

Resonant Inc
Form PRE 14A
August 28, 2015

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549
SCHEDULE 14A

Proxy Statement Pursuant to Section 14(a) of the Securities
Exchange Act of 1934

Filed by the Registrant

Filed by a Party Other than the Registrant

Check the appropriate box:

Preliminary Proxy Statement

Confidential, for Use of the Commission Only (as permitted by Rule 14a-6(e)(2))

Definitive Proxy Statement

Definitive Additional Materials

Soliciting Material Under § 240.14a-12

RESONANT INC.

(Name of Registrant as Specified in its Charter)

(Name of Person(s) Filing Proxy Statement, if other than the Registrant)

Payment of Filing Fee (Check the appropriate box):

No fee required.

Fee computed on table below per Exchange Act Rules 14a-6(i)(1) and 0-11.

(1) Title of each class of securities to which transaction applies:

(2) Aggregate number of securities to which transaction applies:

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(1) Amount Previously Paid:

(2) Form, Schedule or Registration Statement No.:

(3) Filing Party:

(4) Date Filed:

RESONANT INC.

110 Castilian Drive, Suite 100

Goleta, California 93117

NOTICE OF SPECIAL MEETING OF STOCKHOLDERS

To Be Held at 10:00 a.m. Pacific Time on Thursday, October 15, 2015

Dear Stockholders:

You are cordially invited to attend the Special Meeting of Stockholders (the "Special Meeting") of Resonant Inc., a Delaware corporation ("Resonant"). The Special Meeting will be held on Thursday, October 15, 2015, at 10:00 a.m. Pacific Time, at Resonant's headquarters, located at 110 Castilian Drive, Suite 100, Goleta, California 93117, for the following purposes as more fully described in the accompanying proxy statement:

- To approve an amendment of our amended and restated certificate of incorporation to provide that special meetings
1. of stockholders of Resonant shall be called by our secretary upon the written request of one or more stockholders holding shares in the aggregate entitled to cast not less than 20% of the votes at the special meeting; and
 2. To transact such other business as may properly come before the meeting or any adjournments or postponements thereof.

The board of directors of Resonant has fixed the close of business on August 27, 2015 as the record date for the Special Meeting. Only stockholders of record on the record date are entitled to notice of and to vote at the Special Meeting. Further information regarding voting rights and the matters to be voted upon is presented in the accompanying proxy statement.

Your vote is important. Whether or not you plan to attend the Special Meeting, please vote by telephone or Internet by following the voting procedures described in the Proxy Materials. If you received printed proxy materials and wish to vote by mail, promptly complete, date and sign the enclosed proxy card and return it in the accompanying envelope. We appreciate your continued support of Resonant and look forward to either greeting you personally at the meeting or receiving your proxy.

By order of the Board of Directors,

Terry Lingren

Chief Executive Officer

Goleta, California

September 15, 2015

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RESONANT INC.
PROXY STATEMENT FOR THE
SPECIAL MEETING OF STOCKHOLDERS

INFORMATION CONCERNING VOTING AND SOLICITATION OF PROXIES

Our board of directors solicits your proxy for a special meeting of stockholders (the “Special Meeting”), and for any postponement or adjournment of the Special Meeting, for the purposes described in the “Notice of Special Meeting of Stockholders.” The table below describes some important details about the Special Meeting and voting. Additional information is available in the “Frequently Asked Questions” section of the proxy statement immediately below the table. We use the terms “Resonant,” “the company,” “we,” “our” and “us” in this proxy statement to refer to Resonant Inc., a Delaware corporation.

The Notice of Special Meeting, proxy statement and enclosed proxy card are first being mailed to our stockholders on or about September 15, 2015.

Important Notice Regarding the Availability of Proxy Materials for the Special Meeting

This proxy statement is available for viewing, printing and downloading at www.proxyvote.com and on the “Investors” section of our website at ir.resonant.com. Certain documents referenced in the proxy statement are available on our website. However, we are not including the information contained on our website, or any information that may be accessed by links on our website, as part of, or incorporating it by reference into, this proxy statement.

| | |
|------------------------|--|
| Meeting Details | October 15, 2015, 10:00 a.m. Pacific Time, at the offices of Resonant Inc., 110 Castilian Drive, Suite 100, Goleta, California 93117 |
| Record Date | August 27, 2015 |
| Shares Outstanding | There were 7,171,030 shares of common stock outstanding and entitled to vote as of the Record Date. |
| Eligibility to Vote | Holders of our common stock at the close of business on the Record Date are entitled to notice of, and to vote at, the Special Meeting. Each stockholder is entitled to one vote for each share held as of the Record Date. |
| Quorum | A majority of the shares of common stock outstanding and entitled to vote, in person or by proxy, as of the Record Date constitutes a quorum. A quorum is required to transact business at the Special Meeting. |
| Voting Methods | Stockholders whose shares are registered in their names with Computershare, our transfer agent (referred to as “Stockholders of Record”) may vote by proxy via the Internet, phone, or mail by following the instructions on the accompanying proxy card. Stockholders of Record may also vote in person at the Special Meeting by attending the Special Meeting and casting a ballot. Stockholders whose shares are held in “street name” by a broker, bank or other nominee (referred to as “Beneficial Owners”) must follow the voting instructions provided by their brokers or other nominees. See “What is the difference between holding shares as a Stockholder of Record and as a Beneficial Owner?” and “How do I vote and what are the voting deadlines?” below for additional information. |
| Inspector of Elections | We have appointed John McIlvery, our corporate counsel, as Inspector of Elections to determine whether a quorum is present, and to tabulate the votes cast by proxy or in person at the Special Meeting. |

| | |
|--------------------------|---|
| Voting Results | <p>We will announce preliminary results at the Special Meeting. We will report final results on a Current Report on Form 8-K filed with the Securities and Exchange Commission (“SEC”) and post results at ir.resonant.com as soon as practicable after the Special Meeting.</p> |
| Proxy Solicitation Costs | <p>We will bear the costs of soliciting proxies from our stockholders. These costs include preparing, assembling, printing, mailing and distributing notices, proxy statements and proxy cards. Our directors, officers and other employees may solicit proxies personally or by telephone, e-mail or other means of communication, and we will reimburse them for any related expenses. We will also reimburse brokers and other nominees for their reasonable out-of-pocket expenses for forwarding proxy materials to the Beneficial Owners of the shares that the nominees hold in their names.</p> |

FREQUENTLY ASKED QUESTIONS

What matters am I voting on?

You will be voting on:

A proposal to approve an amendment of our amended and restated certificate of incorporation to provide that special meetings of stockholders of Resonant shall be called by our secretary upon the written request of one or more stockholders holding shares in the aggregate entitled to cast not less than 20% of the votes at the special meeting (Proposal No. One); and

Any other business that may properly come before the Special Meeting or any adjournment or postponement thereof.

How does our board of directors recommend that I vote?

Our board of directors recommends that you vote FOR approval of the amendment of our amended and restated certificate of incorporation (Proposal No. One).

Will there be any other items of business on the agenda?

If any other items of business or other matters are properly brought before the Special Meeting, your proxy gives discretionary authority to the persons named on the proxy card with respect to those items of business or other matters. The persons named on the proxy card intend to vote the proxy in accordance with their best judgment. Our board of directors does not intend to bring any other matters to be voted on at the Special Meeting, and we are not currently aware of any matters that may be properly presented by others for action at the Special Meeting.

Who is entitled to vote at the Special Meeting?

Holders of our common stock at the close of business on the Record Date are entitled to notice of, and to vote at, the Special Meeting. Each stockholder is entitled to one vote for each share of our common stock held as of the Record Date. Cumulative voting is not permitted with respect to the election of directors.

A complete list of the stockholders entitled to vote at the Special Meeting will be available at our headquarters, located at 110 Castilian Drive, Suite 100, Goleta, California 93117, during regular business hours for the ten days prior to the Special Meeting. This list will also be available during the Special Meeting at the meeting location. Stockholders may examine the list for any legally valid purpose related to the Special Meeting.

What is the difference between holding shares as a Stockholder of Record and as a Beneficial Owner?

Stockholders of Record. If, at the close of business on the Record Date, your shares are registered directly in your name with Computershare, our transfer agent, you are considered the Stockholder of Record with respect to those shares. As the Stockholder of Record, you have the right to grant your voting proxy directly to the individuals listed on the proxy card or to vote in person at the Special Meeting.

Beneficial Owners. If your shares are held in a stock brokerage account or by a bank or other nominee on your behalf, you are considered the Beneficial Owner of shares held in “street name.” As the Beneficial Owner, you have the right to direct your broker or nominee how to vote your shares by following the voting instructions your broker or other nominee provides. In general, if you do not provide your broker or nominee with instructions on how to vote your shares, your broker or nominee may, in its discretion, vote your shares with respect to routine matters, but may not vote your shares with respect to any non-routine matters. Please see “What if I do not specify how my shares are to be voted?” for additional information.

Do I have to do anything in advance if I plan to attend the Special Meeting and vote in person?

Stockholders of Record. If you are a Stockholder of Record, you do not need to do anything in advance to attend and/or vote your shares in person at the Special Meeting, but you may be asked to present government-issued photo identification for entrance into the Special Meeting.

Beneficial Owners. If you are a Beneficial Owner, you may not vote your shares in person at the Special Meeting unless you obtain a “legal proxy” from your broker or other nominee, who is the Stockholder of Record with respect to your shares. You may still attend the Special Meeting even if you do not have a legal proxy. You may be asked to present government-issued photo identification for entrance into the Special Meeting. You will also be asked to provide proof of Beneficial Ownership as of the Record Date, such as the voting instructions you received from your broker or other nominee, or your brokerage statement reflecting ownership of shares as of the Record Date.

How do I vote and what are the voting deadlines?

Stockholders of Record. If you are a Stockholder of Record, then you can vote in one of the following ways:

You may vote via the Internet or by telephone. To vote via the Internet or by telephone, follow the instructions provided in the proxy card that accompanies this proxy statement. If you vote via the Internet or by telephone, you do not need to return a proxy card by mail. Internet and telephone voting are available 24 hours a day. Votes submitted through the Internet or by telephone must be received by 11:59 p.m. Eastern Time on October 14, 2015.

You may vote by mail. If you would like to vote by mail, you need to complete, date and sign the proxy card that accompanies this proxy statement and promptly mail it in the enclosed postage-paid envelope so that it is received no later than October 14, 2015. You do not need to put a stamp on the enclosed envelope if you mail it from within the United States. The persons named on the proxy card will vote the shares you own in accordance with your instructions on the proxy card you mail. If you return the proxy card, but do not give any instructions on a particular matter to be voted on at the Special Meeting, the persons named on the proxy card will vote the shares you own in accordance with the recommendations of our board of directors.

You may vote in person. If you plan to attend the Special Meeting, you may vote by delivering your completed proxy card in person or by completing and submitting a ballot, which will be provided at the Special Meeting.

Beneficial Owners. If you are the Beneficial Owner of shares held of record by a broker or other nominee, you will receive voting instructions from your broker or other nominee. You must follow the voting instructions provided by your broker or other nominee in order to instruct your broker or other nominee how to vote your shares. The

availability of telephone and Internet voting options will depend on the voting process of your broker or other nominee. As discussed above, if you are a Beneficial Owner, you may not vote your shares in person at the Special Meeting unless you obtain a legal proxy from your broker or other nominee.

May I change my vote or revoke my proxy?

Stockholders of Record. If you are a Stockholder of Record, you may revoke your proxy or change your proxy instructions at any time before your proxy is voted at the Special Meeting by:

- entering a new vote by Internet or telephone;
- signing and returning a new proxy card with a later date;
- delivering a written revocation to our Secretary at the address listed on the front page of this proxy statement; or
- attending the Special Meeting and voting in person.

Beneficial Owners. If you are the beneficial owner of your shares, you must contact the broker or other nominee holding your shares and follow their instructions to change your vote or revoke your proxy.

What is the effect of giving a proxy?

Proxies are solicited by and on behalf of our board of directors. The persons named on the proxy card have been designated as proxy holders by our board of directors. When a proxy is properly dated, executed and returned, the shares represented by the proxy will be voted at the Special Meeting in accordance with the instruction of the stockholder. If no specific instructions are given, however, the shares will be voted in accordance with the recommendations of our board of directors. If any matters not described in the proxy statement are properly presented at the Special Meeting, the proxy holders will use their own judgment to determine how to vote your shares. If the Special Meeting is postponed or adjourned, the proxy holders can vote your shares on the new meeting date, unless you have properly revoked your proxy, as described above.

What if I do not specify how my shares are to be voted?

Stockholders of Record. If you are a Stockholder of Record and you submit a proxy but you do not provide voting instructions, your shares will be voted:

FOR approval of the amendment of our amended and restated certificate of incorporation (Proposal No. One); and
In the discretion of the named proxy holders regarding any other matters properly presented for a vote at the Special Meeting.

Beneficial Owners. If you are a Beneficial Owner and you do not provide your broker or other nominee that holds your shares with voting instructions, your broker or other nominee will determine if it has discretion to vote on each matter. In general, brokers and other nominees do not have discretion to vote on non-routine matters. Proposal No. One (approval of the amendment of our amended and restated certificate of incorporation) is a non-routine matter. As a result, if you do not provide voting instructions to your broker or other nominee, your broker or other nominee cannot vote your shares with respect to Proposal No. One, which would result in a “broker non-vote.” For additional information regarding broker non-votes, see “What are the effects of abstentions and broker non-votes?” below.

What is a quorum?

A quorum is the minimum number of shares required to be present at the Special Meeting for the meeting to be properly held under our bylaws and Delaware law. A majority of the shares of common stock outstanding and entitled to vote, in person or by proxy, constitutes a quorum for the transaction of business at the Special Meeting. As noted above, as of the Record Date, there were at total of 7,171,030 shares of common stock outstanding, which means that 3,585,516 shares of common stock must be represented in person or by proxy at the Special Meeting to have a quorum. If there is no quorum, a majority of the shares present at the Special Meeting may adjourn the meeting to a later date.

How many votes are needed for approval of each proposal?

Amending our amended and restated certificate of incorporation (Proposal No. One) requires the affirmative vote of at least 66 2/3% of our outstanding shares. With respect to this proposal, you may vote FOR, AGAINST or ABSTAIN. If you ABSTAIN from voting on Proposal No. One, the abstention will have the same effect as a vote AGAINST the proposal.

What are the effects of abstentions and broker non-votes?

An abstention represents a stockholder's affirmative choice to decline to vote on a proposal. Under Delaware law, abstentions are considered present and entitled to vote at the Special Meeting. As a result, abstentions will be counted for purposes of determining the presence or absence of a quorum and will also count as votes against a proposal in cases where approval of the proposal requires the affirmative vote of a specified number of our outstanding shares, such as Proposal No. One.

A broker non-vote occurs when a broker or other nominee holding shares for a Beneficial Owner does not vote on a particular proposal because the broker or other nominee does not have discretionary voting power with respect to such proposal and has not received voting instructions from the Beneficial Owner of the shares. Broker non-votes will be counted for purposes of calculating whether a quorum is present at the Special Meeting, but will not be counted for purposes of determining the number of votes cast.

Because approval of the amendment of our amended and restated certificate of incorporation (Proposal No. One) requires the affirmative vote of at least 66 2/3% of our outstanding shares, broker non-votes and abstentions do not count as affirmative votes and thus will have the same effect as a vote AGAINST the proposal, which could prevent the approval of this proposal.

How are proxies solicited for the Special Meeting and who is paying for the solicitation?

The board of directors is soliciting proxies for use at the Special Meeting by means of this proxy statement. We will bear the entire cost of proxy solicitation, including the preparation, assembly, printing, mailing and distribution of the proxy materials. Copies of solicitation materials will also be made available upon request to brokers and other nominees to forward to the Beneficial Owners of the shares held of record by the brokers or other nominees. We will reimburse brokers or other nominees for reasonable expenses that they incur in sending these proxy materials to Beneficial Owners.

This solicitation of proxies may be supplemented by solicitation by telephone, electronic communication, or other means by our directors, officers, employees or agents. No additional compensation will be paid to these individuals for any such services, although we may reimburse such individuals for their reasonable out-of-pocket expenses in connection with such solicitation. We do not plan to retain a proxy solicitor to assist in the solicitation of proxies.

Is my vote confidential?

Proxy instructions, ballots, and voting tabulations that identify individual stockholders are handled in a manner that protects your voting privacy. Your vote will not be disclosed either within Resonant or to third parties, except as

necessary to meet applicable legal requirements, to allow for the tabulation of votes and certification of the vote, or to facilitate a successful proxy solicitation.

Will members of the board of directors attend the Special Meeting?

We encourage our board members to attend our annual meeting of stockholders, but will not request their attendance at the Special Meeting. Those who do attend will be available to answer appropriate questions from stockholders.

I share an address with another stockholder, and we received only one paper copy of the proxy materials. How may I obtain an additional copy of the proxy materials?

We have adopted an SEC-approved procedure called "householding," under which we can deliver a single copy of the proxy materials to multiple stockholders who share the same address unless we received contrary instructions from one or more of the stockholders. This procedure reduces our printing and mailing costs. Stockholders of Record who participate in householding will be able to access and receive separate proxy cards. Upon written or oral request, we will promptly deliver a separate copy of the proxy materials to any stockholder at a shared address to which we delivered a single copy of these documents. To receive a separate copy, or, if you are receiving multiple copies, to request that Resonant only send a single copy of the next year's proxy materials, you may contact us as follows:

Resonant Inc.

Attention: Secretary

110 Castilian Drive, Suite 100

Goleta, California 93117

(805) 308-9803

Stockholders who hold shares in street name may contact their brokerage firm, bank, broker-dealer or other nominee to request information about householding.

PROPOSAL NO. ONE
AMENDMENT OF
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

Our board of directors has approved an amendment of our amended and restated certificate of incorporation (the “Certificate”) to provide that special meetings of stockholders of Resonant shall be called by our secretary upon the written request of one or more stockholders holding shares in the aggregate entitled to cast not less than 20% of the votes at the special meeting. The proposed amendment of the Certificate is being submitted to our stockholders for approval at the Special Meeting.

The description in this proxy statement of the proposed amendment of the Certificate is qualified in its entirety by reference to, and should be read in conjunction with, the full text of the Certificate, as amended and restated by the proposed amendment, which is attached to this proxy statement as Annex A. For convenience of reference, a copy of the Certificate showing the proposed amendment, with deleted text shown in strikethrough and added text shown as bold and italicized, is attached to this proxy statement as Annex B.

