all steps, if any, necessary or advisable to ensure the validity, perfection, priority and, if applicable, control of Collateral Agent over such Investment Related Property (including, without limitation, delivery thereof to Collateral Agent if necessary for such validity, perfection or priority). Notwithstanding the foregoing, so long as no Event of Default shall have occurred and be continuing, each Grantor shall be entitled to retain all cash dividends and distributions, all payments of interest and all property received upon the liquidation or dissolution of a Subsidiary permitted by the Note Documents; and to the extent applicable, each Grantor consents to the grant by each other Grantor of a Security Interest in all Investment Related Property to Collateral Agent.

(b) Delivery and Control. Each Grantor agrees that with respect to any Investment Related Property in which it currently has rights it shall comply with the provisions of this Section 4.4(b) on or before the Issue Date and with respect to any Investment Related Property hereafter acquired by such Grantor it shall comply with the provisions of this Section 4.4(b) promptly upon acquiring rights therein. With respect to any Investment Related Property that is represented by a certificate or that is an "instrument" (other than any Investment Related Property credited to a Securities Account), it shall cause such certificate or instrument to be delivered to Collateral Agent, indorsed in blank by an "effective indorsement" (as defined in Section 8-107 of the UCC), regardless of whether such certificate constitutes a "certificated security" for purposes of the UCC. In addition to the foregoing, if any issuer of any Investment Related Property is located in a jurisdiction outside the United States, each Grantor shall take such additional actions, including, without limitation, causing the issuer to register the pledge on its books and records or making such filings or recordings, in each case as may be necessary or advisable, under the laws of such issuer's jurisdiction to insure the validity, perfection and priority of the security interest of Collateral Agent; *provided* that the Grantors shall not be required to take any actions contemplated by this sentence with respect to the pledge of Equity Interests of Foreign Subsidiaries so long as the total assets (determined in accordance with GAAP) of such Foreign Subsidiaries with respect to which such actions have not been taken do not exceed $1,000,000 in the aggregate at any time.

(c) Voting and Distributions.

(i) So long as no Event of Default shall have occurred and be continuing:

(A) each Grantor shall be entitled to exercise or refrain from exercising any and all voting and other consensual rights pertaining to the Investment Related Property or any part thereof for any purpose not inconsistent with the terms of this Agreement or the Indenture or any other Note Document; provided, however, that, in each case, no vote shall be cast or any consent, waiver or ratification given or any action take or omitted to be taken which would violate, result in a breach of any covenant contained in, or be inconsistent with any of the terms of any Note Document, or which could reasonably be expected to have the effect of impairing the value of the Investment Related Property or any part thereof or the position or interest of Collateral Agent in the Collateral, unless expressly permitted by the terms of the Notes Documents; and

(B) Collateral Agent shall use commercially reasonable efforts to execute and deliver (or cause to be executed and delivered) to each Grantor all proxies, and other instruments as such Grantor may from time to time reasonably request in writing for the purpose of enabling such Grantor to exercise the voting and other consensual rights when and to the extent which it is entitled to exercise pursuant to clause (A) above; provided any such action to be taken by Collateral Agent shall be at the cost of such Grantor.

(ii) Upon the occurrence and during the continuation of an Event of Default:

(A) following notice from Collateral Agent to Grantors (acting at the written direction of Majority Holders), all rights of each Grantor to exercise or refrain from exercising the voting and other consensual rights which it would otherwise be entitled to exercise pursuant hereto shall cease and all such rights shall thereupon become vested in Collateral Agent who shall thereupon have the sole right to exercise such voting and other consensual rights; and

(B) in order to permit Collateral Agent to exercise the voting and other consensual rights which it may be entitled to exercise pursuant hereto and to receive all dividends and other distributions which it may be entitled to receive hereunder: (1) each Grantor shall promptly execute and deliver (or cause to be executed and delivered) to Collateral Agent all proxies, dividend payment orders and other instruments as are necessary for Collateral Agent to exercise such rights and (2) the each Grantor acknowledges that Collateral Agent may utilize the power of attorney set forth in Section 6.

4.4.1 Pledged Equity Interests and Pledged Debt

(a) Representations and Warranties. Each Grantor hereby represents and warrants, that as of the Issue Date:

(i) Schedule 4.4 (as such schedule may be amended or supplemented from time to time) sets forth under the headings "Pledged Stock, "Pledged LLC Interests," "Pledged Partnership Interests" and "Pledged Trust Interests," respectively, all of the Pledged Stock, Pledged LLC Interests, Pledged Partnership Interests and Pledged Trust Interests owned by any Grantor and such Pledged Equity Interests constitute the percentage of issued and outstanding shares of stock, percentage of membership interests, percentage of partnership interests or percentage of beneficial interest of the respective issuers thereof indicated on such Schedule;

(ii) it is the record and beneficial owner of the Pledged Equity Interests pledged by such Grantor free of all Liens, rights or claims of other Persons other than Liens in favor of Collateral Agent pursuant to the terms of this Agreement and Permitted Liens, and there are no outstanding warrants, options or other rights to purchase, or shareholder, voting trust or similar agreements outstanding with respect to, or property that is convertible into, or that requires the issuance or sale of, any Pledged Equity Interests;

(iii) without limiting the generality of Section 4.1(a)(v), except for the consents obtained in Section 4.1(a)(vii), no consent of any Person (to the extent not obtained prior to the date hereof), including any other general or limited partner, any other member of a limited liability company, any other shareholder or any other trust beneficiary, is necessary or desirable in connection with the creation, perfection or first priority status of the security interest of Collateral Agent in any Pledged Equity Interests or the exercise by Collateral Agent of the voting or other rights provided for in this Agreement or the exercise of remedies in respect thereof;

(iv) Schedule 4.4 (as such schedule may be amended or supplemented from time to time) sets forth under the heading "Pledged Debt" all of the Pledged Debt owned by any Grantor and all of such Pledged Debt has been duly authorized, authenticated or issued, and delivered and is the legal, valid and binding obligation of the issuers thereof, except to the extent that the enforceability thereof may be limited by applicable bankruptcy, insolvency, moratorium, reorganization and other similar laws affecting creditors' rights generally and by equitable principles (regardless of whether enforcement is sought in equity or at law) and is not in default; and

(v) none of the Pledged LLC Interests nor Pledged Partnership Interests are or represent interests in issuers that are: (A) registered as investment companies, (B) are dealt in or traded on securities exchanges or markets or (C) have opted to be treated as securities under the uniform commercial code of any jurisdiction unless such interest is certificated and delivered to the Collateral Agent pursuant to Section 4.4(b).

(b) Covenants and Agreements. Each Grantor hereby covenants and agrees that:

(i) except as permitted by the Indenture, it shall not vote to enable or take any other action to: (A) amend or terminate any partnership agreement, limited liability company agreement, certificate of incorporation, by-laws or other organizational documents in any way that materially changes the rights of such Grantor with respect to any Investment Related Property or adversely affects the validity, perfection or priority of Collateral Agent's security interest, (B) permit any issuer of any Pledged Equity Interest to issue any additional stock, partnership interests, limited liability company interests or other equity interests of any nature or to issue securities convertible into or granting the right of purchase or exchange for any stock or other equity interest of any nature of such issuer unless pledged in accordance herewith, (C) permit any issuer of any Pledged Equity Interest to dispose of all or a material portion of its assets, (D) waive any default under or breach of any terms of organizational document relating to the issuer of any Pledged Equity Interest or the terms of any Pledged Debt, or (E) except as otherwise provided herein, cause any issuer of any Pledged Partnership Interests or Pledged LLC Interests which are not securities (for purposes of the UCC) on the date hereof to elect or otherwise take any action to cause such Pledged Partnership Interests or Pledged LLC Interests to be treated as securities for purposes of the UCC; and

(ii) it shall comply in all material respects with all of its obligations under any partnership agreement or limited liability company agreement relating to Pledged Partnership Interests or Pledged LLC Interests and, except as otherwise provided in this Agreement, shall enforce all of its material rights with respect to any Investment Related Property; and

(iii) to the extent applicable, each Grantor consents to the grant by each other Grantor of a security interest in all Investment Related Property to Collateral Agent and, without limiting the foregoing, consents to the transfer of any Pledged Partnership Interest and any Pledged LLC Interest to Collateral Agent or its nominee following an Event of Default and to the substitution of Collateral Agent or its nominee as a partner in any partnership or as a member in any limited liability company with all the rights and powers related thereto.