Reasons for the Certificate Amendment

The Certificate currently provides that, except as otherwise expressly provided by the terms of any series of preferred stock permitting the holders of such series of preferred stock to call a special meeting of the holders of such series, special meetings of stockholders of Resonant may be called only by the board of directors, the chairperson of the board of directors, the chief executive officer or the president (in the absence of a chief executive officer), and the ability of the stockholders to call a special meeting is specifically denied.

In reviewing the company’s corporate governance policies, our board of directors determined that it was appropriate in certain circumstances to provide our stockholders with the right to call a special meeting and bring to a vote those matters that are of interest to our stockholders and properly brought before such a meeting. The proposed amendment to the Certificate would expand the persons who may call a special meeting to include one or more stockholders holding, in the aggregate, shares entitled to cast not less than 20% of the votes at the special meeting. The board of directors believes the proposed amendment properly balances the dual goals of stockholder democracy and efficient corporate governance. By providing a meaningful share ownership requirement on the stockholders’ right to call a special meeting, the board seeks to provide stockholders with an important governance tool while preventing a small minority of stockholders from imposing on Resonant the significant financial and administrative burdens associated with convening special stockholders’ meetings.

Bylaw Amendments

Concurrently with its approval of the amendment of the Certificate, our board of directors also approved amendments of Resonant’s amended and restated bylaws (the “Bylaws”) to implement advance notice procedures, disclosure requirements and other compliance obligations on stockholders that desire to cause our secretary to call a special meeting of stockholders. The amendments of our Bylaws are conditional upon approval of the amendment of the Certificate by our stockholders at the Special Meeting, and will not become effective unless such approval is obtained. The full text of the Bylaws, as amended and restated by the proposed amendments, is attached to this proxy statement as Annex C. For convenience of reference, a copy of the Bylaws showing the proposed amendments, with deleted text shown in strikethrough and added text shown as bold and italicized, is attached to this proxy statement as Annex D.

Effective Date of the Amendments

If the amendment of the Certificate is approved by the requisite vote of our stockholders, the amendment of the Certificate will be effective upon its filing with the Delaware Secretary of State, which filing is expected to occur

shortly after the Special Meeting. The amendments of the Bylaws will become effective at the same time the amendment of the Certificate becomes effective. If this proposal is not approved by the requisite vote of our stockholders, then the amendment of the Certificate will not be filed with the Delaware Secretary of State and neither the amendment of the Certificate nor the amendments of the Bylaws will become effective.

Required Vote

Stockholder approval of the amendment of the Certificate requires the affirmative vote of at least 66 2/3% of our outstanding shares as of the record date for the Special Meeting.

***** OUR BOARD OF DIRECTORS RECOMMENDS THAT YOU VOTE FOR APPROVAL OF THE AMENDMENT OF OUR AMENDED AND RESTATED CERTIFICATE OF INCORPORATION *****

SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT

The following table sets forth certain information with respect to the beneficial ownership of our common stock as of August 27, 2015, for:

- each of our named executive officers;
- each of our directors;
- all of our executive officers and directors as a group; and
- each person, or group of affiliated persons, who beneficially owned more than 5% of our common stock.

We have determined beneficial ownership in accordance with the rules of the SEC, and the information is not necessarily indicative of beneficial ownership for any other purpose. Except as indicated by the footnotes below, we believe, based on information furnished to us, that the persons and entities named in the table below have sole voting and sole investment power with respect to all shares of common stock that they beneficially owned, subject to applicable community property laws.

We have based percentage ownership of our common stock on 7,171,030 shares of our common stock outstanding as of August 27, 2015. In computing the number of shares of common stock beneficially owned by a person and the percentage ownership of such person, we deemed to be outstanding all shares of common stock subject to options held by the person that are currently exercisable or exercisable within 60 days of August 27, 2015, as well as all shares of common stock issuable pursuant to restricted stock units held by the person that are subject to vesting conditions expected to occur within 60 days of August 27, 2015. However, we did not deem such shares outstanding for the purpose of computing the percentage ownership of any other person. Unless otherwise indicated, the address of each beneficial owner listed in the table below is c/o Resonant Inc., 110 Castilian Drive, Suite 100, Goleta, California 93117.

| Name of Beneficial Owner | Common Stock Beneficially Owned | | |
|--|---------------------------------|------------|---|
| | Number | Percentage | |
| Named Executive Officers and Directors: | | | |
| Terry Lingren ⁽¹⁾ | 426,676 | 5.88 | % |
| Robert Hammond ⁽²⁾ | 426,666 | 5.88 | % |
| Neal Fenzi ⁽³⁾ | 426,666 | 5.88 | % |
| Janet Cooper | 27,000 | * | |
| Thomas Joseph | | | |
| Richard Kornfeld | 12,000 | * | |
| John Major | 12,000 | * | |
| All executive officers and directors as a group (9 persons) ⁽⁴⁾ | 1,392,883 | 18.68 | % |
| Other 5% Stockholders: | | | |
| Lone Wolf Holdings, LLC ⁽⁵⁾ | 1,260,094 | 17.57 | % |
| Park City Capital ⁽⁶⁾ | 700,000 | 9.76 | % |

*Represents beneficial ownership of less than one percent.

(1) Consists of (i) 343,333 shares of common stock, (ii) 10 shares of common stock held by Mr. Lingren's adult son, (1) and (iii) 83,333 shares of common stock issuable pursuant to warrants that are currently exercisable or exercisable within 60 days of August 27, 2015.

(2) Consists of (i) 343,333 shares of common stock and (ii) 83,333 shares of common stock issuable pursuant to warrants that are currently exercisable or exercisable within 60 days of August 27, 2015.

(3) Consists of (i) 343,333 shares of common stock and (ii) 83,333 shares of common stock issuable pursuant to warrants that are currently exercisable or exercisable within 60 days of August 27, 2015.

(4) Consists of (i) 1,108,499 shares of common stock, (ii) 10 shares of common stock held by Mr. Lingren's adult son, (iii) 34,375 shares of common stock subject to options that are currently exercisable or exercisable within 60 days of August 27, 2015, and (iv) 249,999 shares of common stock subject to warrants that are currently exercisable or exercisable within 60 days of August 27, 2015.

(5) As of September 29, 2014, based on information set forth in a Form 4 filed with the SEC on September 29, 2014 by Lone Wolf Holdings, LLC and Peter A. Appel. Consists of shares of common stock. The address for Lone Wolf Holdings, LLC is 77 Oregon Road, Bedford Corners, NY 10549. Peter Appel, sole member of Lone Wolf Holdings, LLC, has voting and dispositive power with respect to these securities.

(6) As of April 6, 2015, based on information set forth in a Schedule 13D/A filed with the SEC on April 7, 2015 by Park City Capital Offshore Master, Ltd., Park City Capital, LLC and Michael J. Fox. Consists of shares of common stock. The address for Park City Capital, LLC is 200 Crescent Court, Suite 1575, Dallas, TX. Michael J. Fox has voting and dispositive power with respect to these securities.

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OTHER MATTERS

Deadlines to Propose Actions for Consideration at the 2016 Annual Meeting

Stockholder Proposals for Inclusion in Proxy Statement. Stockholders may present proper proposals for inclusion in our proxy statement and for consideration at the 2016 annual meeting of stockholders by submitting their proposals in writing to our Secretary in a timely manner. For a stockholder proposal to be considered for inclusion in our proxy statement for our 2016 annual meeting of stockholders, our Secretary must receive the written proposal at our principal executive offices no later than January 9, 2016. In addition, stockholder proposals must comply with the requirements of SEC Rule 14a-8 regarding the inclusion of stockholder proposals in company-sponsored proxy materials. Proposals should be addressed to:

Resonant Inc.

Attention: Secretary

110 Castilian Drive, Suite 100

Goleta, California 93117

Stockholder Proposals Not for Inclusion in Proxy Statement. Our bylaws also establish an advance notice procedure for stockholders who wish to present a proposal before an annual meeting of stockholders but do not intend for the proposal to be included in our proxy statement. Our bylaws provide that the only business that may be conducted at an annual meeting is business that is (i) specified in our proxy materials with respect to the meeting, (ii) otherwise properly brought before the meeting by or at the direction of our board of directors, or (iii) properly brought before the meeting by a stockholder of record entitled to vote at the annual meeting who has delivered timely written notice to our Secretary. The written notice must contain the information specified in our bylaws. To be timely for our 2016 annual meeting of stockholders, our Secretary must receive the written notice at our principal executive offices no earlier than February 23, 2016, and no later than the close of business on March 24, 2016.

If we hold our 2016 annual meeting of stockholders more than 30 days before or more than 60 days after the one-year anniversary date of the 2015 Annual Meeting, then notice of a stockholder proposal that is not intended to be included in our proxy statement must be received no earlier than the close of business on the 120th day before the annual meeting and no later than the close of business on the later (i) the 90th day prior to the annual meeting; or (ii) the 10th day following the day on which public announcement of the date of the meeting is first made. If a stockholder who has notified us of his or her intention to present a proposal at an annual meeting does not appear to present his or her proposal at the meeting, we are not required to present the proposal for a vote at the meeting.

Availability of Bylaws. A copy of our bylaws may be obtained by accessing Resonant's filings on the SEC's website at www.sec.gov. You may also contact our Secretary at our principal executive offices for a copy of the relevant bylaw provisions regarding the requirements for stockholder proposals.

ANNEX A
FULL TEXT OF THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF RESONANT INC.
AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
RESONANT INC.

a Delaware Corporation

Resonant Inc., a corporation organized and existing under the laws of the State of Delaware (the “Corporation”), hereby certifies as follows:

- A. The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on January 19, 2012.
- B. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware (the “DGCL”), and restates, integrates and further amends the provisions of the Corporation’s Certificate of Incorporation. Pursuant to resolution of the Board of Directors of the Corporation, a special meeting of the stockholders of the Corporation was duly called and held, upon notice in accordance with Section 222 of the DGCL, at which meeting the necessary number of shares as required by statute were voted in favor of the amendments in this Amended and Restated Certificate of Incorporation.
- C. The text of the Certificate of Incorporation of the Corporation is hereby amended and restated in its entirety to read as follows:

ARTICLE I

The name of the Corporation is Resonant Inc.

ARTICLE II

The address of the Corporation’s registered office in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, DE 19808, County of New Castle. The name of its registered agent at such address is Corporation Service Company.

ARTICLE III

The nature of the business or purpose to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the DGCL.

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ARTICLE IV

Section 4.1 Authorized Capital Stock. The total number of shares of all classes of capital stock that the Corporation is authorized to issue is 50,000,000 shares, consisting of 47,000,000 shares of Common Stock, par value \$0.001 per share (the “Common Stock”), and 3,000,000 shares of Preferred Stock, par value \$0.001 per share (the “Preferred Stock”).

Section 4.2 Increase or Decrease in Authorized Capital Stock. The number of authorized shares of Preferred Stock or Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority in voting power of the stock of the Corporation entitled to vote generally in the election of directors, irrespective of the provisions of Section 242(b)(2) of the DGCL (or any successor provision thereto), voting together as a single class, without a separate vote of the holders of the class or classes the number of authorized shares of which are being increased or decreased, unless a vote by any holders of one or more series of Preferred Stock is required by the express terms of any series of Preferred Stock as provided for or fixed pursuant to the provisions of Section 4.4 of this Article IV.

Section 4.3 Common Stock.

(a) The holders of shares of Common Stock shall be entitled to one vote for each such share on each matter properly submitted to the stockholders on which the holders of shares of Common Stock are entitled to vote. Except as otherwise required by law or this certificate of incorporation (this “Certificate of Incorporation” which term, as used herein, shall mean the certificate of incorporation of the Corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock), and subject to the rights of the holders of Preferred Stock, at any annual or special meeting of the stockholders the holders of shares of Common Stock shall have the right to vote for the election of directors and on all other matters properly submitted to a vote of the stockholders; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation that relates solely to the terms, number of shares, powers, designations, preferences, or relative participating, optional or other special rights (including, without limitation, voting rights), or to qualifications, limitations or restrictions thereon, of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one more other such series, to vote thereon pursuant to this Certificate of Incorporation (including, without limitation, by any certificate of designations relating to any series of Preferred Stock) or pursuant to the DGCL.

(b) Subject to the rights of the holders of Preferred Stock, the holders of shares of Common Stock shall be entitled to receive such dividends and other distributions (payable in cash, property or capital stock of the Corporation) when, as and if declared thereon by the Board of Directors from time to time out of any assets or funds of the Corporation legally available therefor and shall share equally on a per share basis in such dividends and distributions.

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(c) In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Corporation, after payment or provision for payment of the debts and other liabilities of the Corporation, and subject to the rights of the holders of Preferred Stock in respect thereof, the holders of shares of Common Stock shall be entitled to receive all the remaining assets of the Corporation available for distribution to its stockholders, ratably in proportion to the number of shares of Common Stock held by them.

Section 4.4 Preferred Stock.

(a) The Preferred Stock may be issued from time to time in one or more series pursuant to a resolution or resolutions providing for such issue duly adopted by the Board of Directors (authority to do so being hereby expressly vested in the Board of Directors). The Board of Directors is further authorized, subject to limitations prescribed by law, to fix by resolution or resolutions and to set forth in a certification of designations filed pursuant to the DGCL the powers, designations, preferences and relative, participation, optional or other rights, if any, and the qualifications, limitations or restrictions thereof, if any, of any wholly unissued series of Preferred Stock, including without limitation authority to fix by resolution or resolutions the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences of any such series, and the number of shares constituting any such series and the designation thereof, or any of the foregoing.

(b) The Board of Directors is further authorized to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, the number of which was fixed by it, subsequent to the issuance of shares of such series then outstanding, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in the Certificate of Incorporation or the resolution of the Board of Directors originally fixing the number of shares of such series. If the number of shares of any series is so decreased, then the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

ARTICLE V

Section 5.1 General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

Section 5.2 Number of Directors; Election; Term.

(a) Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, the number of directors that constitutes the entire Board of Directors of the Corporation shall be fixed solely by resolution of the Board of Directors.

(b) Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation or removal.

(c) Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

Section 5.3 Vacancies and Newly Created Directorships. Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, and except as otherwise provided in the DGCL, vacancies occurring on the Board of Directors for any reason and newly created directorships resulting from an increase in the authorized number of directors may be filled only by vote of a majority of the remaining members of the Board of Directors, although less than a quorum, or by a sole remaining director, at any meeting of the Board of Directors. A person so elected by the Board of Directors to fill a vacancy or newly created directorship shall hold office until the next election of directors and until his or her successor shall be duly elected and qualified.

ARTICLE VI

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors of the Corporation is expressly authorized to adopt, amend or repeal the Bylaws of the Corporation.

ARTICLE VII

Section 7.1 No Action by Written Consent of Stockholders. Except as otherwise expressly provided by the terms of any series of Preferred Stock permitting the holders of such series of Preferred Stock to act by written consent, any action required or permitted to be taken by stockholders of the Corporation must be effected at a duly called annual or special meeting of the stockholders and may not be effected by written consent in lieu of a meeting.

Section 7.2 Special Meetings. Special meetings of stockholders of the Corporation (i) may be called by the Board of Directors, the chairperson of the Board of Directors, the chief executive officer or the president (in the absence of a chief executive officer) at any time and for any purpose or purposes as shall be stated in the notice of the meeting, and (ii) shall be called by the secretary upon the written request of one or more stockholders holding shares in the aggregate entitled to cast not less than 20% of the votes at the special meeting, subject to and in compliance with this Article VII and the Bylaws of the Corporation.

Section 7.3 Advance Notice. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Corporation shall be given in the manner provided in the Bylaws of the Corporation.

ARTICLE VIII

Section 8.1 Limitation of Personal Liability. To the fullest extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Section 8.2 Indemnification.

The Corporation shall indemnify, to the fullest extent permitted by applicable law, any director or officer of the Corporation who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding") by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another Corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding. The Corporation shall be required to indemnify a person in connection with a Proceeding initiated by such person only if the Proceeding was authorized by the Board.

The Corporation shall have the power to indemnify, to the extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, any employee or agent of the Corporation who was or is a party or is threatened to be made a party to any Proceeding by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding.

Any repeal or amendment of this Article VIII by the stockholders of the Corporation or by changes in law, or the adoption of any other provision of this Certificate of Incorporation inconsistent with this Article VIII will, unless otherwise required by law, be prospective only (except to the extent such amendment or change in law permits the Corporation to further limit or eliminate the liability of directors) and shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or amendment or adoption of such inconsistent provision with respect to acts or omissions occurring prior to such repeal or amendment or adoption of such inconsistent provision.

ARTICLE IX

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation (including any rights, preferences or other designations of Preferred Stock), in the manner now or hereafter prescribed by this Certificate of Incorporation and the DGCL; and all rights, preferences and privileges herein conferred upon stockholders by and pursuant to this Certificate of Incorporation in its present form or as hereafter amended are granted subject to the right reserved in this Article IX. Notwithstanding any other provision of this Certificate of Incorporation, and in addition to any other vote that may be required by law or the terms of any series of Preferred Stock, the affirmative vote of the holders of at least 66 2/3% of the voting power of all then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend, alter or repeal, or adopt any provision as part of this Certificate of Incorporation inconsistent with the purpose and intent of, Article VI, Article VII or this Article IX (including, without limitation, any such Article as renumbered as a result of any amendment, alteration, change, repeal or adoption of any other Article).

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IN WITNESS WHEREOF, Resonant Inc. has caused this Restated Certificate of Incorporation to be signed by the Chief Executive Officer of the Corporation on this [•] day of [•], 20[•].

By:

Terry Lingren
Chief Executive Officer

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ANNEX B
MARKED COPY OF THE
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF RESONANT INC.
AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
RESONANT INC.

a Delaware Corporation

Resonant Inc., a corporation organized and existing under the laws of the State of Delaware (the "Corporation"), hereby certifies as follows:

- A. The original Certificate of Incorporation of the Corporation was filed with the Secretary of State of the State of Delaware on January 19, 2012.
- B. This Amended and Restated Certificate of Incorporation was duly adopted in accordance with Sections 242 and 245 of the General Corporation Law of the State of Delaware (the "DGCL"), and restates, integrates and further amends the provisions of the Corporation's Certificate of Incorporation, and has been duly approved by the written consent. Pursuant to resolution of the Board of Directors of the Corporation, a special meeting of the stockholders of the Corporation was duly called and held, upon notice in accordance with Section 228 of the DGCL of the DGCL, at which meeting the necessary number of shares as required by statute were voted in favor of the amendments in this Amended and Restated Certificate of Incorporation.
- C. The text of the Certificate of Incorporation of the Corporation is hereby amended and restated in its entirety to read as follows:

ARTICLE I

The name of the Corporation is Resonant Inc.

ARTICLE II

The address of the Corporation's registered office in the State of Delaware is 2711 Centerville Road, Suite 400, Wilmington, DE 19808, County of New Castle. The name of its registered agent at such address is Corporation Service Company.

ARTICLE III

The nature of the business or purpose to be conducted or promoted by the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the DGCL.

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ARTICLE IV

Section 4.1 Authorized Capital Stock. The total number of shares of all classes of capital stock that the Corporation is authorized to issue is 50,000,000 shares, consisting of 47,000,000 shares of Common Stock, par value \$0.001 per share (the "Common Stock"), and 3,000,000 shares of Preferred Stock, par value \$0.001 per share (the "Preferred Stock").

Section 4.2 Increase or Decrease in Authorized Capital Stock. The number of authorized shares of Preferred Stock or Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority in voting power of the stock of the Corporation entitled to vote generally in the election of directors, irrespective of the provisions of Section 242(b)(2) of the DGCL (or any successor provision thereto), voting together as a single class, without a separate vote of the holders of the class or classes the number of authorized shares of which are being increased or decreased, unless a vote by any holders of one or more series of Preferred Stock is required by the express terms of any series of Preferred Stock as provided for or fixed pursuant to the provisions of Section 4.4 of this Article IV.

Section 4.3 Common Stock.

(a) The holders of shares of Common Stock shall be entitled to one vote for each such share on each matter properly submitted to the stockholders on which the holders of shares of Common Stock are entitled to vote. Except as otherwise required by law or this certificate of incorporation (this "Certificate of Incorporation" which term, as used herein, shall mean the certificate of incorporation of the Corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock), and subject to the rights of the holders of Preferred Stock, at any annual or special meeting of the stockholders the holders of shares of Common Stock shall have the right to vote for the election of directors and on all other matters properly submitted to a vote of the stockholders; provided, however, that, except as otherwise required by law, holders of Common Stock shall not be entitled to vote on any amendment to this Certificate of Incorporation that relates solely to the terms, number of shares, powers, designations, preferences, or relative participating, optional or other special rights (including, without limitation, voting rights), or to qualifications, limitations or restrictions thereon, of one or more outstanding series of Preferred Stock if the holders of such affected series are entitled, either separately or together with the holders of one more other such series, to vote thereon pursuant to this Certificate of Incorporation (including, without limitation, by any certificate of designations relating to any series of Preferred Stock) or pursuant to the DGCL.

(b) Subject to the rights of the holders of Preferred Stock, the holders of shares of Common Stock shall be entitled to receive such dividends and other distributions (payable in cash, property or capital stock of the Corporation) when, as and if declared thereon by the Board of Directors from time to time out of any assets or funds of the Corporation legally available therefor and shall share equally on a per share basis in such dividends and distributions.

(c) In the event of any voluntary or involuntary liquidation, dissolution or winding-up of the Corporation, after payment or provision for payment of the debts and other

liabilities of the Corporation, and subject to the rights of the holders of Preferred Stock in respect thereof, the holders of shares of Common Stock shall be entitled to receive all the remaining assets of the Corporation available for distribution to its stockholders, ratably in proportion to the number of shares of Common Stock held by them.

Section 4.4 Preferred Stock.

(a) The Preferred Stock may be issued from time to time in one or more series pursuant to a resolution or resolutions providing for such issue duly adopted by the Board of Directors (authority to do so being hereby expressly vested in the Board of Directors). The Board of Directors is further authorized, subject to limitations prescribed by law, to fix by resolution or resolutions and to set forth in a certification of designations filed pursuant to the DGCL the powers, designations, preferences and relative, participation, optional or other rights, if any, and the qualifications, limitations or restrictions thereof, if any, of any wholly unissued series of Preferred Stock, including without limitation authority to fix by resolution or resolutions the dividend rights, dividend rate, conversion rights, voting rights, rights and terms of redemption (including sinking fund provisions), redemption price or prices, and liquidation preferences of any such series, and the number of shares constituting any such series and the designation thereof, or any of the foregoing.

(b) The Board of Directors is further authorized to increase (but not above the total number of authorized shares of the class) or decrease (but not below the number of shares of any such series then outstanding) the number of shares of any series, the number of which was fixed by it, subsequent to the issuance of shares of such series then outstanding, subject to the powers, preferences and rights, and the qualifications, limitations and restrictions thereof stated in the Certificate of Incorporation or the resolution of the Board of Directors originally fixing the number of shares of such series. If the number of shares of any series is so decreased, then the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.

ARTICLE V

Section 5.1 General Powers. The business and affairs of the Corporation shall be managed by or under the direction of the Board of Directors.

Section 5.2 Number of Directors; Election; Term.

(a) Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, the number of directors that constitutes the entire Board of Directors of the Corporation shall be fixed solely by resolution of the Board of Directors.

(b) Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, each director shall serve until his or her successor is duly elected and qualified or until his or her earlier death, resignation or removal.

(c) Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

Section 5.3 Vacancies and Newly Created Directorships. Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors, and except as otherwise provided in the DGCL, vacancies occurring on the Board of Directors for any reason and newly created directorships resulting from an increase in the authorized number of directors may be filled only by vote of a majority of the remaining members of the Board of Directors, although less than a quorum, or by a sole remaining director, at any meeting of the Board of Directors. A person so elected by the Board of Directors to fill a vacancy or newly created directorship shall hold office until the next election of directors and until his or her successor shall be duly elected and qualified.

ARTICLE VI

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors of the Corporation is expressly authorized to adopt, amend or repeal the Bylaws of the Corporation.

ARTICLE VII

Section 7.1 No Action by Written Consent of Stockholders. Except as otherwise expressly provided by the terms of any series of Preferred Stock permitting the holders of such series of Preferred Stock to act by written consent, any action required or permitted to be taken by stockholders of the Corporation must be effected at a duly called annual or special meeting of the stockholders and may not be effected by written consent in lieu of a meeting.

Section 7.2 Special Meetings. Except as otherwise expressly provided by the terms of any series of Preferred Stock permitting the holders of such series of Preferred Stock to call a special meeting of the holders of such series, special Special meetings of stockholders of the Corporation (i) may be called only by the Board of Directors, the chairperson of the Board of Directors, the chief executive officer or the president (in the absence of a chief executive officer), and the ability of the stockholders to call a special meeting is hereby specifically denied. The Board of Directors may cancel, postpone or reschedule any previously scheduled special meeting at any time, before or after the notice for such meeting has been sent to the stockholders at any time and for any purpose or purposes as shall be stated in the notice of the meeting, and (ii) shall be called by the secretary upon the written request of one or more stockholders holding shares in the aggregate entitled to cast not less than 20% of the votes at the special meeting, subject to and in compliance with this Article VII and the Bylaws of the Corporation.

Section 7.3 Advance Notice. Advance notice of stockholder nominations for the election of directors and of business to be brought by stockholders before any meeting of the stockholders of the Corporation shall be given in the manner provided in the Bylaws of the Corporation.

ARTICLE VIII

Section 8.1 Limitation of Personal Liability. To the fullest extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. If the DGCL is amended to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the DGCL, as so amended.

Section 8.2 Indemnification.

The Corporation shall indemnify, to the fullest extent permitted by applicable law, any director or officer of the Corporation who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding") by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another Corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding. The Corporation shall be required to indemnify a person in connection with a Proceeding initiated by such person only if the Proceeding was authorized by the Board.

The Corporation shall have the power to indemnify, to the extent permitted by the DGCL, as it presently exists or may hereafter be amended from time to time, any employee or agent of the Corporation who was or is a party or is threatened to be made a party to any Proceeding by reason of the fact that he or she is or was a director, officer, employee or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, including service with respect to employee benefit plans, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with any such Proceeding.

Any repeal or amendment of this Article VIII by the stockholders of the Corporation or by changes in law, or the adoption of any other provision of this Certificate of Incorporation inconsistent with this Article VIII will, unless otherwise required by law, be prospective only (except to the extent such amendment or change in law permits the Corporation to further limit or eliminate the liability of directors) and shall not adversely affect any right or protection of a director of the Corporation existing at the time of such repeal or amendment or adoption of such inconsistent provision with respect to acts or omissions occurring prior to such repeal or amendment or adoption of such inconsistent provision.

ARTICLE IX

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation (including any rights, preferences or other designations of Preferred Stock), in the manner now or hereafter prescribed by this Certificate of Incorporation and the DGCL; and all rights, preferences and privileges herein conferred upon stockholders by and pursuant to this Certificate of Incorporation in its present form or as hereafter amended are granted subject to the right reserved in this Article IX. Notwithstanding any other provision of this Certificate of Incorporation, and in addition to any other vote that may be required by law or the terms of any series of Preferred Stock, the affirmative vote of the holders of at least 66 2/3% of the voting power of all then outstanding shares of capital stock of the Corporation entitled to vote generally in the election of directors, voting together as a single class, shall be required to amend, alter or repeal, or adopt any provision as part of this Certificate of Incorporation inconsistent with the purpose and intent of, Article VI, Article VII or this Article IX (including, without limitation, any such Article as renumbered as a result of any amendment, alteration, change, repeal or adoption of any other Article).

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IN WITNESS WHEREOF, Resonant Inc. has caused this Restated Certificate of Incorporation to be signed by the Chief Executive Officer of the Corporation on this 3rd[•] day of June[•], 2014.20[•].

By:

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ANNEX C
FULL TEXT OF THE
AMENDED AND RESTATED BYLAWS OF RESONANT INC.
AMENDED AND RESTATED BYLAWS
OF
RESONANT INC.
(as amended and restated on [•])

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AMENDED AND RESTATED BYLAWS
OF
RESONANT INC.

ARTICLE I - CORPORATE OFFICES

Section 1.1 REGISTERED OFFICE

The registered office of Resonant Inc. shall be fixed in the corporation's certificate of incorporation. References in these bylaws to the certificate of incorporation shall mean the certificate of incorporation of the corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock.

Section 1.2 OTHER OFFICES

The corporation's board of directors may at any time establish other offices at any place or places where the corporation is qualified to do business.

ARTICLE II - MEETINGS OF STOCKHOLDERS

Section 2.1 PLACE OF MEETINGS

Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the board of directors. The board of directors may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the General Corporation Law of the State of Delaware (the "DGCL"). In the absence of any such designation or determination, stockholders' meetings shall be held at the corporation's principal executive office.

Section 2.2 ANNUAL MEETING

The annual meeting of stockholders shall be held on such date, at such time, and at such place (if any) within or without the State of Delaware as shall be designated from time to time by the board of directors and stated in the corporation's notice of the meeting. At the annual meeting, directors shall be elected and any other proper business may be transacted.

Section 2.3 SPECIAL MEETING

(a) A special meeting of the stockholders, other than those required by statute, may be called at any time by (A) the board of directors, (B) the chairperson of the board of

directors, (C) the chief executive officer or (D) the president (in the absence of a chief executive officer) and shall be called by the secretary upon the written request of one or more stockholders holding shares in the aggregate entitled to cast not less than 20% of the votes at the special meeting (the "Requisite Percentage"), subject to and in compliance with Article VII of the certificate of incorporation, or any successor provision thereto, and this Section 2.3.

(i) In order for a special meeting to be called upon stockholder request ("Stockholder Requested Special Meeting"), one or more requests for a special meeting (each, a "Special Meeting Request" and, collectively, the "Special Meeting Requests"), must be signed by Proposing Persons (as defined below) that have a combined Net Long Beneficial Ownership (as defined below) of at least the Requisite Percentage. In determining whether a Stockholder Requested Special Meeting has been properly requested by Proposing Persons that have a combined Net Long Beneficial Ownership of at least the Requisite Percentage, multiple Special Meeting Requests delivered to the secretary will be considered together if (i) each Special Meeting Request generally identifies the same purpose or purposes of the Stockholder Requested Special Meeting and generally the same matters proposed to be acted on at such meeting (in each case as determined in good faith by the board of directors), and (ii) such Special Meeting Requests have been dated and delivered to the secretary within 30 days of the earliest dated Special Meeting Request. Additionally, the Special Meeting Request(s) shall provide in reasonable detail, the following:

(1) As to each Proposing Person, (A) the name and address of such Proposing Person (including, if applicable, the name and address as they appear on the corporation's books), (B) the class and number of shares of the corporation which are owned beneficially and/or of record by such Proposing Person (with reasonable evidence of such ownership attached), except that such Proposing Person shall be deemed for such purpose to beneficially own any shares of any class or series of capital stock of the corporation as to which such Proposing Person has the right to acquire (whether such right is exercisable immediately or only after the passage of time or the fulfillment of a condition or both), (C) a representation that such Proposing Person intends to hold at least the outstanding shares of the corporation described in the immediately preceding clause (B) through the date of the Stockholder Requested Special Meeting, and (D) an acknowledgement by the Proposing Person that any reduction in such Proposing Person's Net Long Beneficial Ownership with respect to which a Special Meeting Request relates following the delivery of such Special Meeting Request to the secretary shall constitute a revocation of such Special Meeting Request to the extent of such reduction (provided that the change of any right to acquire capital stock into such capital stock will not be considered a reduction);

(2) As to the purpose or purposes of the Stockholder Requested Special Meeting, a reasonably brief statement of the purpose or purposes of the Stockholder Requested Special Meeting, the matter(s) proposed to be acted on at the Stockholder Requested Special Meeting and the reasons for conducting such

business at the Stockholder Requested Special Meeting, and the text of any proposal or business to be considered at the Stockholder Requested Special Meeting (including the text of any resolutions proposed to be considered and, in the event that such business includes a proposal to amend the bylaws, the language of the proposed amendment); and

(3) To the extent not duplicative of the information called for by Section 2.3, the information as would be required by Section 2.4 of these bylaws, including, without limitation, the information regarding any material interest of the Proposing Person in the matter(s) proposed to be acted on at the Stockholder Requested Special Meeting, all agreements, arrangements or understandings between or among any Proposing Person and any other record holder or beneficial owner of shares of any class or series of capital stock of the corporation, and all information required by Section 2.4(c) with respect to director nominations, including the information set forth in Section 2.4(b)(ii) and Section 2.4(b)(iii).

(4) For purposes of this Section 2.3, the following terms shall have the following meanings:

“Proposing Person” shall mean (A) each stockholder that is a beneficial owner or record owner that signs a Special Meeting Request pursuant to Section 2.3(a)(i), (B) the beneficial owner or beneficial owners, if different, on whose behalf such Special Meeting Request is made, and (C) any other person with whom such stockholder or such beneficial owner (or any of their respective associates or other participants in such solicitation) is acting. For clarity, a stockholder may act as a Proposing Person under a voting arrangement or agreement or a proxy from another person which affords the Proposing Person the right to vote or direct the vote of shares of common stock of the corporation held beneficially or of record by such other person.

“Net Long Beneficial Ownership” shall mean those shares of issued and outstanding common stock of the corporation as to which the stockholder or Proposing Person, as applicable, possesses the power to vote or direct the voting. The number of shares calculated in accordance with the immediately preceding clause shall not include any derivative security, including but not limited to puts, calls, options, warrants, convertible securities, or other rights or obligations to buy or sell securities.

(ii) Notwithstanding anything to the contrary in this Section 2.3:

(1) The secretary shall not accept, and shall consider ineffective, a Special Meeting Request if (A) such Special Meeting Request does not comply with Article VII of the certificate of incorporation, these bylaws, or relates to an item of business that is not a proper subject for stockholder action under applicable law, (B) the Special Meeting Request is received by the corporation during the period commencing 60 days prior to the first anniversary

of the date of the immediately preceding annual meeting of stockholders and ending on the date of the final adjournment of the next annual meeting of stockholders, (C) an identical or substantially similar item (a "Similar Item") to that included in the Special Meeting Request was presented at any meeting of stockholders held within one year prior to receipt by the corporation of such Special Meeting Request, (D) a Similar Item is already included in the corporation's notice as an item of business to be brought before a meeting of the stockholders that has been called but not yet held, or (E) such Special Meeting Request was made in a manner that involved a violation of Regulation 14A under the Exchange Act, or other applicable law. A Similar Item will not include the proposal for an election of one or more directors at an annual meeting of the stockholders.

(2) Business transacted at any Stockholder Requested Special Meeting shall be limited to the purpose stated in the valid Special Meeting Request: provided however, that nothing herein shall prohibit the board of directors from submitting matters to the stockholders at any Stockholder Requested Special Meeting or other shareholders submitting nominations under Section 2.4(c).

(3) Any Proposing Person may revoke a Special Meeting Request by written revocation delivered to, or mailed and received by, the secretary at any time prior to the date of the Stockholder Requested Special Meeting. In the event any revocation(s) are received by the secretary after the secretary's receipt of a valid Special Meeting Request(s) from the holders of the Requisite Percentage of stockholders or any Special Meeting Request is deemed to be revoked as a result of Section 2.3(a)(i)(1), and as a result of such revocation(s), there no longer are valid unrevoked Special Meeting Request(s) from the Requisite Percentage of stockholders to call a special meeting, the board of directors shall have the discretion to determine whether or not to proceed with the Stockholder Requested Special Meeting.

(4) Notwithstanding anything in these bylaws to the contrary, the secretary shall not be required to call a special meeting except in accordance with Article VII of the certificate of incorporation and this Section 2.3. In addition to the requirements of this Section 2.3, each Proposing Person shall comply with all requirements of applicable law, including all requirements of the Exchange Act, with respect to any Special Meeting Request.

(iii) In connection with a Stockholder Requested Special Meeting called in accordance with this Section 2.3, each Proposing Person that signed and delivered a Special Meeting Request shall further update and supplement the information previously provided to the corporation in connection with such request, if necessary, so that the information provided or required to be provided in such request pursuant to this Section 2.3 shall be true and correct as of the record date for notice of the Stockholder Requested

Special Meeting and as of the date that is ten (10) business days prior to the Stockholder Requested Special Meeting or any adjournment or postponement thereof. Such update and supplement shall be delivered to, or mailed and received by, the secretary at the principal executive offices of the corporation not later than five (5) business days after the record date for notice of the special meeting (in the case of the update and supplement required to be made as of such record date), and not later than eight (8) business days prior to the date for the special meeting or any adjournment or postponement thereof. As used herein, the term “business day” shall mean any day that is not a Saturday or Sunday or a day on which banks in the city of the corporation’s principal place of business are required or permitted to close.