4.4.2 Investment Accounts

(a) Representations and Warranties. Each Grantor hereby represents and warrants that:

(i) Schedule 4.4 hereto (as such schedule may be amended or supplemented from time to time) sets forth under the headings "Securities Accounts" and "Commodities Accounts, "respectively, all of the Securities Accounts and Commodities Accounts in which each Grantor has an interest. Each Grantor is the sole entitlement holder of each such Securities Account and Commodities Account, and such Grantor has not consented to, and is not otherwise aware of, any Person (other than Collateral Agent pursuant hereto having "control" (within the meanings of Sections 8-106 and 9-106 of the UCC) over, or any other interest in, any such Securities Account or Commodity Account or any securities or other property credited thereto, other than, to the extent provided by the UCC, the financial institution where such Securities Account or Commodities Account is maintained by solely virtue of its capacity as such;

(ii) Schedule 4.4 hereto (as such schedule may be amended or supplemented from time to time) sets forth under the heading "Deposit Accounts" all of the Deposit Accounts in which each Grantor has an interest and each Grantor is the sole account holder of each such Deposit Account and such Grantor has not consented to, and is not otherwise aware of, any Person (other than Collateral Agent pursuant hereto) having either sole dominion and control (within the meaning of common law) or "control" (within the meaning of Section 9-104 of the UCC) over, or any other interest in, any such Deposit Account or any money or other property deposited therein, other than, to the extent provided by the UCC, the financial institution where such Deposit Account is maintained by solely virtue of its capacity as such; and

(iii) each Grantor has delivered all Instruments constituting Collateral to Collateral Agent.

(b) Delivery and Control. With respect to any Investment Related Property consisting of Securities Accounts or Securities Entitlements, it shall use its commercially reasonable efforts for a period of thirty (30) days to cause the securities intermediary maintaining such Securities Account or Securities Entitlement to enter into an agreement in such form as may be reasonably acceptable to Collateral Agent pursuant to which it shall agree to comply with Collateral Agent's "entitlement orders" without further consent by such Grantor. With respect to any Investment Related Property that is a "Deposit Account," it shall use commercially reasonable efforts for a period of thirty (30) days to cause such depositary institution maintaining such account to enter into an agreement in such form as may be reasonably acceptable to Collateral Agent, pursuant to which Collateral Agent shall, have control over such Deposit Account (within the meaning of Section 9-104 of the UCC); *provided however*, that the Grantors will not be required to provide a control agreement in favor of the Collateral Agent with respect to any Deposit Account that is solely a payroll or benefits account. Notwithstanding the foregoing, in no event will a Grantor be required to obtain control agreements or take any other action required by such applicable foreign jurisdiction to obtain perfection of the Collateral Agent's security interests under the laws of the applicable foreign jurisdiction in respect of foreign Securities Accounts or Deposit Accounts. The Collateral Agent shall not be responsible for determining whether Company has used "commercially reasonable efforts" hereunder.

4.5 Annual Certificates.

The Officer's Certificate delivered to the Trustee pursuant to Section 5.04 of the Indenture shall certify as to each Grantor's compliance with the requirements of this Agreement.

4.6 Letter of Credit Rights.

(a) Representations and Warranties . Each Grantor hereby represents and warrants that all letters of credit with an undrawn amount in excess of $250,000 to which such Grantor is the beneficiary are listed on Schedule 4.6 hereto (as such schedule may be amended or supplemented from time to time).

(b) Covenants and Agreements. Each Grantor hereby covenants and agrees that with respect to any letter of credit with an undrawn amount in excess of $250,000 hereafter arising it shall use commercially reasonable efforts for a period of thirty (30) days to obtain the consent of the issuer thereof to the assignment of the proceeds of the letter of credit to Collateral Agent and shall deliver to Collateral Agent a completed Pledge Supplement, substantially in the form of Exhibit A attached hereto, together with all applicable Supplements to Schedules thereto. The Collateral Agent shall not be responsible for determining whether Company has used "commercially reasonable efforts" hereunder.

4.7 Intellectual Property.

(a) Representations and Warranties. Each Grantor hereby represents and warrants, on the Issue Date, that:

(i) Schedule 4.7 (as such schedule may be amended or supplemented from time to time) sets forth a true and complete list of all United States, state and foreign registrations of and applications for Patents, Trademarks, and Copyrights owned by each Grantor;

(ii) it is the sole and exclusive owner of the entire right, title, and interest in and to all Intellectual Property on Schedule 4.7 (as may be amended or supplemented from time to time), and owns or has the valid right to use, or could obtain such rights upon terms that are not materially adverse, all other Intellectual Property used in or necessary to conduct its business, free and clear of all Liens, claims, encumbrances and licenses, except for Permitted Liens;

(iii) to such Grantor's knowledge, all Intellectual Property material to the business of such Grantor is subsisting and has not been adjudged invalid or unenforceable, in whole or in part, and such Grantor has performed all acts and has paid all renewal, maintenance, and other fees and taxes required to maintain each and every registration and application of material Intellectual Property in full force and effect;

(iv) to such Grantor's knowledge, all Intellectual Property material to the business of such Grantor is valid and enforceable; no holding, decision, or judgment has been rendered in any action or proceeding before any court or administrative authority challenging the validity of, such Grantor's right to register, or such Grantor's rights to own or use, any Intellectual Property and no such action or proceeding is pending or, to such Grantor's knowledge, threatened, that, individually or in the aggregate, could reasonably be expected to have a Material Adverse Effect;

(v) to such Grantor's knowledge, the conduct of such Grantor's business does not infringe upon any trademark, patent, copyright, trade secret or similar intellectual property right owned or controlled by a third party; and, to such Grantor's knowledge, no claim has been made that the use of any Intellectual Property owned or used by Grantor (or any of its respective licensees) violates the asserted rights of any third party that could reasonably be expected to have a Material Adverse Effect;

(vi) to such Grantor's knowledge, no third party is infringing upon any Intellectual Property owned or used by such Grantor, or any of its respective licensees;

(vii) no settlement or consents, covenants not to sue, nonassertion assurances, or releases have been entered into by Grantor or to which Grantor is bound that adversely affect such Grantor's rights to own or use any Intellectual Property material to the business of such Grantor; and

(viii) such Grantor has not made a previous assignment, sale, transfer or agreement constituting a present or future assignment, sale, transfer or agreement of any Intellectual Property that has not been terminated or released. There is no effective financing statement or other document or instrument now executed, or on file or recorded in any public office, granting a security interest in or otherwise encumbering any part of the Intellectual Property, other than in favor of the Collateral Agent.

(b) Covenants and Agreements. Each Grantor hereby covenants and agrees as follows:

(i) In order to facilitate filings with the United States Patent and Trademark Office and the United States Copyright Office, each Grantor shall execute and deliver to Collateral Agent one or more Copyright Security Agreements, Trademark Security Agreements, or Patent Security Agreements, or supplements thereto, to further evidence Collateral Agent's Lien on such Grantor's Patents, Trademarks, or Copyrights, and the General Intangibles of such Grantor relating thereto or represented thereby.