(iv)The secretary shall cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 2.5 and Article VII of these bylaws, that a Stockholder Requested Special Meeting will be held not more than 60 days after receipt of a Special Meeting Request properly made in accordance with Article VII of the certificate of incorporation and these bylaws.

(b)The notice of a special meeting shall include the purpose for which the meeting is called. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting by or at the direction of the board of directors, the chairperson of the board of directors, the chief executive officer, the president (in the absence of a chief executive officer), or the secretary upon the written request of the Requisite Percentage of the corporation’s stockholders pursuant to this Section 2.3. Any special meeting of stockholders, including any Stockholder Requested Special Meeting, shall be held at such date and time as may be fixed by the board of directors in accordance with these bylaws and in compliance with applicable law.

Section 2.4ADVANCE NOTICE PROCEDURES

(a)Advance Notice of Stockholder Business. At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting, business must be brought: (A) pursuant to the corporation’s proxy materials with respect to such meeting, (B) by or at the direction of the board of directors, or (C) by a stockholder of the corporation who (1) is a stockholder of record at the time of the giving of the notice required by this Section 2.4(a) and on the record date for the determination of stockholders entitled to vote at the annual meeting and (2) has timely complied in proper written form with the notice procedures set forth in this Section 2.4(a). In addition, for business to be properly brought before an annual meeting by a stockholder, such business must be a proper matter for stockholder action pursuant to these bylaws and applicable law. Except for proposals properly made in accordance with Rule 14a-8 under the Securities and Exchange Act of 1934, and the rules and regulations thereunder (as so amended and inclusive of such rules and regulations), and included in the notice of meeting given by or at the direction of the board of directors, for the avoidance of doubt, clause (C) above shall be the exclusive means for a stockholder to bring business before an annual meeting of stockholders.

(i) To comply with clause (C) of Section 2.4(a) above, a stockholder's notice must set forth all information required under this Section 2.4(a) and must be timely received by the secretary of the corporation. To be timely, a stockholder's notice must be received by the secretary at the principal executive offices of the corporation not later than the 45th day nor earlier than the 75th day before the one-year anniversary of the date on which the corporation first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the preceding year's annual meeting; provided, however, that in the event that no annual meeting was held in the previous year or if the date of the annual meeting is advanced by more than 30 days prior to or delayed by more than 60 days after the one-year anniversary of the date of the previous year's annual meeting, then, for notice by the stockholder to be timely, it must be so received by the secretary not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of (i) the 90th day prior to such annual meeting, or (ii) the tenth day following the day on which Public Announcement (as defined below) of the date of such annual meeting is first made. In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice as described in this Section 2.4(a)(i). "Public Announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or any successor thereto (the "1934 Act").

(ii) A stockholder's notice to the secretary must set forth as to each matter of business the stockholder intends to bring before the annual meeting: (1) a brief description of the business intended to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (2) the name and address, as they appear on the corporation's books, of the stockholder proposing such business and any Stockholder Associated Person (as defined below), (3) the class and number of shares of the corporation that are held of record or are beneficially owned by the stockholder or any Stockholder Associated Person and any derivative positions held or beneficially held by the stockholder or any Stockholder Associated Person, (4) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit from share price changes for, or to increase or decrease the voting power of, such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, (5) any material interest of the stockholder or a Stockholder Associated Person in such business, and (6) a statement whether either such stockholder or any Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of at least the percentage of the corporation's voting shares required under applicable law to carry the proposal (such information provided and statements made as required by clauses (1) through (6), a "Business Solicitation Statement"). In addition, to be in proper written

form, a stockholder's notice to the secretary must be supplemented not later than ten days following the record date for notice of the meeting to disclose the information contained in clauses (3) and (4) above as of the record date for notice of the meeting. For purposes of this Section 2.4, a "Stockholder Associated Person" of any stockholder shall mean (x) any person controlling, directly or indirectly, or acting in concert with, such stockholder, (y) any beneficial owner of shares of stock of the corporation owned of record or beneficially by such stockholder and on whose behalf the proposal or nomination, as the case may be, is being made, or (z) any person controlling, controlled by or under common control with such person referred to in the preceding clauses (x) and (y).

(iii) Without exception, no business shall be conducted at any annual meeting except in accordance with the provisions set forth in this Section 2.4(a) and, if applicable, Section 2.4(b). In addition, business proposed to be brought by a stockholder may not be brought before the annual meeting if such stockholder or a Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Business Solicitation Statement applicable to such business or if the Business Solicitation Statement applicable to such business contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the annual meeting that business was not properly brought before the annual meeting and in accordance with the provisions of this Section 2.4(a), and, if the chairperson should so determine, he or she shall so declare at the annual meeting that any such business not properly brought before the annual meeting shall not be conducted.

(b) Advance Notice of Director Nominations at Annual Meetings. Notwithstanding anything in these bylaws to the contrary, only persons who are nominated in accordance with the procedures set forth in this Section 2.4(b) shall be eligible for election or re-election as directors at an annual meeting of stockholders. Nominations of persons for election or re-election to the board of directors of the corporation shall be made at an annual meeting of stockholders only (A) by or at the direction of the board of directors or (B) by a stockholder of the corporation who (1) was a stockholder of record at the time of the giving of the notice required by this Section 2.4(b) and on the record date for the determination of stockholders entitled to vote at the annual meeting and (2) has complied with the notice procedures set forth in this Section 2.4(b). In addition to any other applicable requirements, for a nomination to be made by a stockholder, the stockholder must have given timely notice thereof in proper written form to the secretary of the corporation.

(i) To comply with clause (B) of Section 2.4(b) above, a nomination to be made by a stockholder must set forth all information required under this Section 2.4(b) and must be received by the secretary of the corporation at the principal executive offices of the corporation at the time set forth in, and in accordance with, the final three sentences of Section 2.4(a)(i) above.

(ii) To be in proper written form, such stockholder's notice to the secretary must set forth:

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(1) as to each person (a “nominee”) whom the stockholder proposes to nominate for election or re-election as a director: (A) the name, age, business address and residence address of the nominee, (B) the principal occupation or employment of the nominee, (C) the class and number of shares of the corporation that are held of record or are beneficially owned by the nominee and any derivative positions held or beneficially held by the nominee, (D) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of the nominee with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit of share price changes for, or to increase or decrease the voting power of the nominee, (E) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, (F) a written statement executed by the nominee acknowledging that as a director of the corporation, the nominee will owe a fiduciary duty under Delaware law with respect to the corporation and its stockholders, and (G) any other information relating to the nominee that would be required to be disclosed about such nominee if proxies were being solicited for the election or re-election of the nominee as a director, or that is otherwise required, in each case pursuant to Regulation 14A under the 1934 Act (including without limitation the nominee’s written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected or re-elected, as the case may be); and

(2) as to such stockholder giving notice, (A) the information required to be provided pursuant to clauses (2) through (5) of Section 2.4(a)(ii) above, and the supplement referenced in the second sentence of Section 2.4(a)(ii) above (except that the references to “business” in such clauses shall instead refer to nominations of directors for purposes of this paragraph), and (B) a statement whether either such stockholder or Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of a number of the corporation’s voting shares reasonably believed by such stockholder or Stockholder Associated Person to be necessary to elect or re-elect such nominee(s) (such information provided and statements made as required by clauses (A) and (B) above, a “Nominee Solicitation Statement”).

(iii) At the request of the board of directors, any person nominated by a stockholder for election or re-election as a director must furnish to the secretary of the corporation (1) that information required to be set forth in the stockholder’s notice of nomination of such person as a director as of a date subsequent to the date on which the notice of such person’s nomination was given and (2) such other information as may reasonably be required by the corporation to determine the eligibility of such proposed

nominee to serve as an independent director or audit committee financial expert of the corporation under applicable law, securities exchange rule or regulation, or any publicly-disclosed corporate governance guideline or committee charter of the corporation and (3) that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such nominee; in the absence of the furnishing of such information if requested, such stockholder's nomination shall not be considered in proper form pursuant to this Section 2.4(b).

(iv) Without exception, no person shall be eligible for election or re-election as a director of the corporation at an annual meeting of stockholders unless nominated in accordance with the provisions set forth in this Section 2.4(b). In addition, a nominee shall not be eligible for election or re-election at an annual meeting if a stockholder or Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Nominee Solicitation Statement applicable to such nominee or if the Nominee Solicitation Statement applicable to such nominee contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the annual meeting that a nomination was not made in accordance with the provisions prescribed by these bylaws, and if the chairperson should so determine, he or she shall so declare at the annual meeting, and the defective nomination shall be disregarded.

(c) Advance Notice of Director Nominations for Special Meetings.

(i) For a special meeting of stockholders at which directors are to be elected or re-elected, nominations of persons for election or re-election to the board of directors shall be made only (1) by or at the direction of the board of directors or (2) by any stockholder of the corporation who (A) is a stockholder of record at the time of the giving of the notice required by this Section 2.4(c) and on the record date for the determination of stockholders entitled to vote at the special meeting and (B) delivers a timely written notice of the nomination to the secretary of the corporation that includes the information set forth in Section 2.4(b)(ii) and Section 2.4(b)(iii) above. To be timely, such notice must be received by the secretary at the principal executive offices of the corporation not later than the close of business on the later of the 90th day prior to such special meeting or the tenth day following the day on which Public Announcement is first made of the date of the special meeting and of the nominees proposed by the board of directors to be elected or re-elected at such meeting. A person shall not be eligible for election or re-election as a director at a special meeting unless the person is nominated (i) by or at the direction of the board of directors or (ii) by a stockholder in accordance with the notice procedures set forth in this Section 2.4(c). In addition, a nominee shall not be eligible for election or re-election if a stockholder or Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Nominee Solicitation Statement applicable to such nominee or if the Nominee Solicitation Statement applicable to such nominee contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading.

(ii)The chairperson of the special meeting shall, if the facts warrant, determine and declare at the special meeting that a nomination or business was not made in accordance with the procedures prescribed by these bylaws, and if the chairperson should so determine, he or she shall so declare at the meeting, and the defective nomination or business shall be disregarded.

(d)Other Requirements and Rights. In addition to the foregoing provisions of this Section 2.4, a stockholder must also comply with all applicable requirements of state law and of the 1934 Act and the rules and regulations thereunder with respect to the matters set forth in this Section 2.4. Nothing in this Section 2.4 shall be deemed to affect any rights of:

(i)a stockholder to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 (or any successor provision) under the 1934 Act; or

(ii)the corporation to omit a proposal from the corporation's proxy statement pursuant to Rule 14a-8 (or any successor provision) under the 1934 Act.

Section 2.5NOTICE OF STOCKHOLDERS' MEETINGS

Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Except as otherwise provided in the DGCL, the certificate of incorporation or these bylaws, the written notice of any meeting of stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting.

Section 2.6QUORUM

The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. Where a separate vote by a class or series or classes or series is required, a majority of the outstanding shares of such class or series or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter, except as otherwise provided by law, the certificate of incorporation or these bylaws.

If a quorum is not present or represented at any meeting of the stockholders, then either (i) the chairperson of the meeting, or (ii) the stockholders entitled to vote at the meeting, present in person or represented by proxy, shall have power to adjourn the meeting from time to time,

without notice other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.

Section 2.7ADJOURNED MEETING; NOTICE

When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for stockholders entitled to vote is fixed for the adjourned meeting, the board of directors shall fix a new record date for notice of such adjourned meeting in accordance with Section 213(a) of the DGCL and Section 2.11 of these bylaws, and shall give notice of the adjourned meeting to each stockholder of record entitled to vote at such adjourned meeting as of the record date fixed for notice of such adjourned meeting.

Section 2.8CONDUCT OF BUSINESS

The chairperson of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of business. The chairperson of any meeting of stockholders shall be designated by the board of directors; in the absence of such designation, the chairperson of the board, if any, the chief executive officer (in the absence of the chairperson) or the president (in the absence of the chairperson of the board and the chief executive officer), or in their absence any other executive officer of the corporation, shall serve as chairperson of the stockholder meeting.

Section 2.9VOTING

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as may be otherwise provided in the certificate of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder.

Except as otherwise required by law, the certificate of incorporation or these bylaws, in all matters other than the election of directors, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders.

Except as otherwise required by law, the certificate of incorporation or these bylaws, directors shall be elected by a plurality of the

voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Where a separate vote by a class or series or classes or series is required, in all matters other than the election of directors, the affirmative vote of the majority of shares of such class or series or classes or series present in person or represented by proxy at the meeting shall be the act of such class or series or classes or series, except as otherwise provided by law, the certificate of incorporation or these bylaws.

Section 2.10 STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Subject to the rights of the holders of the shares of any series of Preferred Stock or any other class of stock or series thereof that have been expressly granted the right to take action by written consent, any action required or permitted to be taken by the stockholders of the corporation must be effected at a duly called annual or special meeting of stockholders of the corporation and may not be effected by any consent in writing by such stockholders.

Section 2.11 RECORD DATES

In order that the corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If the board of directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the board of directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination.

If no record date is fixed by the board of directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders shall be at the close of business on the day immediately preceding the day on which notice is given, or, if notice is waived, at the close of business on the day immediately preceding the day on which the meeting is held.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance with the provisions of Section 213 of the DGCL and this Section 2.11 at the adjourned meeting.

In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which

record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

Section 2.12 PROXIES

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy authorized by an instrument in writing or by a transmission permitted by law filed in accordance with the procedure established for the meeting, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL. A written proxy may be in the form of a telegram, cablegram, or other means of electronic transmission which sets forth or is submitted with information from which it can be determined that the telegram, cablegram, or other means of electronic transmission was authorized by the person.

Section 2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE

The officer who has charge of the stock ledger of the corporation shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; provided, however, if the record date for determining the stockholders entitled to vote is less than 10 days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date. The stockholder list shall be arranged in alphabetical order and shall show the address of each stockholder and the number of shares registered in the name of each stockholder. The corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least 10 days prior to the meeting (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the corporation's principal place of business. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Such list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

Section 2.14 INSPECTORS OF ELECTION

Before any meeting of stockholders, the board of directors shall appoint an inspector or inspectors of election to act at the meeting or its adjournment. The number of inspectors shall be

either one (1) or three (3). If any person appointed as inspector fails to appear or fails or refuses to act, then the chairperson of the meeting may, and upon the request of any stockholder or a stockholder's proxy shall, appoint a person to fill that vacancy.

Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath to execute faithfully the duties of inspector with strict impartiality and according to the best of his or her ability. The inspector or inspectors so appointed and designated shall (i) ascertain the number of shares of capital stock of the corporation outstanding and the voting power of each share, (ii) determine the shares of capital stock of the corporation represented at the meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors, (v) certify their determination of the number of shares of capital stock of the corporation represented at the meeting and such inspector or inspectors' count of all votes and ballots, (vi) determine when the polls shall close; (vii) determine the result; and (viii) do any other acts that may be proper to conduct the election or vote with fairness to all stockholders.

In determining the validity and counting of proxies and ballots cast at any meeting of stockholders of the corporation, the inspector or inspectors may consider such information as is permitted by applicable law. If there are three (3) inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspectors of election is prima facie evidence of the facts stated therein.

ARTICLE III - DIRECTORS

Section 3.1 POWERS

The business and affairs of the corporation shall be managed by or under the direction of the board of directors, except as may be otherwise provided in the DGCL or the certificate of incorporation.

Section 3.2 NUMBER OF DIRECTORS

The board of directors shall consist of one or more members, each of whom shall be a natural person. Unless the certificate of incorporation fixes the number of directors, the number of directors shall be determined from time to time solely by resolution of the board of directors. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

Section 3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS

Except as provided in Section 3.4 of these bylaws, each director, including a director elected to fill a vacancy, shall hold office until the expiration of the term for which elected and until such director's successor is elected and qualified or until such director's earlier death,

resignation or removal. Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws. The certificate of incorporation or these bylaws may prescribe other qualifications for directors.

Section 3.4 RESIGNATION AND VACANCIES

Any director may resign at any time upon notice given in writing or by electronic transmission to the corporation; provided, however, that if such notice is given by electronic transmission, such electronic transmission must either set forth or be submitted with information from which it can be determined that the electronic transmission was authorized by the director. A resignation is effective when the resignation is delivered unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events. Acceptance of such resignation shall not be necessary to make it effective. A resignation which is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable. Unless otherwise provided in the certificate of incorporation or these bylaws, when one or more directors resign from the board of directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective.

Unless otherwise provided in the certificate of incorporation or these bylaws, vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class shall be filled only by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. If the directors are divided into classes, a person so elected by the directors then in office to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board of directors (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the voting stock at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the DGCL as far as applicable.

Section 3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

The board of directors may hold meetings, both regular and special, either within or outside the State of Delaware. Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the board of directors, or any committee designated by the board of directors, may participate in a meeting of the board of directors, or any committee, by means of conference telephone or

other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

Section 3.6REGULAR MEETINGS

Regular meetings of the board of directors may be held without notice at such time and at such place as shall from time to time be determined by the board of directors.

Section 3.7SPECIAL MEETINGS; NOTICE

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairperson of the board of directors, the chief executive officer, the president, the secretary or a majority of the authorized number of directors, at such times and places as he or she or they shall designate.

Notice of the time and place of special meetings shall be:

(a)delivered personally by hand, by courier or by telephone;

(b)sent by United States first-class mail, postage prepaid;

(c)sent by facsimile; or

(d)sent by electronic mail,

directed to each director at that director's address, telephone number, facsimile number or electronic mail address, as the case may be, as shown on the corporation's records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile or (iii) sent by electronic mail, it shall be delivered or sent at least 24 hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United States mail at least four days before the time of the holding of the meeting. Any oral notice may be communicated to the director. The notice need not specify the place of the meeting (if the meeting is to be held at the corporation's principal executive office) nor the purpose of the meeting.

Section 3.8QUORUM; VOTING

At all meetings of the board of directors, a majority of the total authorized number of directors shall constitute a quorum for the transaction of business. If a quorum is not present at any meeting of the board of directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present. A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

The vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the board of directors, except as may be otherwise specifically provided by statute, the certificate of incorporation or these bylaws.

If the certificate of incorporation provides that one or more directors shall have more or less than one vote per director on any matter, every reference in these bylaws to a majority or other proportion of the directors shall refer to a majority or other proportion of the votes of the directors.

Section 3.9 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the board of directors, or of any committee thereof, may be taken without a meeting if all members of the board of directors or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board of directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 3.10 FEES AND COMPENSATION OF DIRECTORS

Unless otherwise restricted by the certificate of incorporation or these bylaws, the board of directors shall have the authority to fix the compensation of directors.