(ii) it shall not do any act or omit to do any act whereby any of the Intellectual Property which is material to the business of Grantors, taken as a whole, may lapse, or become abandoned, dedicated to the public, or unenforceable, or which would adversely affect in any material respect the validity, grant, or enforceability of the security interest in favor of Collateral Agent granted therein;

(iii) it shall not, with respect to any Trademarks which are material to the business of Grantors, taken as a whole, cease the use of any of such Trademarks or fail to maintain the level of the quality of products sold and services rendered under any of such Trademark at a level at least substantially consistent with the quality of such products and services as of the date hereof, and each Grantor shall take all steps necessary to insure that licensees of such Trademarks use such consistent standards of quality;

(iv) it shall promptly notify Collateral Agent if it knows that any item of the Intellectual Property that is material to the business of Grantors, taken as a whole, may become (A) abandoned or dedicated to the public or placed in the public domain, (B) invalid or unenforceable, or (C) subject to any adverse determination or development (including the institution of proceedings) in any action or proceeding in the United States Patent and Trademark Office, the United States Copyright Office, and state registry, any foreign counterpart of the foregoing, or any court;

(v) it shall take all reasonable steps in the United States Patent and Trademark Office, the United States Copyright Office, any state registry or any foreign counterpart of the foregoing, to pursue any application and maintain any registration of each Trademark, Patent, and Copyright owned by any Grantor and material to the business of Grantors, taken as a whole,which is now or shall become included in the Intellectual Property;

(vi) if any Intellectual Property material to the business of Grantors taken as a whole, owned by or exclusively licensed to such Grantor is infringed, misappropriated, or diluted by a third party, such Grantor shall promptly take all reasonable actions as it determines are appropriate in the exercise of its commercially reasonable judgment, to stop such infringement, misappropriation, or dilution and protect its exclusive rights in such Intellectual Property including, but not limited to, the initiation of a suit for injunctive relief and to recover damages, except where failure to take such action could not reasonably be expected to result in a Material Adverse Effect;

(vii) it shall promptly report to Collateral Agent (A) the filing of any application to register any Intellectual Property with the United States Patent and Trademark Office, the United States Copyright Office or any state registry (whether such application is filed by such Grantor or through any trustee, employee, licensee, or designee thereof) and (B) the registration of any Intellectual Property by any such office, in each case by executing and delivering to Collateral Agent a completed Pledge Supplement, substantially in the form of Exhibit A attached hereto, together with all applicable Supplements to Schedules thereto; and

(viii) it shall use proper statutory notice in connection with its use of any of the Intellectual Property, material to the business of Grantors, taken as a whole.

4.8 Commercial Tort Claims.

(a) Representations and Warranties. Each Grantor hereby represents and warrants that Schedule 4.8 (as such schedule may be amended or supplemented from time to time) sets forth all Commercial Tort Claims of each Grantor in excess of $250,000 individually or $1,000,000 in the aggregate.

(b) Covenants and Agreements. Each Grantor hereby covenants and agrees that with respect to any Commercial Tort Claim in excess of $250,000 individually or $1,000,000 in the aggregate hereafter arising it shall deliver to Collateral Agent a completed Pledge Supplement, substantially in the form of Exhibit A attached hereto, together with all applicable Supplements to Schedules thereto, identifying such new Commercial Tort Claims. Unless and until Collateral Agent shall actually receive such Pledge Supplement, Collateral Agent may assume without inquiry that no such Pledge Supplement is required to be delivered to it.

4.9 Subsidiaries. If any Person becomes a Guarantor, Company and such Guarantor shall (a) promptly cause such Guarantor to become a Grantor under this Agreement by executing and delivering to Collateral Agent a Counterpart Agreement, and (b) take, or cause such Guarantor to take, all such actions and to execute and deliver, or cause to be executed and delivered, in respect of all of its assets that constitute Collateral all such documents, instruments, agreements and certificates as may be necessary, or as may otherwise be reasonably requested by Collateral Agent, to grant a perfected first-priority Lien, subject only to Permitted Liens, on the assets of such Guarantor constituting Collateral to the extent required by this Agreement. If any Person becomes a Foreign Subsidiary of Company, and the ownership interests of such Foreign Subsidiary are owned by any Grantor, such Grantor shall deliver all such documents, instruments, agreements, and certificates as may reasonably be requested by Collateral Agent, and such Grantor take all of the actions necessary to grant and to perfected first priority Lien in favor of Collateral Agent, for the benefit of Secured Parties, hereunder in such ownership interests.

4.10 Real Estate Assets. The Company or the applicable Grantor shall deliver all items set forth in Section 3.5 of the Mortgages within the timeframe set forth therein. If any Grantor acquires a Material Real Estate Asset or a Real Estate Asset owned on the Closing Date becomes a Material Real Estate Asset and such interest has not otherwise been made subject to the Lien of the Collateral Documents in favor of Collateral Agent, for the benefit of Secured Parties, then such Grantor shall take all such actions and execute and deliver, or cause to be executed and delivered, (i) a real property mortgage in customary form, on substantially the same terms and conditions as the Mortgages, subject to any changes necessary to reflect differences in applicable law in the jurisdiction of such Material Real Estate Asset, any changes in applicable law since the Closing Date and whether such Grantor holds fee or leasehold title, and substance and any other documents or instruments as are required to vest in the Collateral Agent a perfected first priority security interest (subject to Permitted Liens) in such Material Real Estate Asset and (ii) a customary survey, title insurance policy and opinion of counsel with respect to such Material Real Estate Asset and such real property mortgage, as applicable.

SECTION 5 -- ACCESS; RIGHT OF INSPECTION AND FURTHER ASSURANCES; ADDITIONAL GRANTORS.

5.1 Right of Inspection; Access. Collateral Agent shall at all times, upon reasonable prior written notice, have access during normal business hours to all the books, correspondence and records of each Grantor, and Collateral Agent and its representatives may examine the same, take extracts therefrom and make photocopies thereof, and each Grantor agrees to render to Collateral Agent, at such Grantor's cost and expense, such clerical and other assistance as may be reasonably requested with regard thereto. Upon reasonable prior written notice, Collateral Agent and its representatives shall also have the right to enter any premises during normal business hours of each Grantor and inspect any property of each Grantor where any of the Collateral of such Grantor granted pursuant to this Agreement is located for the purpose of inspecting the same, observing its use or otherwise protecting its interests therein. Notwithstanding the foregoing, unless an Event of Default exists, such access and inspections shall be limited to not more than one time in any calendar year.

5.2 Further Assurances.

(a) Each Grantor agrees that from time to time, at the expense of such Grantor, that it shall promptly execute and deliver all further instruments and documents, and take all further action, that may be necessary or desirable, or that Collateral Agent may reasonably request, in order to create and/or maintain the validity, perfection or priority of and protect any security interest granted or purported to be granted hereby or to enable Collateral Agent to exercise and enforce its rights and remedies hereunder with respect to Collateral. Without limiting the generality of the foregoing, each Grantor shall:

(i) file such financing or continuation statements, or amendments thereto, and execute and deliver such other agreements, instruments, endorsements, powers of attorney or notices, as may be necessary or desirable, in order to perfect and preserve the security interests granted or purported to be granted hereby;

(ii) take all actions necessary to ensure the recordation of appropriate evidence of the liens and security interest granted hereunder in the Intellectual Property with the United States Patent and Trademark Office, the United States Copyright Office, and the various Secretaries of States; and;

(iii) at any reasonable time, upon request by Collateral Agent, assemble the Collateral and allow inspection of the Collateral by Collateral Agent, or persons designated by Collateral Agent; and

(iv) at Collateral Agent's reasonable request, appear in and defend any action or proceeding that may affect such Grantor's title to or Collateral Agent's security interest in all or any material part of the Collateral.

(b) Each Grantor hereby authorizes Collateral Agent to file (in the event the Grantor fails to do so in the first instance, but without any obligation of Collateral Agent to do so) a Record or Records, including, without limitation, financing or continuation statements, and amendments thereto, in any jurisdictions and with any filing offices as are necessary or advisable to perfect the security interest granted to Collateral Agent herein. Such financing statements may describe the Collateral in the same manner as described herein or may contain an indication or description of collateral that describes such property in any other manner as is necessary or advisable to ensure the perfection of the security interest in the Collateral granted to Collateral Agent herein, including, without limitation, describing such property as "all assets" or "all personal property, whether now owned or hereafter acquired." Each Grantor shall furnish to Collateral Agent from time to time statements and schedules further identifying and describing the Collateral and such other reports in connection with the Collateral as Collateral Agent may reasonably request, all in reasonable detail.

5.3 Additional Grantors. From time to time subsequent to the date hereof, additional Persons may become parties hereto as additional Grantors (each, an **"Additional Grantor"**), by executing a counterpart agreement in the form attached as Exhibit B hereto (**"Counterpart Agreement"**). Upon delivery of any such Counterpart Agreement to Collateral Agent, notice of which is hereby waived by each of the other Grantors, each Additional Grantor shall be a Grantor and shall be as fully a party hereto as if Additional Grantor were an original signatory hereto. Each Grantor expressly agrees that its obligations arising hereunder shall not be affected or diminished by the addition or release of any other Grantor hereunder. This Agreement shall be fully effective as to any Grantor that is or has become a party hereto regardless of whether any other Person becomes or fails to become or ceases to be a Grantor hereunder.

SECTION 6 -- COLLATERAL AGENT APPOINTED ATTORNEY-IN-FACT.

6.1 Power of Attorney. To the extent permitted by applicable law, each Grantor hereby irrevocably appoints Collateral Agent (such appointment being coupled with an interest), on behalf of the Secured Parties, and each of its designees or agents as such Grantor's attorney-in-fact, irrevocably and with full authority in the place and stead of such Grantor and in the name of such Grantor, to take any action and to execute any instrument necessary or advisable to accomplish the purposes of this Agreement, including, without limitation, the following (which if so specified, Collateral Agent shall be entitled to exercise only during the existence of an Event of Default):

(a) upon the occurrence and during the continuance of any Event of Default, to obtain and adjust insurance required to be maintained by such Grantor or paid to Collateral Agent pursuant to the Indenture;

(b) upon the occurrence and during the continuance of any Event of Default, to ask for, demand, collect, sue for, recover, compound, receive and give acquittance and receipts for moneys due and to become due under or in respect of any of the Collateral;

(c) upon the occurrence and during the continuance of any Event of Default, to receive, endorse and collect any drafts or other instruments, documents and chattel paper in connection with clause (b) above;

(d) upon the occurrence and during the continuance of any Event of Default, to file any claims or take any action or institute any proceedings that Collateral Agent (acting at the written direction of Majority Holders) may deem necessary or desirable for the collection of any of the Collateral or otherwise to enforce the rights of Collateral Agent with respect to any of the Collateral;

(e) in the event the Grantor fails to do so in the first instance, to prepare and file any UCC financing statements naming such Grantor as debtor as contemplated by Section 5.2(b);

(f) to prepare and file for recordation in any intellectual property registry, appropriate evidence of the lien and security interest granted herein in the Intellectual Property in the name of such Grantor;

(g) upon the occurrence and during the continuance of an Event of Default, to take or cause to be taken all actions necessary to perform or comply or cause performance or compliance with the terms of this Agreement, including, without limitation, access to pay or discharge taxes or Liens (other than Permitted Liens) levied or placed upon or threatened against the Collateral, the legality or validity thereof and the amounts necessary to discharge the same to be determined by Collateral Agent (acting at the written direction of Majority Holders), any such related costs, expenses, disbursements or payments made by Collateral Agent to become obligations of such Grantor to Collateral Agent, due and payable immediately without demand; and

(h) (i) upon the occurrence and during the continuance of an Event of Default, generally to sell, transfer, pledge, make any agreement with respect to or otherwise deal with any of the Collateral as fully and completely as though Collateral Agent were the absolute owner thereof for all purposes, and (ii) to do, at Collateral Agent's option and such Grantor's expense, at any time or from time to time, all acts and things that Collateral Agent deems reasonably necessary to protect or preserve the Collateral and Collateral Agent's security interest therein in order to effect the intent of this Agreement, all as fully and effectively as such Grantor might do.

6.2 No Implied Duty on the Part of Collateral Agent or Secured Parties. It is expressly understood and agreed that the obligations of Collateral Agent as holder of the Collateral and interest therein, and with respect to the disposition thereof, and otherwise under this Agreement, are only those expressly set forth in this Agreement, the Indenture and the Collateral Agency Agreement. The powers conferred on Collateral Agent hereunder are solely to protect the interests of the Secured Parties in the Collateral and shall not impose any duty upon Collateral Agent or any Secured Party to exercise any such powers. Collateral Agent shall act hereunder on the terms and conditions set forth in this Agreement, the Indenture and the Collateral Agency Agreement. Collateral Agent and the Secured Parties shall be accountable only for amounts that they actually receive as a result of the exercise of such powers, and neither they nor any of their officers, directors, employees or trustees shall be responsible to any Grantor for any act or failure to act hereunder, except for their own gross negligence or willful misconduct.

SECTION 7 -- REMEDIES.

7.1 Generally.

(a) If any Event of Default shall have occurred and be continuing, Collateral Agent (acting at the written direction of Majority Holders) may exercise in respect of the Collateral, in addition to all other rights and remedies provided for herein or otherwise available to it at law or in equity, all the rights and remedies of a secured party on default under the UCC (whether or not the UCC applies to the affected Collateral) to collect, enforce or satisfy any Secured Obligations then owing, whether by acceleration or otherwise, and also, to the extent permitted by applicable law, may pursue any of the following separately, successively or simultaneously:

(i) require any Grantor to, and each Grantor hereby agrees that it shall at its expense and promptly upon request of Collateral Agent forthwith, assemble all or part of the Collateral as directed by Collateral Agent and make it available to Collateral Agent at a place to be designated by Collateral Agent that is reasonably convenient to both parties;

(ii) enter onto the property where any Collateral is located and take possession thereof with or without judicial process;

(iii) prior to the disposition of the Collateral, store, process, repair or recondition the Collateral or otherwise prepare the Collateral for disposition in any manner as the Collateral Agent shall request; and

(iv) without notice except as specified below or under the UCC, sell, assign, lease, license (on an exclusive or nonexclusive basis) or otherwise dispose of the Collateral or any part thereof in one or more parcels at public or private sale, at any of Collateral Agent's offices or elsewhere, for cash, on credit or for future delivery, at such time or times and at such price or prices and upon such other terms as Collateral Agent may deem commercially reasonable.

(b) Collateral Agent or any Secured Party may be the purchaser of any or all of the Collateral at any public or private (to the extent to portion of the Collateral being privately sold is of a kind that is customarily sold on a recognized market or the subject of widely distributed standard price quotations) sale in accordance with the UCC and Collateral Agent, as Collateral Agent for and representative of the Secured Parties, shall be entitled, for the purpose of bidding and making settlement or payment of the purchase price for all or any portion of the Collateral sold at any such sale made in accordance with the UCC, to use and apply any of the Secured Obligations as a credit on account of the purchase price for any Collateral payable by Collateral Agent at such sale. Each purchaser at any such sale shall hold the property sold absolutely free from any claim or right on the part of any Grantor, and each Grantor hereby waives (to the extent permitted by applicable law) all rights of redemption, stay and/or appraisal which it now has or may at any time in the future have under any rule of law or statute now existing or hereafter enacted. Each Grantor agrees that, to the extent notice of sale shall be required by law, at least ten (10) days notice to such Grantor of the time and place of any public sale or the time after which any private sale is to be made shall constitute reasonable notification. Collateral Agent shall not be obligated to make any sale of Collateral regardless of notice of sale having been given. Collateral Agent may adjourn any public or private sale from time to time by announcement at the time and place fixed therefor, and such sale may, without further notice, be made at the time and place to which it was so adjourned. Each Grantor agrees that it would not be commercially unreasonable for Collateral Agent to dispose of the Collateral or any portion thereof by using Internet sites that provide for the auction of assets of the types included in the Collateral or that have the reasonable capability of doing so, or that match buyers and sellers of assets. Each Grantor hereby waives any claims against Collateral Agent arising by reason of the fact that the price at which any Collateral may have been sold at such a private sale was less than the price which might have been obtained at a public sale, even if Collateral Agent accepts the first offer received and does not offer such Collateral to more than one offeree. If the proceeds of any sale or other disposition of the Collateral are insufficient to pay all the Secured Obligations, Grantors shall be liable for the deficiency and the reasonable fees of any attorneys employed by Collateral Agent to collect such deficiency. Each Grantor further agrees that a breach of any of the covenants contained in this Section will cause irreparable injury to Collateral Agent, that Collateral Agent has no adequate remedy at law in respect of such breach and, as a consequence, that each and every covenant contained in this Section shall be specifically enforceable against such Grantor, and such Grantor hereby waives and agrees not to assert any defenses against an action for specific performance of such covenants except for a defense that no default has occurred giving rise to the Secured Obligations becoming due and payable prior to their stated maturities or payment in full thereof.