Section 3.11 REMOVAL OF DIRECTORS

Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors and subject to any limitation imposed by law, any individual director or directors may be removed with or without cause by the affirmative vote of the holders of a majority in voting power of the stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

ARTICLE IV - COMMITTEES

Section 4.1 COMMITTEES OF DIRECTORS

The board of directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may

unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors or in these bylaws, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) approve or adopt, or recommend to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaw of the corporation.

Section 4.2 COMMITTEE MINUTES

Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

Section 4.3 MEETINGS AND ACTION OF COMMITTEES

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of:

(a) Section 3.5 (place of meetings and meetings by telephone);

(b) Section 3.6 (regular meetings);

(c) Section 3.7 (special meetings; notice);

(d) Section 3.8 (quorum; voting);

(e) Section 3.9 (action without a meeting); and

(f) Section 7.5 (waiver of notice)

with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members. However: (i) the time of regular meetings of committees may be determined by resolution of the committee; (ii) special meetings of committees may also be called by resolution of the committee; and (iii) notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the governance of any committee not inconsistent with the provisions of these bylaws.

Any provision in the certificate of incorporation providing that one or more directors shall have more or less than one vote per director on any matter shall apply to voting in any committee or subcommittee, unless otherwise provided in the certificate of incorporation or these bylaws.

Section 4.4SUBCOMMITTEES

Unless otherwise provided in the certificate of incorporation, these bylaws or the resolutions of the board of directors designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

ARTICLE V - OFFICERS

Section 5.1OFFICERS

The officers of the corporation shall be a president and a secretary. The corporation may also have, at the discretion of the board of directors, a chairperson of the board of directors, a vice chairperson of the board of directors, a chief executive officer, a chief financial officer or treasurer, one or more vice presidents, one or more assistant vice presidents, one or more assistant treasurers, one or more assistant secretaries, and any such other officers as may be appointed in accordance with the provisions of these bylaws. Any number of offices may be held by the same person.

Section 5.2APPOINTMENT OF OFFICERS

The board of directors shall appoint the officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws, subject to the rights, if any, of an officer under any contract of employment. A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in this Section 5.2 for the regular election to such office.

Section 5.3SUBORDINATE OFFICERS

The board of directors may appoint, or empower the chief executive officer or, in the absence of a chief executive officer, the president, to appoint, such other officers and agents as the business of the corporation may require. Each of such officers and agents shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

Section 5.4REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the board of directors at any regular or special meeting of the board of directors or, except in the case of an officer chosen by the board of directors, by any officer upon whom such power of removal may be conferred by the board of directors.

Any officer may resign at any time by giving written or electronic notice to the corporation; provided, however, that if such notice is given by electronic transmission, such electronic transmission must either set forth or be submitted with information from which it can

be determined that the electronic transmission was authorized by the officer. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

Section 5.5 VACANCIES IN OFFICES

Any vacancy occurring in any office of the corporation shall be filled by the board of directors or as provided in Section 5.3.

Section 5.6 REPRESENTATION OF SHARES OF OTHER CORPORATIONS

The chairperson of the board of directors, the chief executive officer, the president, any vice president, the treasurer, the secretary or assistant secretary of this corporation, or any other person authorized by the board of directors or the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

Section 5.7 AUTHORITY AND DUTIES OF OFFICERS

All officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the board of directors and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the board of directors.

Section 5.8 THE CHAIRPERSON OF THE BOARD

The chairperson of the board shall have the powers and duties customarily and usually associated with the office of the chairperson of the board. The chairperson of the board shall preside at meetings of the stockholders and of the board of directors.

Section 5.9 THE VICE CHAIRPERSON OF THE BOARD

The vice chairperson of the board shall have the powers and duties customarily and usually associated with the office of the vice chairperson of the board. In the case of absence or disability of the chairperson of the board, the vice chairperson of the board shall perform the duties and exercise the powers of the chairperson of the board.

Section 5.10 THE CHIEF EXECUTIVE OFFICER

The chief executive officer shall have, subject to the supervision, direction and control of the board of directors, ultimate authority for decisions relating to the supervision, direction and management of the affairs and the business of the corporation customarily and usually associated

with the position of chief executive officer, including, without limitation, all powers necessary to direct and control the organizational and reporting relationships within the corporation. If at any time the office of the chairperson and vice chairperson of the board shall not be filled, or in the event of the temporary absence or disability of the chairperson of the board and the vice chairperson of the board, the chief executive officer shall perform the duties and exercise the powers of the chairperson of the board unless otherwise determined by the board of directors.

Section 5.11 THE PRESIDENT

The president shall have, subject to the supervision, direction and control of the board of directors, the general powers and duties of supervision, direction and management of the affairs and business of the corporation customarily and usually associated with the position of president. The president shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chairperson of the board or the chief executive officer. In the event of the absence or disability of the chief executive officer, the president shall perform the duties and exercise the powers of the chief executive officer unless otherwise determined by the board of directors.

Section 5.12 THE VICE PRESIDENTS AND ASSISTANT VICE PRESIDENTS

Each vice president and assistant vice president shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chairperson of the board, the chief executive officer or the president.

Section 5.13 THE SECRETARY AND ASSISTANT SECRETARIES

(a) The secretary shall attend meetings of the board of directors and meetings of the stockholders and record all votes and minutes of all such proceedings in a book or books kept for such purpose. The secretary shall have all such further powers and duties as are customarily and usually associated with the position of secretary or as may from time to time be assigned to him or her by the board of directors, the chairperson of the board, the chief executive officer or the president.

(b) Each assistant secretary shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chairperson of the board, the chief executive officer, the president or the secretary. In the event of the absence, inability or refusal to act of the secretary, the assistant secretary (or if there shall be more than one, the assistant secretaries in the order determined by the board of directors) shall perform the duties and exercise the powers of the secretary.

Section 5.14 THE CHIEF FINANCIAL OFFICER AND ASSISTANT TREASURERS

(a) The chief financial officer shall be the treasurer of the corporation. The chief financial officer shall have custody of the corporation's funds and securities, shall be responsible for maintaining the corporation's accounting records and statements, shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation, and

shall deposit or cause to be deposited moneys or other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the board of directors. The chief financial officer shall also maintain adequate records of all assets, liabilities and transactions of the corporation and shall assure that adequate audits thereof are currently and regularly made. The chief financial officer shall have all such further powers and duties as are customarily and usually associated with the position of chief financial officer, or as may from time to time be assigned to him or her by the board of directors, the chairperson, the chief executive officer or the president.

(b)Each assistant treasurer shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chief executive officer, the president or the chief financial officer. In the event of the absence, inability or refusal to act of the chief financial officer, the assistant treasurer (or if there shall be more than one, the assistant treasurers in the order determined by the board of directors) shall perform the duties and exercise the powers of the chief financial officer.

ARTICLE VI - STOCK

Section 6.1 STOCK CERTIFICATES

The shares of the corporation shall be represented by certificates, provided that the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of the corporation by the chairperson of the board of directors or vice-chairperson of the board of directors, or the president or a vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. The corporation shall not have power to issue a certificate in bearer form.

Section 6.2 SPECIAL DESIGNATION ON CERTIFICATES

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of

stock, a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to this Section 6.2 or Sections 156, 202(a) or 218(a) of the DGCL or with respect to this Section 6.2 a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Except as otherwise expressly provided by law, the rights and obligations of the holders of uncertificated stock and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

Section 6.3 LOST, STOLEN OR DESTROYED CERTIFICATES

Except as provided in this Section 6.3, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

Section 6.4 DIVIDENDS

The board of directors, subject to any restrictions contained in the certificate of incorporation or applicable law, may declare and pay dividends upon the shares of the corporation's capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock, subject to the provisions of the certificate of incorporation. The board of directors may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

Section 6.5 TRANSFER OF STOCK

Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by an attorney duly authorized, and, if such stock is certificated, upon the surrender of a certificate or certificates for a like number of shares, properly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer; provided, however, that such succession, assignment or authority to transfer is not prohibited by the certificate of incorporation, these bylaws, applicable law or contract.

Section 6.6 STOCK TRANSFER AGREEMENTS

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 6.7 REGISTERED STOCKHOLDERS

The corporation:

(a) shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner;

(b) shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares; and

(c) shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII - MANNER OF GIVING NOTICE AND WAIVER

Section 7.1 NOTICE OF STOCKHOLDERS' MEETINGS

Notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the corporation's records. An affidavit of the secretary or an assistant secretary of the corporation or of the transfer agent or other agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

Section 7.2 NOTICE BY ELECTRONIC TRANSMISSION

Without limiting the manner by which notice otherwise may be given effectively to stockholders pursuant to the DGCL, the certificate of incorporation or these bylaws, any notice to stockholders given by the corporation under any provision of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any such consent shall be deemed revoked if: (i) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent; and (ii) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice. However, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

Any notice given pursuant to the preceding paragraph shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and (iv) if by any other form of electronic transmission, when directed to the stockholder.

An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

An “electronic transmission” means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

Section 7.3 NOTICE TO STOCKHOLDERS SHARING AN ADDRESS

Except as otherwise prohibited under the DGCL, without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation under the provisions of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any stockholder who fails to object in writing to the corporation, within 60 days of having been given written notice by the corporation of its intention to send the single notice, shall be deemed to have consented to receiving such single written notice.

Section 7.4 NOTICE TO PERSON WITH WHOM COMMUNICATION IS UNLAWFUL

Whenever notice is required to be given, under the DGCL, the certificate of incorporation or these bylaws, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

Section 7.5 WAIVER OF NOTICE

Whenever notice is required to be given to stockholders, directors or other persons under any provision of the DGCL, the certificate of incorporation or these bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders or the board of directors, as the case may be, need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

ARTICLE VIII - INDEMNIFICATION

Section 8.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN THIRD PARTY PROCEEDINGS

Subject to the other provisions of this Article VIII, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding") (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director of the corporation or an officer of the corporation, or while a director of the corporation or officer of the corporation is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such Proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

Section 8.2 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN ACTIONS BY OR IN THE RIGHT OF THE CORPORATION

Subject to the other provisions of this Article VIII, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that

such person is or was a director or officer of the corporation, or while a director or officer of the corporation is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 8.3SUCCESSFUL DEFENSE

To the extent that a present or former director or officer of the corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described in Section 8.1 or Section 8.2, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Section 8.4INDEMNIFICATION OF OTHERS

Subject to the other provisions of this Article VIII, the corporation shall have power to indemnify its employees and its agents to the extent not prohibited by the DGCL or other applicable law. The board of directors shall have the power to delegate the determination of whether employees or agents shall be indemnified to such person or persons as the board of determines.

Section 8.5ADVANCED PAYMENT OF EXPENSES

Expenses (including attorneys' fees) incurred by an officer or director of the corporation in defending any Proceeding shall be paid by the corporation in advance of the final disposition of such Proceeding upon receipt of a written request therefor (together with documentation reasonably evidencing such expenses) and an undertaking by or on behalf of the person to repay such amounts if it shall ultimately be determined that the person is not entitled to be indemnified under this Article VIII or the DGCL. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the corporation deems reasonably appropriate and shall be subject to the corporation's expense guidelines. The right to advancement of expenses shall not apply to any claim for which indemnity is excluded pursuant to these bylaws, but shall apply to any Proceeding referenced in Section 8.6(b) or Section 8.6(c) prior to a determination that the person is not entitled to be indemnified by the corporation.

Section 8.6LIMITATION ON INDEMNIFICATION

Except as provided in Section 8.3 and subject to the requirements of the DGCL, the corporation shall not be obligated to indemnify any person pursuant to this Article VIII in connection with any Proceeding (or any part of any Proceeding):

(a)for which payment has actually been made to or on behalf of such person under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b)for an accounting or disgorgement of profits pursuant to Section 16(b) of the 1934 Act, or similar provisions of federal, state or local statutory law or common law, if such person is held liable therefor (including pursuant to any settlement arrangements);

(c)for any reimbursement of the corporation by such person of any bonus or other incentive-based or equity-based compensation or of any profits realized by such person from the sale of securities of the corporation, as required in each case under the 1934 Act (including any such reimbursements that arise from an accounting restatement of the corporation pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the "Sarbanes-Oxley Act"), or the payment to the corporation of profits arising from the purchase and sale by such person of securities in violation of Section 306 of the Sarbanes-Oxley Act), if such person is held liable therefor (including pursuant to any settlement arrangements);

(d)initiated by such person against the corporation or its directors, officers, employees, agents or other indemnitees, unless (a) the board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (b) the corporation provides the indemnification, in its sole discretion, pursuant to the powers vested in the corporation under applicable law, (c) otherwise required to be made under Section 8.7 or (d) otherwise required by applicable law; or

(e)if prohibited by applicable law; provided, however, that if any provision or provisions of this Article VIII shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (1) the validity, legality and enforceability of the remaining provisions of this Article VIII (including, without limitation, each portion of any paragraph or clause containing any such provision held to be invalid, illegal or unenforceable, that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (2) to the fullest extent possible, the provisions of this Article VIII (including, without limitation, each such portion of any paragraph or clause containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable.

Section 8.7DETERMINATION; CLAIM

If a claim for indemnification or advancement of expenses under this Article VIII is not paid in full within 90 days after receipt by the corporation of the written request therefor, the

claimant shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of expenses. The corporation shall indemnify such person against any and all expenses that are incurred by such person in connection with any action for indemnification or advancement of expenses from the corporation under this Article VIII, to the extent such person is successful in such action, and to the extent not prohibited by law. In any such suit, the corporation shall, to the fullest extent not prohibited by law, have the burden of proving that the claimant is not entitled to the requested indemnification or advancement of expenses.

Section 8.8NON-EXCLUSIVITY OF RIGHTS

The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VIII shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the certificate of incorporation or any statute, bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advancement of expenses, to the fullest extent not prohibited by the DGCL or other applicable law.

Section 8.9INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under the provisions of the DGCL.

Section 8.10SURVIVAL

The rights to indemnification and advancement of expenses conferred by this Article VIII shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 8.11EFFECT OF REPEAL OR MODIFICATION

Any amendment, alteration or repeal of this Article VIII shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to such amendment, alteration or repeal.

Section 8.12 CERTAIN DEFINITIONS

For purposes of this Article VIII, references to the “corporation” shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article VIII with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. For purposes of this Article VIII, references to “other enterprises” shall include employee benefit plans; references to “fines” shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to “serving at the request of the corporation” shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this Article VIII.

ARTICLE IX - GENERAL MATTERS

Section 9.1 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS

Except as otherwise provided by law, the certificate of incorporation or these bylaws, the board of directors may authorize any officer or officers, or agent or agents, to enter into any contract or execute any document or instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 9.2 FISCAL YEAR

The fiscal year of the corporation shall be fixed by resolution of the board of directors and may be changed by the board of directors.

Section 9.3 SEAL

The corporation may adopt a corporate seal, which shall be adopted and which may be altered by the board of directors. The corporation may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

Section 9.4 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term “person” includes both an entity and a natural person.

ARTICLE X - AMENDMENTS

These bylaws may be adopted, amended or repealed by the stockholders entitled to vote; provided, however, that the affirmative vote of the holders of at least 66 2/3% of the total voting power of outstanding voting securities, voting together as a single class, shall be required for the stockholders of the corporation to alter, amend or repeal, or adopt any bylaw inconsistent with, the following provisions of these bylaws: Article II, Section 3.1, Section 3.2, Section 3.4 and Section 3.11 of Article III, Article VIII and this Article X (including, without limitation, any such Article or Section as renumbered as a result of any amendment, alteration, change, repeal, or adoption of any other Bylaw). The board of directors shall also have the power to adopt, amend or repeal bylaws; provided, however, that a bylaw amendment adopted by stockholders which specifies the votes that shall be necessary for the election of directors shall not be further amended or repealed by the board of directors.

ARTICLE XI - FORUM FOR ADJUDICATION OF DISPUTES

Unless the corporation consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the corporation to the corporation or the corporation’s stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, or (iv) any action asserting a claim governed by the internal affairs doctrine shall be a state or federal court located within the state of Delaware, in all cases subject to the court’s having personal jurisdiction over the indispensable parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the corporation shall be deemed to have notice of and consented to the provisions of this bylaw.

ANNEX D
MARKED COPY OF THE
AMENDED AND RESTATED BYLAWS OF RESONANT INC.
AMENDED AND RESTATED BYLAWS
OF
RESONANT INC.
(initially adopted on January 19, 2012)
(as amended and restated on January 20, 2014 and effective as of the
closing of the corporation's initial public offering[•])

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AMENDED AND RESTATED BYLAWS
OF
RESONANT INC.

ARTICLE I - CORPORATE OFFICES

Section 1.1 REGISTERED OFFICE

The registered office of Resonant Inc. shall be fixed in the corporation's certificate of incorporation. References in these bylaws to the certificate of incorporation shall mean the certificate of incorporation of the corporation, as amended from time to time, including the terms of any certificate of designations of any series of Preferred Stock.

Section 1.2 OTHER OFFICES

The corporation's board of directors may at any time establish other offices at any place or places where the corporation is qualified to do business.

ARTICLE II - MEETINGS OF STOCKHOLDERS

Section 2.1 PLACE OF MEETINGS

Meetings of stockholders shall be held at any place, within or outside the State of Delaware, designated by the board of directors. The board of directors may, in its sole discretion, determine that a meeting of stockholders shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 211(a)(2) of the General Corporation Law of the State of Delaware (the "DGCL"). In the absence of any such designation or determination, stockholders' meetings shall be held at the corporation's principal executive office.

Section 2.2 ANNUAL MEETING

The annual meeting of stockholders shall be held on such date, at such time, and at such place (if any) within or without the State of Delaware as shall be designated from time to time by the board of directors and stated in the corporation's notice of the meeting. At the annual meeting, directors shall be elected and any other proper business may be transacted.

Section 2.3 SPECIAL MEETING

(a) A special meeting of the stockholders, other than those required by statute, may be called at any time only by (A) the board of directors, (B) the chairperson of the board of directors, (C) the chief executive officer or (D) the president (in the absence of a chief executive officer). A special meeting of the stockholders may not be called by any other person or persons. The board of directors may cancel, postpone or reschedule any previously scheduled special meeting at any time, before or after the notice for such meeting has been sent to the stockholders and shall be called by the secretary upon the written request of one or more stockholders holding shares in the aggregate entitled to cast not less than 20% of the votes at the special meeting (the "Requisite Percentage"), subject to and in compliance with Article VII of the certificate of incorporation, or any successor provision thereto, and this Section 2.3.

(i) In order for a special meeting to be called upon stockholder request ("Stockholder Requested Special Meeting"), one or more requests for a special meeting (each, a "Special Meeting Request" and, collectively, the "Special Meeting Requests"), must be signed by Proposing Persons (as defined below) that have a combined Net Long Beneficial Ownership (as defined below) of at least the Requisite Percentage. In determining whether a Stockholder Requested Special Meeting has been properly requested by Proposing Persons that have a combined Net Long Beneficial Ownership of at least the Requisite Percentage, multiple Special Meeting Requests delivered to the secretary will be considered together if (i) each Special Meeting Request generally identifies the same purpose or purposes of the Stockholder Requested Special Meeting and generally the same matters proposed to be acted on at such meeting (in each case as determined in good faith by the board of directors), and (ii) such Special Meeting Requests have been dated and delivered to the secretary within 30 days of the earliest dated Special Meeting Request. Additionally, the Special Meeting Request(s) shall provide in reasonable detail, the following:

(1) As to each Proposing Person, (A) the name and address of such Proposing Person (including, if applicable, the name and address as they appear on the corporation's books), (B) the class and number of shares of the corporation which are owned beneficially and/or of record by such Proposing Person (with reasonable evidence of such ownership attached), except that such Proposing Person shall be deemed for such purpose to beneficially own any shares of any class or series of capital stock of the corporation as to which such Proposing Person has the right to acquire (whether such right is exercisable immediately or only after the passage of time or the fulfillment of a condition or both), (C) a representation that such Proposing Person intends to hold at least the outstanding shares of the corporation described in the immediately preceding clause (B) through the date of the Stockholder Requested Special Meeting, and (D) an acknowledgement by the Proposing Person that any reduction in such Proposing Person's Net Long

Beneficial Ownership with respect to which a Special Meeting Request relates following the delivery of such Special Meeting Request to the secretary shall constitute a revocation of such Special Meeting Request to the extent of such reduction (provided that the change of any right to acquire capital stock into such capital stock will not be considered a reduction);

(2)As to the purpose or purposes of the Stockholder Requested Special Meeting, a reasonably brief statement of the purpose or purposes of the Stockholder Requested Special Meeting, the matter(s) proposed to be acted on at the Stockholder Requested Special Meeting and the reasons for conducting such business at the Stockholder Requested Special Meeting, and the text of any proposal or business to be considered at the Stockholder Requested Special Meeting (including the text of any resolutions proposed to be considered and, in the event that such business includes a proposal to amend the bylaws, the language of the proposed amendment); and

(3)To the extent not duplicative of the information called for by Section 2.3, the information as would be required by Section 2.4 of these bylaws, including, without limitation, the information regarding any material interest of the Proposing Person in the matter(s) proposed to be acted on at the Stockholder Requested Special Meeting, all agreements, arrangements or understandings between or among any Proposing Person and any other record holder or beneficial owner of shares of any class or series of capital stock of the corporation, and all information required by Section 2.4(c) with respect to director nominations, including the information set forth in Section 2.4(b)(ii) and Section 2.4(b)(iii).

(4)For purposes of this Section 2.3, the following terms shall have the following meanings:

“Proposing Person” shall mean (A) each stockholder that is a beneficial owner or record owner that signs a Special Meeting Request pursuant to Section 2.3(a)(i), (B) the beneficial owner or beneficial owners, if different, on whose behalf such Special Meeting Request is made, and (C) any other person with whom such stockholder or such beneficial owner (or any of their respective associates or other participants in such solicitation) is acting. For clarity, a stockholder may act as a Proposing Person under a voting arrangement or agreement or a proxy from another person which affords the Proposing Person the right to vote or direct the vote of shares of common stock of the corporation held beneficially or of record by such other person.

“Net Long Beneficial Ownership” shall mean those shares of issued and outstanding common stock of the corporation as to which the stockholder or Proposing Person, as applicable, possesses the power to vote or direct the voting. The number of shares calculated in accordance with the immediately preceding clause shall not include

any derivative security, including but not limited to puts, calls, options, warrants, convertible securities, or other rights or obligations to buy or sell securities.

(ii) Notwithstanding anything to the contrary in this Section 2.3:

(1) The secretary shall not accept, and shall consider ineffective, a Special Meeting Request if (A) such Special Meeting Request does not comply with Article VII of the certificate of incorporation, these bylaws, or relates to an item of business that is not a proper subject for stockholder action under applicable law, (B) the Special Meeting Request is received by the corporation during the period commencing 60 days prior to the first anniversary of the date of the immediately preceding annual meeting of stockholders and ending on the date of the final adjournment of the next annual meeting of stockholders, (C) an identical or substantially similar item (a "Similar Item") to that included in the Special Meeting Request was presented at any meeting of stockholders held within one year prior to receipt by the corporation of such Special Meeting Request, (D) a Similar Item is already included in the corporation's notice as an item of business to be brought before a meeting of the stockholders that has been called but not yet held, or (E) such Special Meeting Request was made in a manner that involved a violation of Regulation 14A under the Exchange Act, or other applicable law. A Similar Item will not include the proposal for an election of one or more directors at an annual meeting of the stockholders.

(2) Business transacted at any Stockholder Requested Special Meeting shall be limited to the purpose stated in the valid Special Meeting Request; provided however, that nothing herein shall prohibit the board of directors from submitting matters to the stockholders at any Stockholder Requested Special Meeting or other shareholders submitting nominations under Section 2.4(c).

(3) Any Proposing Person may revoke a Special Meeting Request by written revocation delivered to, or mailed and received by, the secretary at any time prior to the date of the Stockholder Requested Special Meeting. In the event any revocation(s) are received by the secretary after the secretary's receipt of a valid Special Meeting Request(s) from the holders of the Requisite Percentage of stockholders or any Special Meeting Request is deemed to be revoked as a result of Section 2.3(a)(i)(1), and as a result of such revocation(s), there no longer are valid unrevoked Special Meeting Request(s) from the Requisite Percentage of stockholders to call a special meeting, the board of directors shall have the discretion to determine whether or not to proceed with the Stockholder Requested Special Meeting.

(4) Notwithstanding anything in these bylaws to the contrary, the secretary shall not be required to call a special meeting except in

accordance with Article VII of the certificate of incorporation and this Section 2.3. In addition to the requirements of this Section 2.3, each Proposing Person shall comply with all requirements of applicable law, including all requirements of the Exchange Act, with respect to any Special Meeting Request.

(iii) In connection with a Stockholder Requested Special Meeting called in accordance with this Section 2.3, each Proposing Person that signed and delivered a Special Meeting Request shall further update and supplement the information previously provided to the corporation in connection with such request, if necessary, so that the information provided or required to be provided in such request pursuant to this Section 2.3 shall be true and correct as of the record date for notice of the Stockholder Requested Special Meeting and as of the date that is ten (10) business days prior to the Stockholder Requested Special Meeting or any adjournment or postponement thereof. Such update and supplement shall be delivered to, or mailed and received by, the secretary at the principal executive offices of the corporation not later than five (5) business days after the record date for notice of the special meeting (in the case of the update and supplement required to be made as of such record date), and not later than eight (8) business days prior to the date for the special meeting or any adjournment or postponement thereof. As used herein, the term "business day" shall mean any day that is not a Saturday or Sunday or a day on which banks in the city of the corporation's principal place of business are required or permitted to close.

(iv) The secretary shall cause notice to be given to the stockholders entitled to vote, in accordance with the provisions of Section 2.5 and Article VII of these bylaws, that a Stockholder Requested Special Meeting will be held not more than 60 days after receipt of a Special Meeting Request properly made in accordance with Article VII of the certificate of incorporation and these bylaws.

(b) The notice of a special meeting shall include the purpose for which the meeting is called. Only such business shall be conducted at a special meeting of stockholders as shall have been brought before the meeting by or at the direction of the board of directors, the chairperson of the board of directors, the chief executive officer or, the president (in the absence of a chief executive officer). Nothing contained in this Section 2.3(b) shall be construed as limiting, fixing or affecting the time when a meeting of stockholders called by action of, or the secretary upon the written request of the Requisite Percentage of the corporation's stockholders pursuant to this Section 2.3. Any special meeting of stockholders, including any Stockholder Requested Special Meeting, shall be held at such date and time as may be fixed by the board of directors may be held in accordance with these bylaws and in compliance with applicable law.

Section 2.4 ADVANCE NOTICE PROCEDURES

(a) Advance Notice of Stockholder Business. At an annual meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before an annual meeting, business must be brought: (A) pursuant to the corporation's proxy materials with respect to such meeting, (B) by or at the direction of the board of directors, or (C) by a stockholder of the corporation who (1) is a stockholder of record at the time of the giving of the notice required by this Section 2.4(a) and on the record date for the determination of stockholders entitled to vote at the annual meeting and (2) has timely complied in proper written form with the notice procedures set forth in this Section 2.4(a). In addition, for business to be properly brought before an annual meeting by a stockholder, such business must be a proper matter for stockholder action pursuant to these bylaws and applicable law. Except for proposals properly made in accordance with Rule 14a-8 under the Securities and Exchange Act of 1934, and the rules and regulations thereunder (as so amended and inclusive of such rules and regulations), and included in the notice of meeting given by or at the direction of the board of directors, for the avoidance of doubt, clause (C) above shall be the exclusive means for a stockholder to bring business before an annual meeting of stockholders.

(i) To comply with clause (C) of Section 2.4(a) above, a stockholder's notice must set forth all information required under this Section 2.4(a) and must be timely received by the secretary of the corporation. To be timely, a stockholder's notice must be received by the secretary at the principal executive offices of the corporation not later than the 45th day nor earlier than the 75th day before the one-year anniversary of the date on which the corporation first mailed its proxy materials or a notice of availability of proxy materials (whichever is earlier) for the preceding year's annual meeting; provided, however, that in the event that no annual meeting was held in the previous year or if the date of the annual meeting is advanced by more than 30 days prior to or delayed by more than 60 days after the one-year anniversary of the date of the previous year's annual meeting, then, for notice by the stockholder to be timely, it must be so received by the secretary not earlier than the close of business on the 120th day prior to such annual meeting and not later than the close of business on the later of (i) the 90th day prior to such annual meeting, or (ii) the tenth day following the day on which Public Announcement (as defined below) of the date of such annual meeting is first made. In no event shall any adjournment or postponement of an annual meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice as described in this Section 2.4(a)(i). "Public Announcement" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or a comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the Securities Exchange Act of 1934, as amended, or any successor thereto (the "1934 Act").

(ii) To be in proper written form, a stockholder's notice to the secretary must set forth as to each matter of business the stockholder intends to bring before the annual meeting: (1) a brief description of the business intended to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (2) the name and address, as they appear on the corporation's books, of the stockholder proposing such business and any Stockholder Associated Person (as defined below), (3) the class and number of shares of the corporation that are held of record or are beneficially owned by the stockholder or any Stockholder Associated Person and any derivative positions held or beneficially held by the stockholder or any Stockholder Associated Person, (4) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit from share price changes for, or to increase or decrease the voting power of, such stockholder or any Stockholder Associated Person with respect to any securities of the corporation, (5) any material interest of the stockholder or a Stockholder Associated Person in such business, and (6) a statement whether either such stockholder or any Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of at least the percentage of the corporation's voting shares required under applicable law to carry the proposal (such information provided and statements made as required by clauses (1) through (6), a "Business Solicitation Statement"). In addition, to be in proper written form, a stockholder's notice to the secretary must be supplemented not later than ten days following the record date for notice of the meeting to disclose the information contained in clauses (3) and (4) above as of the record date for notice of the meeting. For purposes of this Section 2.4, a "Stockholder Associated Person" of any stockholder shall mean (x) any person controlling, directly or indirectly, or acting in concert with, such stockholder, (y) any beneficial owner of shares of stock of the corporation owned of record or beneficially by such stockholder and on whose behalf the proposal or nomination, as the case may be, is being made, or (z) any person controlling, controlled by or under common control with such person referred to in the preceding clauses (x) and (y).

(iii) Without exception, no business shall be conducted at any annual meeting except in accordance with the provisions set forth in this Section 2.4(a) and, if applicable, Section 2.4(b). In addition, business proposed to be brought by a stockholder may not be brought before the annual meeting if such stockholder or a Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Business Solicitation Statement applicable to such business or if the Business Solicitation Statement applicable to such business contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the annual meeting that business was not properly brought before the annual meeting and in accordance with the provisions of this Section 2.4(a), and, if the chairperson should so

determine, he or she shall so declare at the annual meeting that any such business not properly brought before the annual meeting shall not be conducted.

(b)Advance Notice of Director Nominations at Annual Meetings. Notwithstanding anything in these bylaws to the contrary, only persons who are nominated in accordance with the procedures set forth in this Section 2.4(b) shall be eligible for election or re-election as directors at an annual meeting of stockholders. Nominations of persons for election or re-election to the board of directors of the corporation shall be made at an annual meeting of stockholders only (A) by or at the direction of the board of directors or (B) by a stockholder of the corporation who (1) was a stockholder of record at the time of the giving of the notice required by this Section 2.4(b) and on the record date for the determination of stockholders entitled to vote at the annual meeting and (2) has complied with the notice procedures set forth in this Section 2.4(b). In addition to any other applicable requirements, for a nomination to be made by a stockholder, the stockholder must have given timely notice thereof in proper written form to the secretary of the corporation.

(i)To comply with clause (B) of Section 2.4(b) above, a nomination to be made by a stockholder must set forth all information required under this Section 2.4(b) and must be received by the secretary of the corporation at the principal executive offices of the corporation at the time set forth in, and in accordance with, the final three sentences of Section 2.4(a)(i) above.

(ii)To be in proper written form, such stockholder's notice to the secretary must set forth:

(1)as to each person (a "nominee") whom the stockholder proposes to nominate for election or re-election as a director: (A) the name, age, business address and residence address of the nominee, (B) the principal occupation or employment of the nominee, (C) the class and number of shares of the corporation that are held of record or are beneficially owned by the nominee and any derivative positions held or beneficially held by the nominee, (D) whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of the nominee with respect to any securities of the corporation, and a description of any other agreement, arrangement or understanding (including any short position or any borrowing or lending of shares), the effect or intent of which is to mitigate loss to, or to manage the risk or benefit of share price changes for, or to increase or decrease the voting power of the nominee, (E) a description of all arrangements or understandings between the stockholder and each nominee and any other person or persons (naming such person or persons) pursuant to which the nominations are to be made by the stockholder, (F) a written statement executed by the nominee acknowledging that as a director of the corporation, the nominee will owe a fiduciary duty under Delaware law with respect to the corporation and its stockholders, and (G) any other information relating to the nominee that would be

required to be disclosed about such nominee if proxies were being solicited for the election or re-election of the nominee as a director, or that is otherwise required, in each case pursuant to Regulation 14A under the 1934 Act (including without limitation the nominee's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected or re-elected, as the case may be); and

(2) as to such stockholder giving notice, (A) the information required to be provided pursuant to clauses (2) through (5) of Section 2.4(a)(ii) above, and the supplement referenced in the second sentence of Section 2.4(a)(ii) above (except that the references to "business" in such clauses shall instead refer to nominations of directors for purposes of this paragraph), and (B) a statement whether either such stockholder or Stockholder Associated Person will deliver a proxy statement and form of proxy to holders of a number of the corporation's voting shares reasonably believed by such stockholder or Stockholder Associated Person to be necessary to elect or re-elect such nominee(s) (such information provided and statements made as required by clauses (A) and (B) above, a "Nominee Solicitation Statement").

(iii) At the request of the board of directors, any person nominated by a stockholder for election or re-election as a director must furnish to the secretary of the corporation (1) that information required to be set forth in the stockholder's notice of nomination of such person as a director as of a date subsequent to the date on which the notice of such person's nomination was given and (2) such other information as may reasonably be required by the corporation to determine the eligibility of such proposed nominee to serve as an independent director or audit committee financial expert of the corporation under applicable law, securities exchange rule or regulation, or any publicly-disclosed corporate governance guideline or committee charter of the corporation and (3) that could be material to a reasonable stockholder's understanding of the independence, or lack thereof, of such nominee; in the absence of the furnishing of such information if requested, such stockholder's nomination shall not be considered in proper form pursuant to this Section 2.4(b).

(iv) Without exception, no person shall be eligible for election or re-election as a director of the corporation at an annual meeting of stockholders unless nominated in accordance with the provisions set forth in this Section 2.4(b). In addition, a nominee shall not be eligible for election or re-election at an annual meeting if a stockholder or Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Nominee Solicitation Statement applicable to such nominee or if the Nominee Solicitation Statement applicable to such nominee contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading. The chairperson of the annual meeting shall, if the facts warrant, determine and declare at the annual meeting that a nomination was not made in accordance with the provisions prescribed by these bylaws, and if the chairperson should

so determine, he or she shall so declare at the annual meeting, and the defective nomination shall be disregarded.

(c) Advance Notice of Director Nominations for Special Meetings.

(i) For a special meeting of stockholders at which directors are to be elected or re-elected, nominations of persons for election or re-election to the board of directors shall be made only (1) by or at the direction of the board of directors or (2) by any stockholder of the corporation who (A) is a stockholder of record at the time of the giving of the notice required by this Section 2.4(c) and on the record date for the determination of stockholders entitled to vote at the special meeting and (B) delivers a timely written notice of the nomination to the secretary of the corporation that includes the information set forth in Section 2.4(b)(ii) and Section 2.4(b)(iii) above. To be timely, such notice must be received by the secretary at the principal executive offices of the corporation not later than the close of business on the later of the 90th day prior to such special meeting or the tenth day following the day on which Public Announcement is first made of the date of the special meeting and of the nominees proposed by the board of directors to be elected or re-elected at such meeting. A person shall not be eligible for election or re-election as a director at a special meeting unless the person is nominated (i) by or at the direction of the board of directors or (ii) by a stockholder in accordance with the notice procedures set forth in this Section 2.4(c). In addition, a nominee shall not be eligible for election or re-election if a stockholder or Stockholder Associated Person, as applicable, takes action contrary to the representations made in the Nominee Solicitation Statement applicable to such nominee or if the Nominee Solicitation Statement applicable to such nominee contains an untrue statement of a material fact or omits to state a material fact necessary to make the statements therein not misleading.

(ii) The chairperson of the special meeting shall, if the facts warrant, determine and declare at the special meeting that a nomination or business was not made in accordance with the procedures prescribed by these bylaws, and if the chairperson should so determine, he or she shall so declare at the meeting, and the defective nomination or business shall be disregarded.