(c) Collateral Agent may sell the Collateral without giving any warranties as to the Collateral. Collateral Agent may specifically disclaim or modify any warranties of title or the like. This procedure will not be considered to adversely effect the commercial reasonableness of any sale of the Collateral.

(d) Collateral Agent shall have no obligation to marshal any of the Collateral.

7.2 Application of Proceeds. Except as expressly provided elsewhere in this Agreement, to the extent permitted by applicable law, all proceeds received by Collateral Agent in respect of any sale, any collection from, or other realization upon all or any part of the Collateral shall be applied in full or in part by Collateral Agent as set forth in the Collateral Agency Agreement.

7.3 Sales on Credit. If Collateral Agent sells any of the Collateral upon credit, Grantor will be credited only with payments actually made by purchaser and received by Collateral Agent and applied to indebtedness of such purchaser. In the event such purchaser fails to pay for the Collateral, Collateral Agent may resell the Collateral and Grantor shall be credited with proceeds of the sale.

7.4 Deposit Accounts. If any Event of Default shall have occurred and be continuing, Collateral Agent (acting at the written direction of Majority Holders) may apply, to the extent permitted by applicable law, the balance from any Deposit Account or instruct the bank at which any Deposit Account is maintained to pay the balance of any Deposit Account to or for the benefit of Collateral Agent.

7.5 Investment Related Property. Each Grantor recognizes that, by reason of certain prohibitions contained in the Securities Act and applicable state securities laws, Collateral Agent may be compelled, with respect to any sale of all or any part of the Investment Related Property conducted without prior registration or qualification of such Investment Related Property under the Securities Act and/or such state securities laws, to limit purchasers to those who will agree, among other things, to acquire the Investment Related Property for their own account, for investment and not with a view to the distribution or resale thereof. Each Grantor acknowledges that any such private sale may be at prices and on terms less favorable than those obtainable through a public sale without such restrictions (including a public offering made pursuant to a registration statement under the Securities Act) and, notwithstanding such circumstances, each Grantor agrees that any such private sale shall be deemed to have been made in a commercially reasonable manner and that Collateral Agent shall have no obligation to engage in public sales and no obligation to delay the sale of any Investment Related Property for the period of time necessary to permit the issuer thereof to register it for a form of public sale requiring registration under the Securities Act or under applicable state securities laws, even if such issuer would, or should, agree to so register it. If Collateral Agent (acting at the written direction of Majority Holders) determines to exercise its right to sell any or all of the Investment Related Property, upon written request, each Grantor shall and shall cause each issuer of any Pledged Stock to be sold hereunder, each partnership and each limited liability company interests in which have been pledged hereunder from time to time to furnish to Collateral Agent all such information as Collateral Agent may request in order to determine the number and nature of interest, shares or other instruments included in the Investment Related Property which may be sold by Collateral Agent in exempt transactions under the Securities Act and the rules and regulations of the Securities and Exchange Commission thereunder, as the same are from time to time in effect.

7.6 Cash Proceeds. In addition to the rights of Collateral Agent specified in Section 4.3 with respect to Receivables, all proceeds of any Collateral received by Collateral Agent hereunder (whether from a Grantor or otherwise) consisting of cash, checks and other near-cash items (collectively, "**Cash Proceeds**") shall be returned to the applicable Grantor, provided that, if an Event of Default shall have occurred and be continuing, the Collateral Agent may, in the sole discretion of Collateral Agent (acting at the written direction of Majority Holders), (A) be held by Collateral Agent for the ratable benefit of the Secured Parties, as collateral security for the Secured Obligations (whether matured or unmatured) and/or (B) then or at any time thereafter may be applied by Collateral Agent against the Secured Obligations then due and owing.

7.7 Intellectual Property. (a) Anything contained herein to the contrary notwithstanding, pursuant to the Note Documents and to the extent permitted by applicable law, upon the occurrence and during the continuation of an Event of Default:

(i) Collateral Agent shall have the right (but not the obligation) to bring suit or otherwise commence any action or proceeding in the name of any Grantor, Collateral Agent or otherwise, to enforce any Intellectual Property, in which event such Grantor shall, at the request of Collateral Agent, do any and all lawful acts and execute any and all documents reasonably required by Collateral Agent in aid of such enforcement and such Grantor shall promptly, upon demand, reimburse and indemnify Collateral Agent as provided in Section 10 hereof in connection with the exercise of its rights under this Section, and, to the extent that Collateral Agent shall not bring suit to enforce any Intellectual Property as provided in this Section, each Grantor agrees to use all reasonable measures, whether by action, suit, proceeding or otherwise, to prevent the infringement of any of the Intellectual Property by others and for that purpose agrees to diligently maintain any action, suit or proceeding against any Person so infringing as shall be necessary to prevent such infringement;

(ii) upon written demand from Collateral Agent (acting at the written direction of Majority Holders), each Grantor shall grant, assign, convey or otherwise transfer to Collateral Agent an absolute assignment of all of such Grantor's right, title and interest in and to the Intellectual Property and shall execute and deliver to Collateral Agent such documents as are reasonably necessary or appropriate to carry out the intent and purposes of this Agreement;

(iii) each Grantor agrees that such an assignment and/or recording shall be applied to reduce the Secured Obligations outstanding only to the extent that Collateral Agent (or any Secured Party) receives cash proceeds in respect of the sale of, or other realization upon, the Intellectual Property;

(iv) [reserved];

(v) Collateral Agent shall have the right to notify, or require each Grantor to notify, any obligors with respect to amounts due or to become due to such Grantor in respect of the Intellectual Property, of the existence of the security interest created herein, to direct such obligors to make payment of all such amounts directly to Collateral Agent, and, upon such notification and at the expense of such Grantor, to enforce collection of any such amounts and to adjust, settle or compromise the amount or payment thereof, in the same manner and to the same extent as such Grantor might have done;

(vi) all amounts and proceeds (including checks and other instruments) received by Grantor in respect of amounts due to such Grantor in respect of the Collateral or any portion thereof shall be received in trust for the benefit of Collateral Agent hereunder, shall be segregated from other funds of such Grantor and shall be forthwith paid over or delivered to Collateral Agent in the same form as so received (with any necessary endorsement) to be held as cash Collateral and applied as provided by Section 7.6 hereof; and

(vii) except as otherwise provided herein, Grantor shall not adjust, settle or compromise the amount or payment of any such amount or release wholly or partly any obligor with respect thereto or allow any credit or discount thereon.

(b) If (i) an Event of Default shall have occurred and, by reason of cure, waiver, modification, amendment or otherwise, no longer be continuing, (ii) no other Event of Default shall have occurred and be continuing, (iii) an assignment or other transfer to Collateral Agent of any rights, title and interests in and to the Intellectual Property shall have been previously made and shall have become absolute and effective, and (iv) the Secured Obligations shall not have become immediately due and payable, upon the written request of any Grantor, Collateral Agent shall promptly execute and deliver to such Grantor, at such Grantor's sole cost and expense, such assignments or other transfer documents, in form and substance reasonable satisfactory to Collateral Agent as may be necessary to reassign to such Grantor any such rights, title and interests as may have been assigned to Collateral Agent as aforesaid, subject to any disposition thereof that may have been made by Collateral Agent; provided, after giving effect to such reassignment, Collateral Agent's security interest granted pursuant hereto, as well as all other rights and remedies of Collateral Agent granted hereunder, shall continue to be in full force and effect.

(c) Solely for the purpose of enabling Collateral Agent to exercise rights and remedies under this Section 7 and at such time as Collateral Agent shall be lawfully entitled to exercise such rights and remedies, each Grantor hereby grants to Collateral Agent, to the extent it has the right to do so, an irrevocable, nonexclusive license (exercisable without payment of royalty or other compensation to such Grantor), subject, in the case of Trademarks, to sufficient rights to quality control and inspection in favor of such Grantor to avoid the risk of invalidation of said Trademarks, to use, operate under, license, or sublicense any Intellectual Property now owned or hereafter acquired by such Grantor, and wherever the same may be located.

SECTION 8 -- CONTINUING SECURITY INTEREST.

This Agreement shall create a continuing security interest in the Collateral and shall remain in full force and effect until the payment in full of all Secured Obligations, be binding upon each Grantor, its successors and assigns, and inure, together with the rights and remedies of Collateral Agent hereunder, to the benefit of Collateral Agent and its successors, transferees and assigns. Upon the payment in full of all Secured Obligations, and as otherwise provided in the Note Documents, the security interest granted hereby shall terminate hereunder and of record and all rights to the Collateral shall revert to Grantors. Upon any such termination Collateral Agent shall, at Grantors' expense, execute and deliver to Grantors such documents, in form and substance reasonably satisfactory to Collateral Agent, as Grantors shall reasonably request to evidence such termination. Subject to Section 13.03 of the Indenture, upon any disposition of property of Grantors permitted under the Indenture, the Liens granted herein shall be deemed automatically released without further action on the part of any Person (but excluding any transaction subject to Article 6 of the Indenture where the recipient is required to become the obligor on the Notes or a Guarantor).

SECTION 9 -- STANDARD OF CARE; COLLATERAL AGENT MAY PERFORM.

The powers conferred on Collateral Agent hereunder are solely to protect its interest in the Collateral and shall not impose any duty upon it to exercise any such powers. Except for the exercise of reasonable care in the custody of any Collateral while being held by Collateral Agent hereunder and the accounting for moneys actually received by it hereunder, Collateral Agent shall have no duty or liability as to any Collateral or as to the taking of any necessary steps to preserve rights against prior parties or any other rights pertaining to any Collateral, it being understood and agreed that Grantors shall be responsible for preservation of all rights in the Collateral of such Grantor, and Collateral Agent shall be relieved of all responsibility for the Collateral upon surrendering it or tendering the surrender of it to the Grantors. Collateral Agent shall be deemed to have exercised reasonable care in the custody and preservation of Collateral in its possession if such Collateral is accorded treatment substantially equal to that which Collateral Agent accords its own property, it being understood that Collateral Agent shall not have responsibility for (i) ascertaining or taking action with respect to calls, conversions, exchanges, maturities, tenders or other matters relating to any Collateral, whether or not any Collateral Agent has or is deemed to have knowledge of such matters, (ii) taking any necessary steps to preserve rights against any parties with respect to any Collateral, and (iii) to the maximum extent permitted by law, for any actions or inactions expect to the extent caused by the gross negligence or willful misconduct of Collateral Agent or its officers, employees or agents, in each case as determined by a court of competent jurisdiction. Neither Collateral Agent nor any of its directors, officers, employees or agents shall be liable for failure to demand, collect or realize upon all or any part of the Collateral or for any delay in doing so or shall be under any obligation to sell or otherwise dispose of any Collateral upon the request of any Grantor or otherwise.

The parties hereto agree that the Collateral Agent shall be afforded all of the rights, protections, indemnities, immunities and privileges afforded to the Collateral Agent in the Collateral Agency Agreement (including, but not limited to, those set forth in Section 6 thereof) in connection with its execution of this Agreement and the performance of its obligations hereunder.

SECTION 10 -- MISCELLANEOUS.

Any notice required or permitted to be given under this Agreement shall be given in accordance with Section 8.2 of the Collateral Agency Agreement. No failure or delay on the part of Collateral Agent in the exercise of any power, right or privilege hereunder or under any other Note Document shall impair such power, right or privilege or be construed to be a waiver of any default or acquiescence therein, nor shall any single or partial exercise of any such power, right or privilege preclude other or further exercise thereof or of any other power, right or privilege. Except as otherwise provided in the Note Documents, the Grantors hereby waive presentment, demand, protest or any notice (to the extent permitted by applicable law) of any kind in connection with this Agreement and the other Collateral Documents. All rights and remedies existing under this Agreement and the other Note Documents are cumulative to, and not exclusive of, any rights or remedies otherwise available. In case any provision in or obligation under this Agreement shall be invalid, illegal or unenforceable in any jurisdiction, the validity, legality and enforceability of the remaining provisions or obligations, or of such provision or obligation in any other jurisdiction, shall not in any way be affected or impaired thereby. All covenants hereunder shall be given independent effect so that if a particular action or condition is not permitted by any of such covenants, the fact that it would be permitted by an exception to, or would otherwise be within the limitations of, another covenant shall not avoid the occurrence of a Default or an Event of Default if such action is taken or condition exists. This Agreement shall be binding upon and inure to the benefit of Collateral Agent and Grantors and their respective successors and assigns. No Grantor shall assign any right, duty or obligation hereunder, without the consent of the Collateral Agent (to be given or withheld at the written direction of Majority Holders). This Agreement and the other Note Documents embody the entire agreement and understanding between Grantors and Collateral Agent and supersede all prior agreements and understandings between such parties relating to the subject matter hereof and thereof. Accordingly, the Note Documents may not be contradicted by evidence of prior, contemporaneous or subsequent oral agreements of the parties. There are no unwritten oral agreements between the parties. This Agreement may be executed in one or more counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument; signature pages may be detached from multiple separate counterparts and attached to a single counterpart so that all signature pages are physically attached to the same document.

THIS AGREEMENT AND THE RIGHTS AND OBLIGATIONS OF THE PARTIES HEREUNDER SHALL BE GOVERNED BY, AND SHALL BE CONSTRUED AND ENFORCED IN ACCORDANCE WITH, THE LAWS OF THE STATE OF NEW YORK (INCLUDING SECTION 5-1401 AND SECTION 5-1402 OF THE NEW YORK GENERAL OBLIGATION LAWS). In connection with any suit, action or proceeding ("Proceeding") involving, directly or indirectly, any matter in any way arising out of, related to or connected with this Agreement, each party hereby irrevocably (i) submits to the non-exclusive jurisdiction of the courts of the State of New York and the United States District Court located in the Borough of Manhattan in New York City situated in New York City, New York and (ii) waives any objection which it may have at any time to the laying of venue of any such Proceeding brought in any such court, waives any claim that any such Proceeding has been brought in an inconvenient forum and further waives the right to object, with respect to any such Proceeding, that such court does not have any jurisdiction over such party. Each Grantor hereby waives personal service of process upon it and consents that any such service of process may be made by certified or registered mail, return receipt requested, directed to Grantor at the last specified address for notice hereunder, and service so made shall be deemed completed five (5) days after the same shall have been marked. The parties hereby waive their right to trial by jury in any such Proceeding.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, each of the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first written above.

COLLATERAL AGENT

THE BANK OF NEW YORK MELLON
TRUST COMPANY, N.A.

By: /s/ R. Tarnas
Name: R. Tarnas
Title: Vice President

IN WITNESS WHEREOF, each of the parties hereto have caused this Agreement to be duly executed and delivered by their respective officers thereunto duly authorized as of the date first written above.

GRANTORS

AKOUSTIS TECHNOLOGIES, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

AKOUSTIS, INC.