(d) Other Requirements and Rights. In addition to the foregoing provisions of this Section 2.4, a stockholder must also comply with all applicable requirements of state law and of the 1934 Act and the rules and regulations thereunder with respect to the matters set forth in this Section 2.4. Nothing in this Section 2.4 shall be deemed to affect any rights of:

(i) a stockholder to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 (or any successor provision) under the 1934 Act; or

(ii) the corporation to omit a proposal from the corporation's proxy statement pursuant to Rule 14a-8 (or any successor provision) under the 1934 Act.

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Section 2.5 NOTICE OF STOCKHOLDERS' MEETINGS

Whenever stockholders are required or permitted to take any action at a meeting, a written notice of the meeting shall be given which shall state the place, if any, date and hour of the meeting, the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such meeting, the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Except as otherwise provided in the DGCL, the certificate of incorporation or these bylaws, the written notice of any meeting of stockholders shall be given not less than 10 nor more than 60 days before the date of the meeting to each stockholder entitled to vote at such meeting as of the record date for determining the stockholders entitled to notice of the meeting.

Section 2.6 QUORUM

The holders of a majority of the stock issued and outstanding and entitled to vote, present in person or represented by proxy, shall constitute a quorum for the transaction of business at all meetings of the stockholders. Where a separate vote by a class or series or classes or series is required, a majority of the outstanding shares of such class or series or classes or series, present in person or represented by proxy, shall constitute a quorum entitled to take action with respect to that vote on that matter, except as otherwise provided by law, the certificate of incorporation or these bylaws.

If a quorum is not present or represented at any meeting of the stockholders, then either (i) the chairperson of the meeting, or (ii) the stockholders entitled to vote at the meeting, present in person or represented by proxy, shall have power to adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present or represented. At such adjourned meeting at which a quorum is present or represented, any business may be transacted that might have been transacted at the meeting as originally noticed.

Section 2.7 ADJOURNED MEETING; NOTICE

When a meeting is adjourned to another time or place, unless these bylaws otherwise require, notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at such adjourned meeting are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than 30 days, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. If after the adjournment a new record date for stockholders entitled to vote is fixed for the adjourned meeting, the board of directors shall fix a new record date for notice of such adjourned meeting in accordance with Section 213(a) of the DGCL and Section 2.11 of these bylaws, and shall give notice of the adjourned meeting to each stockholder

of record entitled to vote at such adjourned meeting as of the record date fixed for notice of such adjourned meeting.

Section 2.8 CONDUCT OF BUSINESS

The chairperson of any meeting of stockholders shall determine the order of business and the procedure at the meeting, including such regulation of the manner of voting and the conduct of business. The chairperson of any meeting of stockholders shall be designated by the board of directors; in the absence of such designation, the chairperson of the board, if any, the chief executive officer (in the absence of the chairperson) or the president (in the absence of the chairperson of the board and the chief executive officer), or in their absence any other executive officer of the corporation, shall serve as chairperson of the stockholder meeting.

Section 2.9 VOTING

The stockholders entitled to vote at any meeting of stockholders shall be determined in accordance with the provisions of Section 2.11 of these bylaws, subject to Section 217 (relating to voting rights of fiduciaries, pledgors and joint owners of stock) and Section 218 (relating to voting trusts and other voting agreements) of the DGCL.

Except as may be otherwise provided in the certificate of incorporation or these bylaws, each stockholder shall be entitled to one vote for each share of capital stock held by such stockholder.

Except as otherwise required by law, the certificate of incorporation or these bylaws, in all matters other than the election of directors, the affirmative vote of a majority of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders.

Except as otherwise required by law, the certificate of incorporation or these bylaws, directors shall be elected by a plurality of the voting power of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors. Where a separate vote by a class or series or classes or series is required, in all matters other than the election of directors, the affirmative vote of the majority of shares of such class or series or classes or series present in person or represented by proxy at the meeting shall be the act of such class or series or classes or series, except as otherwise provided by law, the certificate of incorporation or these bylaws.

Section 2.10 STOCKHOLDER ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Subject to the rights of the holders of the shares of any series of Preferred Stock or any other class of stock or series thereof that have been expressly granted the right to take action by written consent, any action required or permitted to be taken by the stockholders of the corporation must be effected at a duly called annual or special meeting of stockholders of the corporation and may not be effected by any consent in writing by such stockholders.

Section 2.11 RECORD DATES

In order that the corporation may determine the stockholders entitled to notice of any meeting of stockholders or any adjournment thereof, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the board of directors and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If the board of directors so fixes a date, such date shall also be the record date for determining the stockholders entitled to vote at such meeting unless the board of directors determines, at the time it fixes such record date, that a later date on or before the date of the meeting shall be the date for making such determination.

If no record date is fixed by the board of directors, the record date for determining stockholders entitled to notice of and to vote at a meeting of stockholders shall be at the close of business on the day immediately preceding the day on which notice is given, or, if notice is waived, at the close of business on the day immediately preceding the day on which the meeting is held.

A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the board of directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or an earlier date as that fixed for determination of stockholders entitled to vote in accordance with the provisions of Section 213 of the DGCL and this Section 2.11 at the adjourned meeting.

In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the board of directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the board of directors adopts the resolution relating thereto.

Section 2.12 PROXIES

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for such stockholder by proxy authorized by an instrument in writing or by a transmission permitted by law filed in accordance with the procedure established for the meeting, but no such proxy shall be voted or acted upon after three years from its date, unless the proxy provides for a longer period. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212 of the DGCL. A written proxy may be in the form of a telegram, cablegram, or other means of electronic transmission which sets forth or is submitted with information from which it can be determined that the telegram, cablegram, or other means of electronic transmission was authorized by the person.

Section 2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE

The officer who has charge of the stock ledger of the corporation shall prepare and make, at least 10 days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting; provided, however, if the record date for determining the stockholders entitled to vote is less than 10 days before the meeting date, the list shall reflect the stockholders entitled to vote as of the tenth day before the meeting date. The stockholder list shall be arranged in alphabetical order and shall show the address of each stockholder and the number of shares registered in the name of each stockholder. The corporation shall not be required to include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least 10 days prior to the meeting (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours, at the corporation's principal place of business. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be examined by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting. Such list shall presumptively determine the identity of the stockholders entitled to vote at the meeting and the number of shares held by each of them.

Section 2.14 INSPECTORS OF ELECTION

Before any meeting of stockholders, the board of directors shall appoint an inspector or inspectors of election to act at the meeting or its adjournment. The number of inspectors shall be either one (1) or three (3). If any person appointed as inspector fails to appear or fails or refuses to act, then the chairperson of the meeting may, and upon the request of any stockholder or a stockholder's proxy shall, appoint a person to fill that vacancy.

Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath to execute faithfully the duties of inspector with strict impartiality and according to the best of his or her ability. The inspector or inspectors so appointed and designated shall (i) ascertain the number of shares of capital stock of the corporation outstanding and the voting power of each share, (ii) determine the shares of capital stock of the corporation represented at the meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors, (v) certify their determination of the number of shares of capital stock of the corporation represented at the meeting and such inspector or inspectors' count of all votes and ballots, (vi) determine when the polls shall close; (vii) determine the result; and (viii) do any other acts that may be proper to conduct the election or vote with fairness to all stockholders.

In determining the validity and counting of proxies and ballots cast at any meeting of stockholders of the corporation, the inspector or inspectors may consider such information as is permitted by applicable law. If there are three (3) inspectors of election, the decision, act or certificate of a majority is effective in all respects as the decision, act or certificate of all. Any report or certificate made by the inspectors of election is prima facie evidence of the facts stated therein.

ARTICLE III - DIRECTORS

Section 3.1 POWERS

The business and affairs of the corporation shall be managed by or under the direction of the board of directors, except as may be otherwise provided in the DGCL or the certificate of incorporation.

Section 3.2 NUMBER OF DIRECTORS

The board of directors shall consist of one or more members, each of whom shall be a natural person. Unless the certificate of incorporation fixes the number of directors, the number of directors shall be determined from time to time solely by resolution of the board of directors. No reduction of the authorized number of directors shall have the effect of removing any director before that director's term of office expires.

Section 3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS

Except as provided in Section 3.4 of these bylaws, each director, including a director elected to fill a vacancy, shall hold office until the expiration of the term for which elected and until such director's successor is elected and qualified or until such director's earlier death, resignation or removal. Directors need not be stockholders unless so required by the certificate of incorporation or these bylaws. The certificate of incorporation or these bylaws may prescribe other qualifications for directors.

Section 3.4 RESIGNATION AND VACANCIES

Any director may resign at any time upon notice given in writing or by electronic transmission to the corporation; provided, however, that if such notice is given by electronic transmission, such electronic transmission must either set forth or be submitted with information from which it can be determined that the electronic transmission was authorized by the director. A resignation is effective when the resignation is delivered unless the resignation specifies a later effective date or an effective date determined upon the happening of an event or events. Acceptance of such resignation shall not be necessary to make it effective. A resignation which is conditioned upon the director failing to receive a specified vote for reelection as a director may provide that it is irrevocable. Unless otherwise provided in the certificate of incorporation or these bylaws, when one or more directors resign from the board of directors, effective at a future

date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective. Unless otherwise provided in the certificate of incorporation or these bylaws, vacancies and newly created directorships resulting from any increase in the authorized number of directors elected by all of the stockholders having the right to vote as a single class shall be filled only by a majority of the directors then in office, although less than a quorum, or by a sole remaining director. If the directors are divided into classes, a person so elected by the directors then in office to fill a vacancy or newly created directorship shall hold office until the next election of the class for which such director shall have been chosen and until his or her successor shall have been duly elected and qualified.

If, at the time of filling any vacancy or any newly created directorship, the directors then in office constitute less than a majority of the whole board of directors (as constituted immediately prior to any such increase), the Court of Chancery may, upon application of any stockholder or stockholders holding at least 10% of the voting stock at the time outstanding having the right to vote for such directors, summarily order an election to be held to fill any such vacancies or newly created directorships, or to replace the directors chosen by the directors then in office as aforesaid, which election shall be governed by the provisions of Section 211 of the DGCL as far as applicable.

Section 3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

The board of directors may hold meetings, both regular and special, either within or outside the State of Delaware. Unless otherwise restricted by the certificate of incorporation or these bylaws, members of the board of directors, or any committee designated by the board of directors, may participate in a meeting of the board of directors, or any committee, by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and such participation in a meeting shall constitute presence in person at the meeting.

Section 3.6 REGULAR MEETINGS

Regular meetings of the board of directors may be held without notice at such time and at such place as shall from time to time be determined by the board of directors.

Section 3.7 SPECIAL MEETINGS; NOTICE

Special meetings of the board of directors for any purpose or purposes may be called at any time by the chairperson of the board of directors, the chief executive officer, the president, the secretary or a majority of the authorized number of directors, at such times and places as he or she or they shall designate.

Notice of the time and place of special meetings shall be:

(a) delivered personally by hand, by courier or by telephone;

(b) sent by United States first-class mail, postage prepaid;

(c) sent by facsimile; or

(d) sent by electronic mail,

directed to each director at that director's address, telephone number, facsimile number or electronic mail address, as the case may be, as shown on the corporation's records.

If the notice is (i) delivered personally by hand, by courier or by telephone, (ii) sent by facsimile or (iii) sent by electronic mail, it shall be delivered or sent at least 24 hours before the time of the holding of the meeting. If the notice is sent by United States mail, it shall be deposited in the United States mail at least four days before the time of the holding of the meeting. Any oral notice may be communicated to the director. The notice need not specify the place of the meeting (if the meeting is to be held at the corporation's principal executive office) nor the purpose of the meeting.

Section 3.8 QUORUM; VOTING

At all meetings of the board of directors, a majority of the total authorized number of directors shall constitute a quorum for the transaction of business. If a quorum is not present at any meeting of the board of directors, then the directors present thereat may adjourn the meeting from time to time, without notice other than announcement at the meeting, until a quorum is present. A meeting at which a quorum is initially present may continue to transact business notwithstanding the withdrawal of directors, if any action taken is approved by at least a majority of the required quorum for that meeting.

The vote of a majority of the directors present at any meeting at which a quorum is present shall be the act of the board of directors, except as may be otherwise specifically provided by statute, the certificate of incorporation or these bylaws.

If the certificate of incorporation provides that one or more directors shall have more or less than one vote per director on any matter, every reference in these bylaws to a majority or other proportion of the directors shall refer to a majority or other proportion of the votes of the directors.

Section 3.9 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Unless otherwise restricted by the certificate of incorporation or these bylaws, any action required or permitted to be taken at any meeting of the board of directors, or of any committee thereof, may be taken without a meeting if all members of the board of directors or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing or

writings or electronic transmission or transmissions are filed with the minutes of proceedings of the board of directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 3.10 FEES AND COMPENSATION OF DIRECTORS

Unless otherwise restricted by the certificate of incorporation or these bylaws, the board of directors shall have the authority to fix the compensation of directors.

Section 3.11 REMOVAL OF DIRECTORS

Subject to the rights of holders of any series of Preferred Stock with respect to the election of directors and subject to any limitation imposed by law, any individual director or directors may be removed with or without cause by the affirmative vote of the holders of a majority in voting power of the stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

No reduction of the authorized number of directors shall have the effect of removing any director prior to the expiration of such director's term of office.

ARTICLE IV - COMMITTEES

Section 4.1 COMMITTEES OF DIRECTORS

The board of directors may designate one or more committees, each committee to consist of one or more of the directors of the corporation. The board of directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not such member or members constitute a quorum, may unanimously appoint another member of the board of directors to act at the meeting in the place of any such absent or disqualified member. Any such committee, to the extent provided in the resolution of the board of directors or in these bylaws, shall have and may exercise all the powers and authority of the board of directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers that may require it; but no such committee shall have the power or authority to (i) approve or adopt, or recommend to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopt, amend or repeal any bylaw of the corporation.

Section 4.2 COMMITTEE MINUTES

Each committee shall keep regular minutes of its meetings and report the same to the board of directors when required.

Section 4.3 MEETINGS AND ACTION OF COMMITTEES

Meetings and actions of committees shall be governed by, and held and taken in accordance with, the provisions of:

(a) Section 3.5 (place of meetings and meetings by telephone);

(b) Section 3.6 (regular meetings);

(c) Section 3.7 (special meetings; notice);

(d) Section 3.8 (quorum; voting);

(e) Section 3.9 (action without a meeting); and

(f) Section 7.5 (waiver of notice)

with such changes in the context of those bylaws as are necessary to substitute the committee and its members for the board of directors and its members. However: (i) the time of regular meetings of committees may be determined by resolution of the committee; (ii) special meetings of committees may also be called by resolution of the committee; and (iii) notice of special meetings of committees shall also be given to all alternate members, who shall have the right to attend all meetings of the committee. The board of directors may adopt rules for the governance of any committee not inconsistent with the provisions of these bylaws.

Any provision in the certificate of incorporation providing that one or more directors shall have more or less than one vote per director on any matter shall apply to voting in any committee or subcommittee, unless otherwise provided in the certificate of incorporation or these bylaws.

Section 4.4 SUBCOMMITTEES

Unless otherwise provided in the certificate of incorporation, these bylaws or the resolutions of the board of directors designating the committee, a committee may create one or more subcommittees, each subcommittee to consist of one or more members of the committee, and delegate to a subcommittee any or all of the powers and authority of the committee.

ARTICLE V - OFFICERS

Section 5.1 OFFICERS

The officers of the corporation shall be a president and a secretary. The corporation may also have, at the discretion of the board of directors, a chairperson of the board of directors, a vice chairperson of the board of directors, a chief executive officer, a chief financial officer or treasurer, one or more vice presidents, one or more assistant vice presidents, one or more

assistant treasurers, one or more assistant secretaries, and any such other officers as may be appointed in accordance with the provisions of these bylaws. Any number of offices may be held by the same person.

Section 5.2 APPOINTMENT OF OFFICERS

The board of directors shall appoint the officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 of these bylaws, subject to the rights, if any, of an officer under any contract of employment. A vacancy in any office because of death, resignation, removal, disqualification or any other cause shall be filled in the manner prescribed in this Section 5.2 for the regular election to such office.

Section 5.3 SUBORDINATE OFFICERS

The board of directors may appoint, or empower the chief executive officer or, in the absence of a chief executive officer, the president, to appoint, such other officers and agents as the business of the corporation may require. Each of such officers and agents shall hold office for such period, have such authority, and perform such duties as are provided in these bylaws or as the board of directors may from time to time determine.

Section 5.4 REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of an officer under any contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the board of directors at any regular or special meeting of the board of directors or, except in the case of an officer chosen by the board of directors, by any officer upon whom such power of removal may be conferred by the board of directors.

Any officer may resign at any time by giving written or electronic notice to the corporation; provided, however, that if such notice is given by electronic transmission, such electronic transmission must either set forth or be submitted with information from which it can be determined that the electronic transmission was authorized by the officer. Any resignation shall take effect at the date of the receipt of that notice or at any later time specified in that notice. Unless otherwise specified in the notice of resignation, the acceptance of the resignation shall not be necessary to make it effective. Any resignation is without prejudice to the rights, if any, of the corporation under any contract to which the officer is a party.

Section 5.5 VACANCIES IN OFFICES

Any vacancy occurring in any office of the corporation shall be filled by the board of directors or as provided in Section 5.3.

Section 5.6 REPRESENTATION OF SHARES OF OTHER CORPORATIONS

The chairperson of the board of directors, the chief executive officer, the president, any vice president, the treasurer, the secretary or assistant secretary of this corporation, or any other

person authorized by the board of directors or the president or a vice president, is authorized to vote, represent, and exercise on behalf of this corporation all rights incident to any and all shares of any other corporation or corporations standing in the name of this corporation. The authority granted herein may be exercised either by such person directly or by any other person authorized to do so by proxy or power of attorney duly executed by such person having the authority.

Section 5.7 AUTHORITY AND DUTIES OF OFFICERS

All officers of the corporation shall respectively have such authority and perform such duties in the management of the business of the corporation as may be designated from time to time by the board of directors and, to the extent not so provided, as generally pertain to their respective offices, subject to the control of the board of directors.

Section 5.8 THE CHAIRPERSON OF THE BOARD

The chairperson of the board shall have the powers and duties customarily and usually associated with the office of the chairperson of the board. The chairperson of the board shall preside at meetings of the stockholders and of the board of directors.

Section 5.9 THE VICE CHAIRPERSON OF THE BOARD

The vice chairperson of the board shall have the powers and duties customarily and usually associated with the office of the vice chairperson of the board. In the case of absence or disability of the chairperson of the board, the vice chairperson of the board shall perform the duties and exercise the powers of the chairperson of the board.

Section 5.10 THE CHIEF EXECUTIVE OFFICER

The chief executive officer shall have, subject to the supervision, direction and control of the board of directors, ultimate authority for decisions relating to the supervision, direction and management of the affairs and the business of the corporation customarily and usually associated with the position of chief executive officer, including, without limitation, all powers necessary to direct and control the organizational and reporting relationships within the corporation. If at any time the office of the chairperson and vice chairperson of the board shall not be filled, or in the event of the temporary absence or disability of the chairperson of the board and the vice chairperson of the board, the chief executive officer shall perform the duties and exercise the powers of the chairperson of the board unless otherwise determined by the board of directors.

Section 5.11 THE PRESIDENT

The president shall have, subject to the supervision, direction and control of the board of directors, the general powers and duties of supervision, direction and management of the affairs and business of the corporation customarily and usually associated with the position of president. The president shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chairperson of the board or the chief executive officer. In the event of the absence or disability of the chief executive officer, the

president shall perform the duties and exercise the powers of the chief executive officer unless otherwise determined by the board of directors.

Section 5.12 THE VICE PRESIDENTS AND ASSISTANT VICE PRESIDENTS

Each vice president and assistant vice president shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chairperson of the board, the chief executive officer or the president.

Section 5.13 THE SECRETARY AND ASSISTANT SECRETARIES

(a) The secretary shall attend meetings of the board of directors and meetings of the stockholders and record all votes and minutes of all such proceedings in a book or books kept for such purpose. The secretary shall have all such further powers and duties as are customarily and usually associated with the position of secretary or as may from time to time be assigned to him or her by the board of directors, the chairperson of the board, the chief executive officer or the president.

(b) Each assistant secretary shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chairperson of the board, the chief executive officer, the president or the secretary. In the event of the absence, inability or refusal to act of the secretary, the assistant secretary (or if there shall be more than one, the assistant secretaries in the order determined by the board of directors) shall perform the duties and exercise the powers of the secretary.

Section 5.14 THE CHIEF FINANCIAL OFFICER AND ASSISTANT TREASURERS

(a) The chief financial officer shall be the treasurer of the corporation. The chief financial officer shall have custody of the corporation's funds and securities, shall be responsible for maintaining the corporation's accounting records and statements, shall keep full and accurate accounts of receipts and disbursements in books belonging to the corporation, and shall deposit or cause to be deposited moneys or other valuable effects in the name and to the credit of the corporation in such depositories as may be designated by the board of directors. The chief financial officer shall also maintain adequate records of all assets, liabilities and transactions of the corporation and shall assure that adequate audits thereof are currently and regularly made. The chief financial officer shall have all such further powers and duties as are customarily and usually associated with the position of chief financial officer, or as may from time to time be assigned to him or her by the board of directors, the chairperson, the chief executive officer or the president.

(b)Each assistant treasurer shall have such powers and perform such duties as may from time to time be assigned to him or her by the board of directors, the chief executive officer, the president or the chief financial officer. In the event of the absence, inability or refusal to act of the chief financial officer, the assistant treasurer (or if there shall be more than one, the assistant treasurers in the order determined by the board of directors) shall perform the duties and exercise the powers of the chief financial officer.

ARTICLE VI - STOCK

Section 6.1 STOCK CERTIFICATES

The shares of the corporation shall be represented by certificates, provided that the board of directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the corporation. Every holder of stock represented by certificates shall be entitled to have a certificate signed by, or in the name of the corporation by the chairperson of the board of directors or vice-chairperson of the board of directors, or the president or a vice-president, and by the treasurer or an assistant treasurer, or the secretary or an assistant secretary of the corporation representing the number of shares registered in certificate form. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent or registrar who has signed or whose facsimile signature has been placed upon a certificate has ceased to be such officer, transfer agent or registrar before such certificate is issued, it may be issued by the corporation with the same effect as if such person were such officer, transfer agent or registrar at the date of issue. The corporation shall not have power to issue a certificate in bearer form.

Section 6.2 SPECIAL DESIGNATION ON CERTIFICATES

If the corporation is authorized to issue more than one class of stock or more than one series of any class, then the powers, the designations, the preferences, and the relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate that the corporation shall issue to represent such class or series of stock; provided, however, that, except as otherwise provided in Section 202 of the DGCL, in lieu of the foregoing requirements there may be set forth on the face or back of the certificate that the corporation shall issue to represent such class or series of stock, a statement that the corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Within a reasonable time after the issuance or transfer of uncertificated stock, the corporation shall send to the registered owner thereof a written notice containing the information required to be set forth or stated on certificates pursuant to this Section 6.2 or Sections 156, 202(a) or 218(a) of the DGCL or with respect to this Section 6.2 a statement that the corporation will furnish without charge to each stockholder who so requests the powers,

designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights. Except as otherwise expressly provided by law, the rights and obligations of the holders of uncertificated stock and the rights and obligations of the holders of certificates representing stock of the same class and series shall be identical.

Section 6.3 LOST, STOLEN OR DESTROYED CERTIFICATES

Except as provided in this Section 6.3, no new certificates for shares shall be issued to replace a previously issued certificate unless the latter is surrendered to the corporation and cancelled at the same time. The corporation may issue a new certificate of stock or uncertificated shares in the place of any certificate theretofore issued by it, alleged to have been lost, stolen or destroyed, and the corporation may require the owner of the lost, stolen or destroyed certificate, or such owner's legal representative, to give the corporation a bond sufficient to indemnify it against any claim that may be made against it on account of the alleged loss, theft or destruction of any such certificate or the issuance of such new certificate or uncertificated shares.

Section 6.4 DIVIDENDS

The board of directors, subject to any restrictions contained in the certificate of incorporation or applicable law, may declare and pay dividends upon the shares of the corporation's capital stock. Dividends may be paid in cash, in property, or in shares of the corporation's capital stock, subject to the provisions of the certificate of incorporation. The board of directors may set apart out of any of the funds of the corporation available for dividends a reserve or reserves for any proper purpose and may abolish any such reserve. Such purposes shall include but not be limited to equalizing dividends, repairing or maintaining any property of the corporation, and meeting contingencies.

Section 6.5 TRANSFER OF STOCK

Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by an attorney duly authorized, and, if such stock is certificated, upon the surrender of a certificate or certificates for a like number of shares, properly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer; provided, however, that such succession, assignment or authority to transfer is not prohibited by the certificate of incorporation, these bylaws, applicable law or contract.

Section 6.6 STOCK TRANSFER AGREEMENTS

The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 6.7 REGISTERED STOCKHOLDERS

The corporation:

(a) shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner;

(b) shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares; and

(c) shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of another person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VII - MANNER OF GIVING NOTICE AND WAIVER

Section 7.1 NOTICE OF STOCKHOLDERS' MEETINGS

Notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the corporation's records. An affidavit of the secretary or an assistant secretary of the corporation or of the transfer agent or other agent of the corporation that the notice has been given shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

Section 7.2 NOTICE BY ELECTRONIC TRANSMISSION

Without limiting the manner by which notice otherwise may be given effectively to stockholders pursuant to the DGCL, the certificate of incorporation or these bylaws, any notice to stockholders given by the corporation under any provision of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any such consent shall be deemed revoked if: (i) the corporation is unable to deliver by electronic transmission two consecutive notices given by the corporation in accordance with such consent; and (ii) such inability becomes known to the secretary or an assistant secretary of the corporation or to the transfer agent, or other person responsible for the giving of notice. However, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

Any notice given pursuant to the preceding paragraph shall be deemed given: (i) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (ii) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (iii) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A)

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such posting and (B) the giving of such separate notice; and (iv) if by any other form of electronic transmission, when directed to the stockholder.

An affidavit of the secretary or an assistant secretary or of the transfer agent or other agent of the corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein.

An "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved, and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

Section 7.3 NOTICE TO STOCKHOLDERS SHARING AN ADDRESS

Except as otherwise prohibited under the DGCL, without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation under the provisions of the DGCL, the certificate of incorporation or these bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Any such consent shall be revocable by the stockholder by written notice to the corporation. Any stockholder who fails to object in writing to the corporation, within 60 days of having been given written notice by the corporation of its intention to send the single notice, shall be deemed to have consented to receiving such single written notice.

Section 7.4 NOTICE TO PERSON WITH WHOM COMMUNICATION IS UNLAWFUL

Whenever notice is required to be given, under the DGCL, the certificate of incorporation or these bylaws, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

Section 7.5 WAIVER OF NOTICE

Whenever notice is required to be given to stockholders, directors or other persons under any provision of the DGCL, the certificate of incorporation or these bylaws, a written waiver, signed by the person entitled to notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time of the event for which notice is to be given, shall be deemed equivalent to notice. Attendance of a person at a meeting shall constitute a waiver of notice of such meeting, except when the person attends a meeting for the express

purpose of objecting at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Neither the business to be transacted at, nor the purpose of, any regular or special meeting of the stockholders or the board of directors, as the case may be, need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the certificate of incorporation or these bylaws.

ARTICLE VIII - INDEMNIFICATION

Section 8.1 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN THIRD PARTY PROCEEDINGS

Subject to the other provisions of this Article VIII, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (a "Proceeding") (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director of the corporation or an officer of the corporation, or while a director of the corporation or officer of the corporation is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by such person in connection with such Proceeding if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe such person's conduct was unlawful. The termination of any Proceeding by judgment, order, settlement, conviction, or upon a plea of nolo contendere or its equivalent, shall not, of itself, create a presumption that the person did not act in good faith and in a manner which such person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had reasonable cause to believe that such person's conduct was unlawful.

Section 8.2 INDEMNIFICATION OF DIRECTORS AND OFFICERS IN ACTIONS BY OR IN THE RIGHT OF THE CORPORATION

Subject to the other provisions of this Article VIII, the corporation shall indemnify, to the fullest extent permitted by the DGCL, as now or hereinafter in effect, any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director or officer of the corporation, or while a director or officer of the corporation is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection with the defense or settlement of such action or suit if such person acted in good faith and in a manner such person reasonably believed to be in or not opposed to the best interests of the corporation; except that no indemnification shall be made in respect of any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent

that the Court of Chancery or the court in which such action or suit was brought shall determine upon application that, despite the adjudication of liability but in view of all the circumstances of the case, such person is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or such other court shall deem proper.

Section 8.3SUCCESSFUL DEFENSE

To the extent that a present or former director or officer of the corporation has been successful on the merits or otherwise in defense of any action, suit or proceeding described in Section 8.1 or Section 8.2, or in defense of any claim, issue or matter therein, such person shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred by such person in connection therewith.

Section 8.4INDEMNIFICATION OF OTHERS

Subject to the other provisions of this Article VIII, the corporation shall have power to indemnify its employees and its agents to the extent not prohibited by the DGCL or other applicable law. The board of directors shall have the power to delegate the determination of whether employees or agents shall be indemnified to such person or persons as the board of determines.

Section 8.5ADVANCED PAYMENT OF EXPENSES

Expenses (including attorneys' fees) incurred by an officer or director of the corporation in defending any Proceeding shall be paid by the corporation in advance of the final disposition of such Proceeding upon receipt of a written request therefor (together with documentation reasonably evidencing such expenses) and an undertaking by or on behalf of the person to repay such amounts if it shall ultimately be determined that the person is not entitled to be indemnified under this Article VIII or the DGCL. Such expenses (including attorneys' fees) incurred by former directors and officers or other employees and agents may be so paid upon such terms and conditions, if any, as the corporation deems reasonably appropriate and shall be subject to the corporation's expense guidelines. The right to advancement of expenses shall not apply to any claim for which indemnity is excluded pursuant to these bylaws, but shall apply to any Proceeding referenced in Section 8.6(b) or Section 8.6(c) prior to a determination that the person is not entitled to be indemnified by the corporation.

Section 8.6LIMITATION ON INDEMNIFICATION

Except as provided in Section 8.3 and subject to the requirements of the DGCL, the corporation shall not be obligated to indemnify any person pursuant to this Article VIII in connection with any Proceeding (or any part of any Proceeding):

(a)for which payment has actually been made to or on behalf of such person under any statute, insurance policy, indemnity provision, vote or otherwise, except with respect to any excess beyond the amount paid;

(b)for an accounting or disgorgement of profits pursuant to Section 16(b) of the 1934 Act, or similar provisions of federal, state or local statutory law or common law, if such person is held liable therefor (including pursuant to any settlement arrangements);

(c)for any reimbursement of the corporation by such person of any bonus or other incentive-based or equity-based compensation or of any profits realized by such person from the sale of securities of the corporation, as required in each case under the 1934 Act (including any such reimbursements that arise from an accounting restatement of the corporation pursuant to Section 304 of the Sarbanes-Oxley Act of 2002 (the “Sarbanes-Oxley Act”), or the payment to the corporation of profits arising from the purchase and sale by such person of securities in violation of Section 306 of the Sarbanes-Oxley Act), if such person is held liable therefor (including pursuant to any settlement arrangements);

(d)initiated by such person against the corporation or its directors, officers, employees, agents or other indemnitees, unless (a) the board of directors authorized the Proceeding (or the relevant part of the Proceeding) prior to its initiation, (b) the corporation provides the indemnification, in its sole discretion, pursuant to the powers vested in the corporation under applicable law, (c) otherwise required to be made under Section 8.7 or (d) otherwise required by applicable law; or

(e)if prohibited by applicable law; provided, however, that if any provision or provisions of this Article VIII shall be held to be invalid, illegal or unenforceable for any reason whatsoever: (1) the validity, legality and enforceability of the remaining provisions of this Article VIII (including, without limitation, each portion of any paragraph or clause containing any such provision held to be invalid, illegal or unenforceable, that is not itself held to be invalid, illegal or unenforceable) shall not in any way be affected or impaired thereby; and (2) to the fullest extent possible, the provisions of this Article VIII (including, without limitation, each such portion of any paragraph or clause containing any such provision held to be invalid, illegal or unenforceable) shall be construed so as to give effect to the intent manifested by the provision held invalid, illegal or unenforceable.

Section 8.7 DETERMINATION; CLAIM

If a claim for indemnification or advancement of expenses under this Article VIII is not paid in full within 90 days after receipt by the corporation of the written request therefor, the claimant shall be entitled to an adjudication by a court of competent jurisdiction of his or her entitlement to such indemnification or advancement of expenses. The corporation shall indemnify such person against any and all expenses that are incurred by such person in

connection with any action for indemnification or advancement of expenses from the corporation under this Article VIII, to the extent such person is successful in such action, and to the extent not prohibited by law. In any such suit, the corporation shall, to the fullest extent not prohibited by law, have the burden of proving that the claimant is not entitled to the requested indemnification or advancement of expenses.

Section 8.8NON-EXCLUSIVITY OF RIGHTS

The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VIII shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the certificate of incorporation or any statute, bylaw, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in such person's official capacity and as to action in another capacity while holding such office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advancement of expenses, to the fullest extent not prohibited by the DGCL or other applicable law.

Section 8.9INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of such person's status as such, whether or not the corporation would have the power to indemnify such person against such liability under the provisions of the DGCL.

Section 8.10SURVIVAL

The rights to indemnification and advancement of expenses conferred by this Article VIII shall continue as to a person who has ceased to be a director, officer, employee or agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

Section 8.11EFFECT OF REPEAL OR MODIFICATION

Any amendment, alteration or repeal of this Article VIII shall not adversely affect any right or protection hereunder of any person in respect of any act or omission occurring prior to such amendment, alteration or repeal.

Section 8.12CERTAIN DEFINITIONS

For purposes of this Article VIII, references to the "corporation" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, employees or agents, so

that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this Article VIII with respect to the resulting or surviving corporation as such person would have with respect to such constituent corporation if its separate existence had continued. For purposes of this Article VIII, references to “other enterprises” shall include employee benefit plans; references to “fines” shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to “serving at the request of the corporation” shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee or agent with respect to an employee benefit plan, its participants or beneficiaries; and a person who acted in good faith and in a manner such person reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner “not opposed to the best interests of the corporation” as referred to in this Article VIII.

ARTICLE IX - GENERAL MATTERS

Section 9.1 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS

Except as otherwise provided by law, the certificate of incorporation or these bylaws, the board of directors may authorize any officer or officers, or agent or agents, to enter into any contract or execute any document or instrument in the name of and on behalf of the corporation; such authority may be general or confined to specific instances. Unless so authorized or ratified by the board of directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 9.2 FISCAL YEAR

The fiscal year of the corporation shall be fixed by resolution of the board of directors and may be changed by the board of directors.

Section 9.3 SEAL

The corporation may adopt a corporate seal, which shall be adopted and which may be altered by the board of directors. The corporation may use the corporate seal by causing it or a facsimile thereof to be impressed or affixed or in any other manner reproduced.

Section 9.4 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction, and definitions in the DGCL shall govern the construction of these bylaws. Without limiting the generality of this provision, the singular number includes the plural, the plural number includes the singular, and the term “person” includes both an entity and a natural person.

ARTICLE X - AMENDMENTS

These bylaws may be adopted, amended or repealed by the stockholders entitled to vote; provided, however, that the affirmative vote of the holders of at least 66 2/3% of the total voting power of outstanding voting securities, voting together as a single class, shall be required for the stockholders of the corporation to alter, amend or repeal, or adopt any bylaw inconsistent with, the following provisions of these bylaws: Article II, Section 3.1, Section 3.2, Section 3.4 and Section 3.11 of Article III, Article VIII and this Article X (including, without limitation, any such Article or Section as renumbered as a result of any amendment, alteration, change, repeal, or adoption of any other Bylaw). The board of directors shall also have the power to adopt, amend or repeal bylaws; provided, however, that a bylaw amendment adopted by stockholders which specifies the votes that shall be necessary for the election of directors shall not be further amended or repealed by the board of directors.

ARTICLE XI - FORUM FOR ADJUDICATION OF DISPUTES

Unless the corporation consents in writing to the selection of an alternative forum, the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the corporation, (ii) any action asserting a claim of breach of a fiduciary duty owed by any director, officer or other employee of the corporation to the corporation or the corporation's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, or (iv) any action asserting a claim governed by the internal affairs doctrine shall be a state or federal court located within the state of Delaware, in all cases subject to the court's having personal jurisdiction over the indispensable parties named as defendants. Any person or entity purchasing or otherwise acquiring any interest in shares of capital stock of the corporation shall be deemed to have notice of and consented to the provisions of this bylaw.

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