By: /s/ John T. Kurtzweil
Name: John T. Kurtzweil
Title: Chief Financial Officer

EXHIBIT A
TO PLEDGE AND SECURITY AGREEMENT

PLEDGE SUPPLEMENT

This **PLEDGE SUPPLEMENT**, dated [**mm/dd/yy**], is delivered pursuant to the PLEDGE AND SECURITY AGREEMENT, dated as of May 14, 2018 (as it may be from time to time amended, restated, modified or supplemented, the "**Security Agreement**"), among **AKOUSTIS TECHNOLOGIES, INC.**, the other Grantor named therein, and **THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.**, as Collateral Agent. Capitalized terms used herein not otherwise defined herein shall have the meanings ascribed thereto in the Security Agreement.

Grantor hereby confirms the grant to Collateral Agent set forth in the Security Agreement of, and does hereby grant to Collateral Agent, a security interest in all of Grantor's right, title and interest in and to all Collateral to secure the Secured Obligations, in each case whether now or hereafter existing or in which Grantor now has or hereafter acquires an interest and wherever the same may be located. Grantor represents and warrants that the attached Supplements to Schedules accurately and completely set forth all additional information required pursuant to the Security Agreement as of the date set forth therein, and hereby agrees that such Supplements to Schedules shall constitute part of the Schedules to the Security Agreement.

IN WITNESS WHEREOF, Grantor has caused this Pledge Supplement to be duly executed and delivered by its duly authorized officer as of [**mm/dd/yy**].

[NAME OF GRANTOR]

By: _____
Name:
Title:

EXHIBIT B
TO PLEDGE AND SECURITY AGREEMENT

FORM OF COUNTERPART AGREEMENT

[Date]

The Bank of New York Mellon Trust Company, N.A.
as Collateral Agent
for the Secured Obligations
in the Pledge and Security Agreement
referred to below

Attn:

[Name of Additional Grantor]

Ladies and Gentlemen:

Reference is made to the Pledge and Security Agreement dated as of May 14, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "**Pledge and Security Agreement**"), among Akoustis Technologies, Inc., a Delaware corporation, (the "**Company**"), the other Grantor party thereto and The Bank of New York Mellon Trust Company, N.A., as Collateral Agent (" **Collateral Agent**"). Terms defined in the Pledge and Security Agreement and not otherwise defined herein are as defined in the Pledge and Security Agreement.

Pursuant to [Section 4.9/5.3] of the Pledge and Security Agreement, the undersigned hereby agrees, as of the date first above written, to be bound as a Grantor by all of the terms and provisions of the Pledge and Security Agreement to the same extent as the other Grantor. The undersigned further agrees, as of the date first above written, that each reference in the Pledge and Security Agreement to a "Grantor" shall also mean and be a reference to the undersigned.

This Supplement to Pledge and Security Agreement shall be governed by, and construed in accordance with, the laws of the State of New York.

Very truly yours,

[NAME OF ADDITIONAL GRANTOR]

By: _____
Title:

EXHIBIT C
to Security Agreement

COPYRIGHT SECURITY AGREEMENT

(Copyrights, Copyright Registrations, Copyright Applications and Copyright Licenses)

_____ ___, 20__

WHEREAS, [name of Lien Grantor], a _____ corporation (herein referred to as the "**Lien Grantor**") owns, or in the case of licenses is a party to, the Copyright Collateral (as defined below);

WHEREAS, Akoustis Technologies, Inc., Akoustis, Inc., as guarantor and The Bank of New York Mellon Trust Company, N.A., as trustee, are parties to an Indenture dated as of May 14, 2018 (as amended from time to time, the "**Indenture**"); and

WHEREAS, pursuant to (i) a Pledge and Security Agreement dated as of May 14, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "**Security Agreement**") among Akoustis Technologies, Inc., the other grantors party thereto and The Bank of New York Mellon Trust Company, N.A., as collateral agent for the Secured Parties referred to therein (in such capacity, together with its successors in such capacity, the "**Grantee**"), and (ii) certain other loan documents (including this Copyright Security Agreement), the Lien Grantor has [secured certain of its obligations (the "**Secured Obligations**")][1] [guaranteed certain obligations of Akoustis Technologies, Inc. and secured such guarantee (the "**Lien Grantor's Transaction Guarantee**")][2] by granting to the Grantee for the benefit of such Secured Parties a continuing security interest in personal property of the Lien Grantor, including all right, title and interest of the Lien Grantor in, to and under the Copyright Collateral (as defined below);

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Lien Grantor grants to the Grantee, to secure the [Secured Obligations] [Lien Grantor's Transaction Guarantee], a continuing security interest in all of the Lien Grantor's right, title and interest in, to and under the following (all of the following items or types of property being herein collectively referred to as the "**Copyright Collateral**"), whether now owned or existing or hereafter acquired or arising:

(a) each Copyright (as defined in the Security Agreement) owned by the Lien Grantor, including, without limitation, each Copyright registration or application therefor referred to in Schedule 1 hereto;

(b) each Copyright License (as defined in the Security Agreement) to which the Lien Grantor is a party, including, without limitation, each Copyright License identified in Schedule 1 hereto; and

---

[1] Delete these bracketed words if the Lien Grantor is a Guarantor.

[2] Delete these bracketed words if the Lien Grantor is the Borrower.

(c) all proceeds of, revenues from, and accounts and general intangibles arising out of, the foregoing, including, without limitation, all proceeds of and revenues from any claim by the Lien Grantor against third parties for past, present or future infringement of any Copyright (including, without limitation, any Copyright owned by the Lien Grantor and identified in Schedule 1), and all rights and benefits of the Lien Grantor under any Copyright License (including, without limitation, any Copyright License identified in Schedule 1).

The Lien Grantor irrevocably constitutes and appoints the Grantee and any officer or agent thereof, with full power of substitution, as its true and lawful attorney-in-fact with full power and authority in the name of the Lien Grantor or in the Grantee's name, from time to time, in the Grantee's discretion, so long as any Event of Default (as defined in the Indenture) shall have occurred and be continuing, to take with respect to the Copyright Collateral any and all appropriate action which the Lien Grantor might take with respect to the Copyright Collateral and to execute any and all documents and instruments which may be necessary or desirable to carry out the terms of this Copyright Security Agreement and to accomplish the purposes hereof.

Except to the extent expressly permitted in the Security Agreement or the Indenture, the Lien Grantor agrees not to sell, license, exchange, assign or otherwise transfer or dispose of, or grant any rights with respect to, or mortgage or otherwise encumber, any of the Copyright Collateral.

The foregoing security interest is granted in conjunction with the security interests granted by the Lien Grantor to the Grantee pursuant to the Security Agreement. The Lien Grantor acknowledges and affirms that the rights and remedies of the Grantee with respect to the security interest in the Copyright Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

IN WITNESS WHEREOF, the Lien Grantor has caused this Copyright Security Agreement to be duly executed by its officer thereunto duly authorized as of the day and year first written above.

[NAME OF LIEN GRANTOR]

By: _____
Name:
Title:

Acknowledged:

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
as Collateral Agent

By: _____
Name:
Title:

EXHIBIT D
to Security Agreement

PATENT SECURITY AGREEMENT

(Patents, Patent Applications and Patent Licenses)

_____ ___, 20__

WHEREAS, [name of Lien Grantor], a _____ corporation (herein referred to as the "**Lien Grantor**") owns, or in the case of licenses is a party to, the Patent Collateral (as defined below);

WHEREAS, Akoustis Technologies, Inc., Akoustis, Inc., as guarantor and The Bank of New York Mellon Trust Company, N.A., as trustee, are parties to an Indenture dated as of May 14, 2018 (as amended from time to time, the "**Indenture**"); and

WHEREAS, pursuant to (i) a Pledge and Security Agreement dated as of May 14, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "**Security Agreement**") among Akoustis Technologies, Inc., the other grantors party thereto and The Bank of New York Mellon Trust Company, N.A., as collateral agent for the Secured Parties referred to therein (in such capacity, together with its successors in such capacity, the "**Grantee**"), and (ii) certain other loan documents (including this Patent Security Agreement), the Lien Grantor has [secured certain of its obligations (the "**Secured Obligations**")][3] [guaranteed certain obligations of Akoustis Technologies, Inc. and secured such guarantee (the "**Lien Grantor's Transaction Guarantee**")][2] by granting to the Grantee for the benefit of such Secured Parties a continuing security interest in personal property of the Lien Grantor, including all right, title and interest of the Lien Grantor in, to and under the Patent Collateral (as defined below);

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Lien Grantor grants to the Grantee, to secure the [Secured Obligations] [Lien Grantor's Transaction Guarantee], a continuing security interest in all of the Lien Grantor's right, title and interest in, to and under the following (all of the following items or types of property being herein collectively referred to as the "**Patent Collateral**"), whether now owned or existing or hereafter acquired or arising:

(a) each Patent (as defined in the Security Agreement) owned by the Lien Grantor, including, without limitation, each Patent referred to in Schedule 1 hereto;

(b) each Patent License (as defined in the Security Agreement) to which the Lien Grantor is a party, including, without limitation, each Patent License identified in Schedule 1 hereto; and

(c) all proceeds of and revenues from the foregoing, including, without limitation, all proceeds of and revenues from any claim by the Lien Grantor against third parties for past, present or future infringement of any Patent owned by the Lien Grantor (including, without limitation, any Patent identified in Schedule 1 hereto) and all rights and benefits of the Lien Grantor under any Patent License (including, without limitation, any Patent License identified in Schedule 1 hereto).

---

[3] Delete these bracketed words if the Lien Grantor is a Guarantor.

[2] Delete these bracketed words if the Lien Grantor is the Borrower.

The Lien Grantor irrevocably constitutes and appoints the Grantee and any officer or agent thereof, with full power of substitution, as its true and lawful attorney-in-fact with full power and authority in the name of the Lien Grantor or in the Grantee's name, from time to time, in the Grantee's discretion, so long as any Event of Default (as defined in the Indenture) shall have occurred and be continuing, to take with respect to the Patent Collateral any and all appropriate action which the Lien Grantor might take with respect to the Patent Collateral and to execute any and all documents and instruments which may be necessary or desirable to carry out the terms of this Patent Security Agreement and to accomplish the purposes hereof.

Except to the extent expressly permitted in the Security Agreement or the Indenture, the Lien Grantor agrees not to sell, license, exchange, assign or otherwise transfer or dispose of, or grant any rights with respect to, or mortgage or otherwise encumber, any of the Patent Collateral.

The foregoing security interest is granted in conjunction with the security interests granted by the Lien Grantor to the Grantee pursuant to the Security Agreement. The Lien Grantor acknowledges and affirms that the rights and remedies of the Grantee with respect to the security interest in the Patent Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

IN WITNESS WHEREOF, the Lien Grantor has caused this Patent Security Agreement to be duly executed by its officer thereunto duly authorized as of the day and year first written above.

[NAME OF LIEN GRANTOR]

By: _____
Name:
Title:

Acknowledged:

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
as Collateral Agent

By: _____
Name:
Title:

EXHIBIT E
to Security Agreement

TRADEMARK SECURITY AGREEMENT

(Trademarks, Trademark Registrations, Trademark Applications and Trademark Licenses)

_____ ___, 20__

WHEREAS, [name of Lien Grantor], a _____ corporation (herein referred to as the "**Lien Grantor**") owns, or in the case of licenses is a party to, the Trademark Collateral (as defined below);

WHEREAS, Akoustis Technologies, Inc., Akoustis, Inc., as guarantor and The Bank of New York Mellon Trust Company, N.A., as trustee, are parties to an Indenture dated as of May 14, 2018 (as amended from time to time, the "**Indenture**"); and

WHEREAS, pursuant to (i) a Pledge and Security Agreement dated as of May 14, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "**Security Agreement**") among Akoustis Technologies, Inc., the other grantors party thereto and The Bank of New York Mellon Trust Company, N.A., as collateral agent for the Secured Parties referred to therein (in such capacity, together with its successors in such capacity, the "**Grantee**"), and (ii) certain other loan documents (including this Trademark Security Agreement), the Lien Grantor has [secured certain of its obligations (the "**Secured Obligations**")][1] [guaranteed certain obligations of Akoustis Technologies, Inc. and secured such guarantee (the "**Lien Grantor's Transaction Guarantee**")][2] by granting to the Grantee for the benefit of such Secured Parties a continuing security interest in personal property of the Lien Grantor, including all right, title and interest of the Lien Grantor in, to and under the Trademark Collateral (as defined below);

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Lien Grantor grants to the Grantee, to secure the [Secured Obligations] [Lien Grantor's Transaction Guarantee], a continuing security interest in all of the Lien Grantor's right, title and interest in, to and under the following (all of the following items or types of property being herein collectively referred to as the "**Trademark Collateral**"), whether now owned or existing or hereafter acquired or arising:

(a) each Trademark (as defined in the Security Agreement) owned by the Lien Grantor, including, without limitation, each Trademark registration and application referred to in Schedule 1 hereto, and all of the goodwill of the business connected with the use of, or symbolized by, each Trademark (provided that no security interest shall be granted in the United States intent-to-use trademark applications to the extent that, and solely during the period in which, the grant of a security interest therein would impair the validity or enforceability of such intent-to-use trademark applications under applicable federal law);

(b) each Trademark License (as defined in the Security Agreement) to which the Lien Grantor is a party, including, without limitation, each Trademark License identified in Schedule 1 hereto, and all of the goodwill of the business connected with the use of, or symbolized by, each Trademark licensed pursuant thereto; and

---

[1] Delete these bracketed words if the Lien Grantor is a Guarantor.

[2] Delete these bracketed words if the Lien Grantor is the Borrower.

(c) all proceeds of and revenues from the foregoing, including, without limitation, all proceeds of and revenues from any claim by the Lien Grantor against third parties for past, present or future unfair competition with, or violation of intellectual property rights in connection with or injury to, or infringement or dilution of, any Trademark owned by the Lien Grantor (including, without limitation, any Trademark identified in Schedule 1 hereto), and all rights and benefits of the Lien Grantor under any Trademark License (including, without limitation, any Trademark License identified in Schedule 1 hereto), or for injury to the goodwill associated with any of the foregoing.

The Lien Grantor irrevocably constitutes and appoints the Grantee and any officer or agent thereof, with full power of substitution, as its true and lawful attorney-in-fact with full power and authority in the name of the Lien Grantor or in the Grantee's name, from time to time, in the Grantee's discretion, so long as any Event of Default (as defined in the Indenture) shall have occurred and be continuing, to take with respect to the Trademark Collateral any and all appropriate action which the Lien Grantor might take with respect to the Trademark Collateral and to execute any and all documents and instruments which may be necessary or desirable to carry out the terms of this Trademark Security Agreement and to accomplish the purposes hereof.

Except to the extent expressly permitted in the Security Agreement or the Indenture, the Lien Grantor agrees not to sell, license, exchange, assign or otherwise transfer or dispose of, or grant any rights with respect to, or mortgage or otherwise encumber, any of the Trademark Collateral.

The foregoing security interest is granted in conjunction with the security interests granted by the Lien Grantor to the Grantee pursuant to the Security Agreement. The Lien Grantor acknowledges and affirms that the rights and remedies of the Grantee with respect to the security interest in the Trademark Collateral granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein.

IN WITNESS WHEREOF, the Lien Grantor has caused this Trademark Security Agreement to be duly executed by its officer thereunto duly authorized as of the day and year first written above.

[NAME OF LIEN GRANTOR]

By: _____
Name:
Title:

Acknowledged:

THE BANK OF NEW YORK MELLON TRUST COMPANY, N.A.,
as Collateral Agent

By: _____
Name:
Title: