

EXHIBIT A

FORM OF AMENDMENT TO AMENDED AND RESTATED BYLAWS

The following Amendment is hereby made to the Amended and Restated Bylaws (the “*Bylaws*”) of Luna Innovations Incorporated, a Delaware corporation (the “*Company*”):

1. Article II, Section 2.3 of the Bylaws is hereby deleted in its entirety and replaced with the following:

“Section 2.3. Special Meeting.

Special meetings of the stockholders may be called at any time only by (i) the Board acting pursuant to a resolution duly adopted by a majority of the Board, or (ii) the mutual agreement of the Chief Executive Officer and the President. Such special meetings may not be called by any other person or persons.

Only such business shall be considered at a special meeting of stockholders as shall have been stated in the notice for such meeting. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board may be held.”

2. Article V, Section 5.1 of the Bylaws is hereby deleted in its entirety and replaced with the following:

“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, a Chairman of the Board, a Vice Chairman of the Board, a Chief Executive Officer, a Chief Operating Officer, a Chief Commercialization Officer, a Chief Financial Officer, a Treasurer, one or more Vice Presidents, Assistant Vice Presidents, Assistant Secretaries, and Assistant Treasurers, and any such other officers as may be appointed by the Board or in accordance with the provisions of Section 5.3 of these Bylaws. Any number of offices may be held by the same person.”

3. Article V, Section 5.7 of the Bylaws is hereby deleted in its entirety and replaced with the following:

“Section 5.7. Chief Executive Officer.

The duties of the Chief Executive Officer shall be as determined from time to time by the Board.”

4. Article V, Section 5.8 of the Bylaws is hereby deleted in its entirety and replaced with the following:

“Section 5.8. President; Other Officers.

The duties of the President and such other officers shall each be as determined from time to time by the Board.”

**AMENDED AND RESTATED BYLAWS
OF
LUNA INNOVATIONS INCORPORATED**

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**AMENDED AND RESTATED BYLAWS
OF
LUNA INNOVATIONS INCORPORATED**

**ARTICLE I
CORPORATE OFFICES**

1.1 REGISTERED OFFICE

The address of the Corporation's registered office in the State of Delaware is Corporation Trust Center, 1209 Orange Street, Wilmington, New Castle County, Delaware 19801. The name of the registered agent at such address is The Corporation Trust Company.

1.2 OTHER OFFICES

The Board of Directors of the corporation (the "Board") 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**

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. In the absence of any such designation, stockholders' meetings shall be held at the corporation's principal executive office.

2.2 ANNUAL MEETING

The annual meeting of stockholders shall be held each year on a date and at a time designated by the Board. At the annual meeting, directors shall be elected and any other proper business may be transacted.

2.3 SPECIAL MEETING

A special meeting of the stockholders may be called at any time by the Board, or by the Chairman of the Board, the Chief Executive Officer or the President, or by one or more stockholders holding shares in the aggregate entitled to cast votes not less than 10% of the votes at that meeting.

Effective upon the closing of a firm commitment underwritten public offering of Common Stock of the Corporation and subject to the rights of the holders of any series of Preferred Stock then outstanding, special meetings of the stockholders may be called at any time only by the Board acting pursuant to a resolution duly adopted by a majority of the Board, the Chairman of the Board, the Chief Executive Officer or the President, but such special meetings may not be called by any other person or persons.

Only such business shall be considered at a special meeting of stockholders as shall have been stated in the notice for such meeting. Nothing contained in this paragraph of this Section 2.3 shall be construed as limiting, fixing, or affecting the time when a meeting of stockholders called by action of the Board may be held.

2.4 NOTICE OF STOCKHOLDERS' MEETINGS; EXCEPTION TO REQUIREMENTS OF NOTICE

All notices of meetings with stockholders shall be in writing and shall be sent or otherwise given in accordance with Section 2.5 of these Bylaws not less than ten (10) nor more than sixty (60) calendar days before the date of the meeting to each stockholder entitled to vote at such meeting. The notice shall specify the place, 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 (as authorized by the Board in its sole discretion pursuant to Section 211(a)(2) of the General Corporation Law of Delaware), and, in the case of a special meeting, the purpose or purposes for which the meeting is called. Any previously scheduled meeting of stockholders may be postponed, and, unless the Certificate of Incorporation of the corporation, as the same may be amended and/or restated from time to time (as so amended and restated, the "Certificate") provides otherwise, any special meeting of the stockholders may be cancelled by resolution duly adopted by a majority of the Board members then in office upon public notice given prior to the date previously scheduled for such meeting of stockholders.

Whenever notice is required to be given, under the General Corporation Law of Delaware, the Certificate 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 with the Secretary of State of Delaware, 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.

Whenever notice is required to be given, under any provision of the General Corporation Law of Delaware, the Certificate or these Bylaws, to any stockholder, and such stockholder has received (a) notice of two (2) consecutive annual meetings, or (b) at least two (2) payments (if sent by first-class mail) of dividends or interest on securities during a twelve (12) month period, having been mailed such notice addressed to such person at such person's address as shown on the records of the corporation and have been returned undeliverable, the giving of such notice to such person shall not be required. Any actions or meeting which shall be taken or held without notice to such person shall have the same force and effect as if such notice had been duly given. If any such person shall deliver to the corporation a written notice setting forth such person's then current address, the requirement that notice be given to such person shall be reinstated. In the event that the action taken by the corporation is such as to require the filing of a certificate with the Secretary of State of Delaware, the certificate need not state that notice was not given to persons to whom notice was not required to be given pursuant to Section 230(b) of the General Corporation Law of Delaware.

The exception in subsection (a) of the above paragraph to the requirement that notice be given shall not be applicable to any notice returned as undeliverable if the notice was given by electronic transmission.

2.5 MANNER OF GIVING NOTICE; AFFIDAVIT OF NOTICE

Written notice of any meeting of stockholders, if mailed, is given when deposited in the United States mail, postage prepaid, directed to the stockholder at his, her or its address as it appears on the records of the corporation and otherwise is given when delivered. An affidavit of the Secretary or an Assistant Secretary, 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.

2.6 QUORUM

The holders of a majority of the stock issued and outstanding and entitled to vote thereat, present in person or represented by proxy, shall constitute a quorum at all meetings of the stockholders for the transaction of business, except as otherwise provided by statute or the Certificate. If, however, such quorum is not present or represented at any meeting of the stockholders, then a majority of the stockholders entitled to vote thereat, 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. The stockholders present at a duly called meeting at which quorum is present may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.

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 and place 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 (as authorized by the Board in its sole discretion pursuant to Section 211(a)(2) of the General Corporation Law of Delaware), are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business that might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days, or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting. The Chairman of the meeting shall have the power to adjourn any meeting of stockholders for any reason, and the stockholders shall have the power to adjourn any meeting of stockholders in accordance with Section 2.6 of these Bylaws.

2.8 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 the provisions of Sections 217 and 218 of the General Corporation Law of Delaware (relating to voting rights of fiduciaries, pledgors and joint owners of stock and to voting trusts and other voting agreements).

Except as otherwise provided in the provisions of Section 213 of the General Corporation Law of Delaware (relating to the fixing of a date for determination of stockholders of record), or as may be otherwise provided in the Certificate, each stockholder shall be entitled to one (1) vote for each share of capital stock held by such stockholder.

In all matters, other than the election of directors and except as otherwise required by law, the affirmative vote of the majority of shares present or represented by proxy at the meeting and entitled to vote on the subject matter shall be the act of the stockholders. Directors shall be elected by a plurality of the votes of the shares present in person or represented by proxy at the meeting and entitled to vote on the election of directors.

2.9 WAIVER OF NOTICE

Whenever notice is required to be given under any provision of the General Corporation Law of Delaware, the Certificate or these Bylaws, a written waiver thereof, 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 stated therein, 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 need be specified

in any written waiver of notice, or any waiver by electronic transmission, unless so required by the Certificate or these Bylaws.

2.10 STOCKHOLDER ACTION BY WRITTEN CONSENT

Unless otherwise provided in the Certificate, any action required by the DGCL to be taken at any annual or special meeting of stockholders of a corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice, and without a vote, if a consent or consents in writing, setting forth the action so taken, shall be signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted.

Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing and who, if the action had been taken at a meeting, would have been entitled to notice of the meeting if the record date for such meeting had been the date that written consents signed by a sufficient number of holders to take the action were delivered to the Company as provided in Section 228 of the DGCL. In the event that the action which is consented to is such as would have required the filing of a certificate under any provision of the DGCL, if such action had been voted on by stockholders at a meeting thereof, the certificate filed under such provision shall state, in lieu of any statement required by such provision concerning any vote of stockholders, that written consent has been given in accordance with Section 228 of the DGCL.

2.11 RECORD DATE FOR STOCKHOLDER NOTICE

In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, or entitled to receive payment of any dividend or other distribution or allotment of any rights, or 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 may fix, in advance, a record date, which such date shall not precede the date upon which the resolution fixing the record date is adopted by the Board and which such date shall not be more than sixty (60) nor less than ten (10) calendar days before the date of such meeting, nor more than sixty (60) days prior to any other action.

If the Board does not so fix a record date:

(a) The record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the day on which the meeting is held.

(b) The record date for determining stockholders for any other purpose shall be at the close of business on the day on which the Board adopts the resolution relating thereto.

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 may fix a new record date for the adjourned meeting.

2.12 PROXIES

Each stockholder entitled to vote at a meeting of stockholders may authorize another person or persons to act for him, her or it by a written proxy, signed by the stockholder and filed with the Secretary of the corporation, but no such proxy shall be voted or acted upon after three (3) years from its date, unless the proxy provides for a longer period. A stockholder may authorize another person or persons to act for him, her or it as proxy in the manner(s) provided under Section 212(c) of the General Corporate Law of Delaware or as otherwise provided under Delaware law. The revocability of a proxy that states on its face that it is irrevocable shall be governed by the provisions of Section 212(e) of the General Corporation Law of Delaware.

2.13 LIST OF STOCKHOLDERS ENTITLED TO VOTE; STOCK LEDGER

The officer who has charge of the stock ledger of a corporation shall prepare and make, at least ten (10) calendar days before every meeting of stockholders, a complete list of the stockholders entitled to vote at the meeting, arranged in alphabetical order, and showing the address of each stockholder and the number of shares registered in the name of each stockholder. Nothing contained in this Section 2.13 shall require the corporation 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: (a) 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 (b) for a period of at least ten (10) calendar days prior to the meeting during ordinary business hours at the principal place of business of the corporation.

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 the stockholders of the corporation. The list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present.

2.14 NOMINATIONS AND PROPOSALS BY STOCKHOLDERS AT ANNUAL MEETING

(a) 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: (A) specified in the notice of meeting (or any supplement thereto) given by or at the direction of the Board, (B) otherwise properly brought before the meeting by or at the direction of the Board, or (C) otherwise properly brought before the meeting by a stockholder (i) who is a stockholder of record on the date of the giving of notice provided for in this Section 2.14(a) and on the record date for the determination of stockholders entitled to vote at such annual meeting and (ii) who complies with the notice procedures set forth in this Section 2.14(a). For business to be properly brought before an

annual meeting by a stockholder, the stockholder must have given timely notice thereof in writing to the Secretary of the corporation. To be timely, a stockholder's notice must be delivered to or mailed and received at the principal executive offices of the corporation not less than ninety (90) calendar days in advance of the date that is the one year anniversary of the date on which the corporation first mailed its proxy statement to stockholders in connection with the previous year's annual meeting of stockholders; *provided, however*, that in the event that no annual meeting was held in the previous year or the date of the annual meeting has been changed by more than thirty (30) days from the date of the prior year's meeting, notice by the stockholder to be timely must be so received not later than the close of business on the tenth (10th) day following the day notice of the date of the meeting was mailed or such public disclosure was made, whichever occurs first. A stockholder's notice to the Secretary shall set forth as to each matter the stockholder proposes to bring before the annual meeting: (i) a brief description of the business desired to be brought before the annual meeting and the reasons for conducting such business at the annual meeting, (ii) the name and address, as they appear on the corporation's books, of the stockholder proposing such business, (iii) the class and number of shares of the corporation which are beneficially owned by the stockholder, (iv) any material interest of the stockholder in such business and (v) any other information that is required to be provided by the stockholder pursuant to Regulation 14A under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), in such stockholder's capacity as a proponent to a stockholder proposal. Notwithstanding the foregoing, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholder's meeting, stockholders must provide notice as required by the regulations promulgated under the Exchange Act. Notwithstanding anything in these Bylaws to the contrary, no business shall be conducted at any annual meeting except in accordance with the procedures set forth in this paragraph (a). The chairman of the annual meeting shall, if the facts warrant, determine and declare at the meeting that business was not properly brought before the meeting and in accordance with the provisions of this paragraph (a), and, if he should so determine, he shall so declare at the meeting that any such business not properly brought before the meeting shall not be transacted.

(b) Only persons who are nominated in accordance with the procedures set forth in this paragraph (b) shall be eligible for election as directors, except as otherwise provided in the Certificate of Incorporation with respect to the right of holders of preferred stock of the corporation. Nominations of persons for election to the Board of the corporation may be made at a meeting of stockholders by or at the direction of the Board or by any stockholder of the corporation entitled to vote in the election of directors at the meeting who complies with the notice procedures set forth in this paragraph (b). Such nominations, other than those made by or at the direction of the Board, shall be made pursuant to timely notice in writing to the Secretary of the corporation in accordance with the provisions of paragraph (a) of this Section 2.14. Such stockholder's notice shall set forth (i) as to each person, if any, whom the stockholder proposes to nominate for election or re-election as a director: (A) the name, age, business address and residence address of such person, (B) the principal occupation or employment of such person, (C) the class and number of shares of the corporation which are beneficially owned by such person, (D) 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, and

(E) any other information relating to such person that is required to be disclosed in solicitations of proxies for elections of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including without limitation such person's written consent to being named in the proxy statement, if any, as a nominee and to serving as a director if elected); and (ii) as to such stockholder giving notice, the information required to be provided pursuant to paragraph (a) of this Section 2.14. At the request of the Board, any person nominated by a stockholder for election as a director shall furnish to the Secretary of the corporation that information required to be set forth in the stockholder's notice of nomination, which pertains to the nominee. No person shall be eligible for election as a director of the corporation unless nominated in accordance with the procedures set forth in this paragraph (b). The chairman of the meeting shall, if the facts warrant, determine and declare at the meeting that a nomination was not made in accordance with the procedures prescribed by these Bylaws, and if he should so determine, he shall so declare at the meeting, and the defective nomination shall be disregarded.

(c) Notwithstanding the foregoing provisions of this Section 2.14, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to matters set forth in this Section 2.14. Nothing in this Section 2.14 shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the Exchange Act.

2.15 ORGANIZATION

Meetings of stockholders shall be presided over by (a) the Chairman of the Board or, in the absence thereof, (b) such person as the Chairman of the Board shall appoint or, in the absence thereof or in the event that the Chairman of the Board shall fail to make such appointment, (c) such person as the Chairman of the executive committee of the corporation shall appoint or, in the absence thereof or in the event that the Chairman of the executive committee of the corporation shall fail to make such appointment, any officer of the corporation elected by the Board. In the absence of the Secretary of the corporation, the secretary of the meeting shall be such person as the Chairman of the meeting appoints.

The Board shall, in advance of any meeting of stockholders, appoint one (1) or more inspector(s), who may include individual(s) who serve the corporation in other capacities, including without limitation as officers, employees or agents, to act at the meeting of stockholders and make a written report thereof. The Board may designate one (1) or more persons as alternate inspector(s) to replace any inspector, who fails to act. If no inspector or alternate has been appointed or is able to act at a meeting of stockholders, the Chairman of the meeting shall appoint one (1) or more inspector(s) to act at the meeting. Each inspector, before discharging his or her duties, shall take and sign an oath to faithfully execute the duties of inspector with strict impartiality and according to the best of his or her ability. The inspector(s) or alternate(s) shall have the duties prescribed pursuant to Section 231 of the General Corporate Laws of Delaware or other applicable law.

The Board shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and

regulations, if any, the Chairman of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all acts as, in the judgment of such Chairman, are necessary, appropriate or convenient for the proper conduct of the meeting, including without limitation establishing an agenda of business of the meeting, rules or regulations to maintain order, restrictions on entry to the meeting after the time fixed for commencement thereof and the fixing of the date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at a meeting (and shall announce such at the meeting).

2.16 NOTICE BY ELECTRONIC TRANSMISSION

Without limiting the manner by which notice otherwise may be given effectively to stockholders, any notice to stockholders given by the corporation under any provision of the General Corporation Law of Delaware, the Certificate 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 (a) the corporation is unable to deliver by electronic transmission two (2) consecutive notices given by the corporation in accordance with such consent, and (b) such inability becomes known to the Secretary or an Assistant Secretary of the corporation, the transfer agent or other person responsible for the giving of notice; *provided, however*, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action.

Notice given pursuant to the above paragraph shall be deemed given (a) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice, (b) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice, (c) if by a posting on an electronic network together with a separate notice to the stockholder of such specific posting, upon the later of (i) such posting, and (ii) the giving of such separate notice, and (d) if by any other form of electronic transmission, when directed to the stockholder. An affidavit of the Secretary or Assistant Secretary, 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.

For purposes of these Bylaws, “**electronic transmission**” means any form of communication, not directly involving the physical transmission of paper, which 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. This Section 2.16 shall not apply to Section 164 (failure to pay for stock; remedies), Section 296 (adjudication of claims; appeal), Section 311 (revocation of voluntary dissolution), Section 312 (renewal, revival, extension and restoration of certificate of incorporation) or Section 324 (attachment of shares of stock) of the General Corporation Law of Delaware.

ARTICLE III

DIRECTORS

3.1 POWERS

The business and affairs of the corporation shall be managed by or under the direction of the Board. In addition to the power and authorities these Bylaws expressly confer upon them, the Board may exercise all such powers of the corporation and do all such lawful acts and things as are not required by statute, the Certificate or these Bylaws to be exercised or done by the stockholders.

3.2 NUMBER OF DIRECTORS

Subject to the rights of the holders of any Preferred Stock of the corporation to elect additional directors under specified circumstances, the authorized number of directors of the corporation shall be fixed from time to time exclusively by the Board pursuant to a resolution duly adopted by a majority of the Board members then in office.

No reduction of the authorized number of directors shall have the effect of removing any director before such director's term of office expires.

3.3 ELECTION, QUALIFICATION AND TERM OF OFFICE OF DIRECTORS

Except as provided in the Certificate or Section 3.4 of these Bylaws, directors shall be classified, with respect to the time for which they severally hold office, into three (3) classes, as nearly equal in number as possible, one (1) class to be originally elected for a term expiring at the annual meeting of stockholders to be held in 2006, another class to be originally elected for a term expiring at the annual meeting of stockholders to be held in 2007, and another class to be originally elected for a term expiring at the annual meeting of stockholders to be held in 2008, with each class to hold office until its successor is duly elected and qualified. At each succeeding annual meeting of stockholders, commencing with the first annual meeting (a) directors elected to succeed those directors whose terms then expire shall be elected for a term of office to expire at the third succeeding annual meeting of stockholders after their election, with each director to hold office until his or her successor shall have been duly elected and qualified, and (b) if authorized by a resolution of the Board, directors may be elected to fill any vacancy on the Board, regardless of how such vacancy shall have been created (as set forth in Section 3.4 below).

Directors need not be stockholders unless so required by the Certificate or these Bylaws, wherein other qualifications for directors may be prescribed.

Elections of directors at all meetings of the stockholders at which directors are to be elected shall be by ballot and, subject to the rights of the holders of any Preferred Stock of the corporation to elect additional directors under specified circumstances, a plurality of the votes cast thereat shall elect directors. The ballot shall state the name of the stockholder or proxy voting or such other information as may be required under the procedure established by the Chairman of the meeting. If authorized by the Board, such requirement of a ballot shall be satisfied by a ballot submitted by electronic transmission provided that any such electronic transmission must either set forth or be

submitted with information from which it can be determined that the electronic submission was authorized.

3.4 RESIGNATION AND VACANCIES

Any director may resign at any time upon written notice or by electronic transmission to the corporation.

Subject to the rights of the holders of any series of Preferred Stock of the corporation then outstanding and unless the Board otherwise determines, newly created directorships resulting from any increase in the authorized number of directors, or any vacancies on the Board resulting from the death, resignation, retirement, disqualification, removal from office or other cause shall, unless otherwise provided by law or resolution of the Board, be filled only by a majority vote of the directors then in office, whether or not less than a quorum, and directors so chosen shall hold office for a term expiring at the annual meeting of stockholders at which the term of office of the class to which they have been elected expires.

3.5 PLACE OF MEETINGS; MEETINGS BY TELEPHONE

The Board may hold meetings, both regular and special, either within or outside the State of Delaware.

Unless otherwise restricted by the Certificate or these Bylaws, members of the Board, or any committee designated by the Board, may participate in a meeting of the Board, 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.

3.6 FIRST MEETINGS

The first meeting of each newly elected Board shall be held immediately after, and at the same location as, the annual meeting of stockholders, unless the Board shall fix another time and place and give notice thereof (or obtain waivers of notice thereof) in the manner required herein for special meetings of directors, and no notice of such meeting shall be necessary to the newly elected directors in order legally to constitute the meeting, except as provided in this Section 3.6 and provided that a quorum shall be present.

3.7 REGULAR MEETINGS

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

3.8 SPECIAL MEETINGS; NOTICE

Special meetings of the Board for any purpose(s) may be called at any time by the Chairman of the Board, the Chief Executive Officer, the President or a majority of the members of the Board then in office. The person(s) authorized to call special meetings of the Board may fix the place and time of the meetings.

The Secretary shall give notice of any special meeting to each director personally or by telephone, or sent by first-class mail, overnight mail, courier service or telegram, postage or charges prepaid, addressed to each director at that director's address as it is shown on the records of the corporation. If the notice is mailed, it shall be deposited in the United States mail at least four (4) calendar days before the time of the holding of the meeting. If the notice is delivered by telegram, overnight mail or courier, it shall be deemed adequately delivered when the telegram is delivered to the telegraph company or the notice is delivered to the overnight mail or courier service company at least forty-eight (48) hours before such meeting. If by facsimile transmission, such notice shall be deemed adequately delivered when the notice is transmitted at least twelve (12) hours before such meeting. If by telephone or hand delivery the notice shall be given at least twelve (12) hours prior to the time set for the meeting. Any oral notice given personally or by telephone may be communicated either to the director or to a person at the office of the director who the person giving the notice has reason to believe will promptly communicate it to the director. The notice need not specify the purpose or the place of the meeting, if the meeting is to be held at the principal executive office of the corporation.

3.9 QUORUM

At all meetings of the Board, a majority of the Whole Board (as defined below) shall constitute a quorum for all purposes, and the act of a majority of the directors present at any meeting at which there is a quorum shall be the act of the Board, except as may be otherwise specifically provided by statute or by the Certificate. The directors present at a duly organized meeting may continue to transact business until adjournment notwithstanding the withdrawal of enough directors to leave less than quorum. The term "Whole Board" shall mean the total number of authorized directors of the corporation whether or not there exist any vacancies in previously authorized directorships.

3.10 WAIVER OF NOTICE

Whenever notice is required to be given under any provisions of the General Corporation Law of Delaware or the Certificate or these Bylaws, a written waiver thereof, 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 stated therein, 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 directors, or members of a

committee of directors, need be specified in any written waiver of notice or any waiver by electronic transmission unless so required by the Certificate or these Bylaws.

3.11 ADJOURNED MEETING: NOTICE

If a quorum is not present at any meeting of the Board, then a majority of 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.

3.12 BOARD ACTION BY WRITTEN CONSENT WITHOUT A MEETING

Unless otherwise restricted by the Certificate or these Bylaws, any action required or permitted to be taken at any meeting of the Board, or of any committee thereof, may be taken without a meeting if all members of the Board or committee, as the case may be, consent thereto in writing or by electronic transmission and the writing(s) or electronic transmission(s) are filed with the minutes of proceedings of the Board 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.

3.13 FEES AND COMPENSATION OF DIRECTORS

Unless otherwise restricted by the Certificate or these Bylaws, the Board shall have the authority to fix the compensation of directors.

3.14 REMOVAL OF DIRECTORS

Unless otherwise restricted by statute, the Certificate or these Bylaws, any director or the entire Board may be removed, with or without cause, by the holders of a majority of the shares then entitled to vote at an election of directors.

Effective upon the closing of a firm commitment underwritten public offering of Common Stock of the Corporation and subject to the rights of the holders of any series of Preferred Stock of the corporation then outstanding, unless otherwise restricted by statute, the Certificate or these Bylaws, any director, or all of the directors, may be removed from the Board, but only for cause, but only by the affirmative vote of the holders of at least a majority of the voting power of all the then outstanding shares of capital stock of the corporation then entitled to vote at the election of directors, voting together as a single class.

For purposes of the foregoing paragraph, "cause" shall mean (i) continued willful failure to perform the obligations of a director, (ii) gross negligence by the director, (iii) engaging in transactions that defraud the corporation, (iv) fraud or intentional misrepresentation, including falsifying use of funds and intentional misstatements made in financial statements, books, records or reports to stockholders or governmental agencies, (v) material violation of any agreement between the director and the corporation, (vi) knowingly causing the corporation to commit violations of

applicable law (including by failure to act), (vii) acts of moral turpitude or (viii) conviction of a felony.

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

4.1 COMMITTEES OF DIRECTORS

The Board may from time to time, by resolution passed by a majority of the Whole Board, designate one (1) or more committees of the Board, with such lawfully delegable powers and duties as it thereby confers, with each committee to consist of one (1) or more of the directors of the corporation. The Board may designate one (1) 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(s) thereof present at any meeting and not disqualified from voting, whether or not such member(s) constitute a quorum, may unanimously appoint another member of the Board to act at the meeting in the place of any such absent or disqualified member.

4.2 COMMITTEE MINUTES

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

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 Article III of these Bylaws, Section 3.5 (place of meetings and meetings by telephone), Section 3.7 (regular meetings), Section 3.8 (special meetings and notice), Section 3.9 (quorum), Section 3.10 (waiver of notice), Section 3.11 (adjournment and notice of adjournment), and Section 3.12 (action without a meeting), with such changes in the context of those Bylaws as are necessary to substitute the committee and its members for the Board and its members; *provided, however*, that the time of regular and special meetings of committees may also be called by resolution of the Board. The Board may adopt rules for the government of any committee not inconsistent with the provisions of these Bylaws.

ARTICLE V

OFFICERS

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, a Chairman of the Board, a Vice Chairman of the Board, a Chief Executive Officer, a Chief Financial Officer, a Treasurer, one or more Vice Presidents, Assistant Vice Presidents, Assistant Secretaries, and Assistant Treasurers, and any such other officers as may be appointed in accordance with the provisions of Section 5.3 of these Bylaws. Any number of offices may be held by the same person.

5.2 ELECTION OF OFFICERS

The officers of the corporation, except such officers as may be appointed in accordance with the provisions of Section 5.3 of these Bylaws, shall be chosen by the Board, which shall consider such subject at its first meeting after every annual meeting of stockholders, subject to the rights, if any, of an officer under any contract of employment. Each officer shall hold office until his or her successor is elected and qualified or until his or her earlier resignation or removal. A failure to elect officers shall not dissolve or otherwise affect the corporation.

5.3 SUBORDINATE OFFICERS

The Board may appoint, or empower the Chief Executive Officer or, in the absence of a Chief Executive Officer, the President, to appoint, such other officers as the business of the corporation may require, each of whom shall hold office for such period, have such authority, and perform such duties as are provided in these Bylaws or as the Board may from time to time determine.

5.4 REMOVAL AND RESIGNATION OF OFFICERS

Subject to the rights, if any, of an officer under contract of employment, any officer may be removed, either with or without cause, by an affirmative vote of the majority of the Board at any regular or special meeting of the Board.

Any officer may resign at any time by giving written notice to the corporation. 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 such notice, 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.

5.5 VACANCIES IN OFFICES

Any vacancy occurring in any office of the corporation shall be filled by the Board.

5.6 CHAIRMAN OF THE BOARD

The Chairman of the Board, if such an officer be elected, shall, if present, preside at meetings of the Board and exercise and perform such other powers and duties as may from time to time be

assigned to him or her by the Board or as may be prescribed by these Bylaws. If there is no Chief Executive Officer or President, then the Chairman of the Board shall also be the Chief Executive Officer of the corporation and as such shall also have the powers and duties prescribed in Section 5.7 of these Bylaws.

5.7 CHIEF EXECUTIVE OFFICER

Subject to such supervisory powers, if any, as the Board may give to the Chairman of the Board, the Chief Executive Officer, if any, shall, subject to the control of the Board, have general supervision, direction, and control of the business and affairs of the corporation and shall report directly to the Board. All other officers, officials, employees and agents shall report directly or indirectly to the Chief Executive Officer. The Chief Executive Officer shall see that all orders and resolutions of the Board are carried into effect. The Chief Executive Officer shall serve as chairperson of and preside at all meetings of the stockholders. In the absence of a Chairman of the Board, the Chief Executive Officer shall preside at all meetings of the Board.

5.8 PRESIDENT

In the absence or disability of the Chief Executive Officer, the President shall perform all the duties of the Chief Executive Officer. When acting as the Chief Executive Officer, the President shall have all the powers of, and be subject to all the restrictions upon, the Chief Executive Officer. The President shall have such other powers and perform such other duties as from time to time may be prescribed for him or her by the Board, these Bylaws, the Chief Executive Officer or the Chairman of the Board.

5.9 VICE PRESIDENT

In the absence or disability of the President, the Vice President(s), if any, in order of their rank as fixed by the Board or, if not ranked, a Vice President designated by the Board, shall perform all the duties of the President and, when so acting, shall have all the powers of, and be subject to all the restrictions upon, the President. The Vice President(s) shall have such other powers and perform such other duties as from time to time may be prescribed for them respectively by the Board, these Bylaws, the Chairman of the Board, the Chief Executive Officer or, in the absence of a Chief Executive Officer, the President.

5.10 SECRETARY

The Secretary shall keep or cause to be kept, at the principal executive office of the corporation or such other place as the Board may direct, a book of minutes of all meetings and actions of directors, committees of directors, and stockholders. The minutes shall show the time and place of each meeting, whether regular or special (and, if special, how authorized and the notice given), the names of those present at directors' meetings or committee meetings, the number of shares present or represented at stockholders' meetings, and the proceedings thereof.

The Secretary shall keep, or cause to be kept, at the principal executive office of the corporation or at the office of the corporation's transfer agent or registrar, as determined by resolution of the Board, a share register, or a duplicate share register, showing the names of all stockholders and their addresses, the number and classes of shares held by each, the number and date of certificates evidencing such shares, and the number and date of cancellation of every certificate surrendered for cancellation. Such share register shall be the "stock ledger" for purposes of Section 2.13 of these Bylaws.

The Secretary shall give, or cause to be given, notice of all meetings of the stockholders and of the Board, or committee of the Board, required to be given by law or by these Bylaws. He or she shall keep the seal of the corporation, if one be adopted, in safe custody and shall have such other powers and perform such other duties as may be prescribed by the Board or by these Bylaws.

5.11 CHIEF FINANCIAL OFFICER

The Chief Financial Officer shall keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the corporation, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital and retained earnings.

The Chief Financial Officer shall deposit all money and other valuables in the name and to the credit of the corporation with such depositaries as may be designated by the Board or Chief Executive Officer. The Chief Financial Officer shall disburse the funds of the corporation as may be ordered by the Board, shall render to the Board and Chief Executive Officer, or in the absence of a Chief Executive Officer the President, whenever they request, an account of all of his or her transactions as Chief Financial Officer and of the financial condition of the corporation, and shall have such other powers and perform such other duties as may be prescribed by the Board or these Bylaws. In lieu of any contrary resolution duly adopted by the Board, the Chief Financial Officer shall be the Treasurer of the corporation.

5.12 ASSISTANT SECRETARY

The Assistant Secretary(ies), if any, in the order determined by the Board (or if there be no such determination, then in the order of their election) shall, in the absence of the Secretary or in the event of his or her inability or refusal to act, perform the duties and exercise the powers of the Secretary and shall perform such other duties and have such other powers as the Board may from time to time prescribe.

5.13. ASSISTANT TREASURER

The Assistant Treasurer(s), if any, in the order determined by the Board (or if there be no such determination, then in the order of their election), shall, in the absence of the Chief Financial Officer or in the event of his or her inability or refusal to act, perform the duties and exercise the

powers of the Chief Financial Officer and shall perform such other duties and have such other powers as the Board may from time to time prescribe.

5.14 AUTHORITY AND DUTIES OF OFFICERS

In addition to the foregoing authority and duties, 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.

ARTICLE VI

INDEMNITY

6.1 RIGHT TO INDEMNIFICATION IN ACTIONS, SUITS OR PROCEEDINGS OTHER THAN THOSE BY OR IN THE RIGHTS OF THE CORPORATION

Subject to Section 6.3 of this Article VI, the corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in the right of the corporation) by reason of the fact that such person is or was a director or officer of the corporation, or is or was a director or officer of the corporation serving at the request of the corporation as a director or officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan 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 action, suit or 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 action, suit or 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.

6.2 RIGHT TO INDEMNIFICATION IN ACTIONS, SUITS OR PROCEEDINGS BY OR IN THE RIGHT OF THE CORPORATION

Subject to Section 6.3 of this Article VI, the corporation shall indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor by reason of the fact that such person is or was a director or officer of the corporation, or is or was a director or officer of the corporation serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan 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.

6.3 AUTHORIZATION OF INDEMNIFICATION

Any indemnification under this Article VI (unless ordered by a court) shall be made by the corporation only as authorized in the specific case upon a determination that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standard of conduct set forth in Section 6.1 or Section 6.2 of this Article VI, as the case may be. Such determination shall be made, with respect to a person who is a director or officer at the time of such determination, (a) by a majority vote of the directors who are not parties to such action, suit or proceeding, even though less than a quorum, or (b) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (c) if there are no such directors, or if such directors so direct, by independent legal counsel in a written opinion or (d) by the stockholders (but only if a majority of the directors who are not parties to such action, suit or proceeding, if they constitute a quorum of the board of directors, presents the issue of entitlement to indemnification to the stockholders for their determination). Any person or persons having the authority to act on the matter on behalf of the corporation shall make such determination, with respect to former directors and officers. To the extent, however, 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 above, 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, without the necessity of authorization in the specific case.

6.4 GOOD FAITH DEFINED

For purposes of any determination under Section 6.3 of this Article VI, a person shall be deemed to have 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, or, with respect to any criminal action or proceeding, to have had no reasonable cause to believe such person's conduct was unlawful, if such person's action is based on the records or books of account of the corporation or another enterprise, or on information supplied to such person by the officers of the corporation or another enterprise in the course of their duties, or on the advice of legal counsel for the corporation or another enterprise or on information or records given or reports made to the corporation or another enterprise by an independent certified public accountant or by an appraiser or other expert selected with reasonable care by the corporation or another enterprise. The term "another enterprise" as used in this Section 6.4 shall mean any other corporation or any partnership, joint venture, trust, employee

benefit plan or other enterprise of which such person is or was serving at the request of the corporation as a director, officer, employee or agent. The provisions of this Section 6.4 shall not be deemed to be exclusive or to limit in any way the circumstances in which a person may be deemed to have met the applicable standard of conduct set forth in Section 6.1 or Section 6.2 of this Article VI, as the case may be.

6.5 INDEMNIFICATION BY A COURT

Notwithstanding any contrary determination in the specific case under Section 6.3 of this Article VI, and notwithstanding the absence of any determination thereunder, any director or officer may apply to the Court of Chancery in the State of Delaware (but in no event later than forty-five (45) days after written receipt of the written request by said director or officer) for indemnification to the extent otherwise permissible under Section 6.1 and Section 6.2 of this Article VI. The basis of such indemnification by a court shall be a determination by such court that indemnification of the director or officer is proper in the circumstances because such person has met the applicable standards of conduct set forth in Section 6.1 or Section 6.2 of this Article VI, as the case may be. Neither a contrary determination in the specific case under Section 6.3 of this Article VI nor the absence of any determination thereunder shall be a defense to such application or create a presumption that the director or officer seeking indemnification has not met any applicable standard of conduct. Notice of any application for indemnification pursuant to this Section 6.5 shall be given to the corporation promptly upon the filing of such application. If successful, in whole or in part, the director or officer seeking indemnification shall also be entitled to be paid the expense of prosecuting such application.

6.6 EXPENSES PAYABLE IN ADVANCE

Expenses incurred by a director or officer in defending any civil, criminal, administrative or investigative action, suit or proceeding shall be paid by the corporation in advance of the final disposition of such action, suit or proceeding upon receipt of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that such person is not entitled to be indemnified by the corporation as authorized in this Article VI.

6.7 NONEXCLUSIVITY OF INDEMNIFICATION AND ADVANCEMENT OF EXPENSES

The indemnification and advancement of expenses provided by or granted pursuant to this Article VI shall not be deemed exclusive of any other rights to which those seeking indemnification or advancement of expenses may be entitled under the Certificate, any 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, it being the policy of the corporation that indemnification of the persons specified in Section 6.1 and Section 6.2 of this Article VI shall be made to the fullest extent permitted by law. The provisions of this Article VI shall not be deemed to preclude the indemnification of any person who is not specified in Section 6.1

or Section 6.2 of this Article VI but whom the corporation has the power or obligation to indemnify under the provisions of the General Corporation Law of the State of Delaware, or otherwise.

6.8 INSURANCE

The corporation may purchase and maintain insurance on behalf of any person who is or was a director or officer of the corporation, or is or was a director or officer of the corporation serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan 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 or the obligation to indemnify such person against such liability under the provisions of this Article VI.

6.9 CERTAIN DEFINITIONS

For purposes of this Article VI, 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 or officers, so that any person who is or was a director or officer of such constituent corporation, or is or was a director or officer of such constituent corporation serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust, employee benefit plan or other enterprise, shall stand in the same position under the provisions of this Article VI 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 VI, 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 or officer 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 VI.

6.10 SURVIVAL OF INDEMNIFICATION AND ADVANCEMENT OF EXPENSES

The indemnification and advancement of expenses provided by, or granted pursuant to, this Article VI shall, unless otherwise provided when authorized or ratified, continue as to a person who has ceased to be a director or officer and shall inure to the benefit of the heirs, executors and administrators of such a person.

6.11 LIMITATION ON INDEMNIFICATION

Notwithstanding anything contained in this Article VI to the contrary, except for proceedings to enforce rights to indemnification (which shall be governed by Section 6.5 hereof), the corporation shall not be obligated to indemnify any director or officer in connection with a proceeding (or part thereof) initiated by such person unless such proceeding (or part thereof) was authorized or consented to by the board of directors of the corporation.

6.12 INDEMNIFICATION OF EMPLOYEES AND AGENTS

The corporation may, to the extent authorized from time to time by the board of directors, provide rights to indemnification and to the advancement of expenses to employees and agents of the corporation similar to those conferred in this Article VI to directors and officers of the corporation.

ARTICLE VII

RECORDS AND REPORTS

7.1 MAINTENANCE AND INSPECTION OF RECORDS

The corporation shall, either at its principal executive office or at such place or places as designated by the Board, keep a record of its stockholders listing their names and addresses and the number and class of shares held by each stockholder, a copy of these Bylaws, as may be amended to date, minute books, accounting books and other records.

Any such records maintained by the corporation may be kept on, or by means of, or be in the form of, any information storage device or method, provided that the records so kept can be converted into clearly legible paper form within a reasonable time. The corporation shall so convert any records so kept upon the request of any person entitled to inspect such records pursuant to the provisions of the General Corporation Law of Delaware. When records are kept in such manner, a clearly legible paper form produced from or by means of the information storage device or method shall be admissible in evidence, and accepted for all other purposes, to the same extent as an original paper form accurately portrays the record.

Any stockholder of record, in person or by attorney or other agent, shall, upon written demand under oath stating the purpose thereof, have the right during the usual hours for business to inspect for any proper purpose the corporation's stock ledger, a list of its stockholders, and its other books and records and to make copies or extracts therefrom. A proper purpose shall mean a purpose reasonably related to such person's interest as a stockholder. In every instance where an attorney or other agent is the person who seeks the right to inspection, the demand under oath shall be accompanied by a power of attorney or such other writing that authorizes the attorney or other agent to so act on behalf of the stockholder. The demand under oath shall be directed to the corporation at its registered office in Delaware or at its principal place of business.

7.2 INSPECTION BY DIRECTORS

Any director shall have the right to examine the corporation's stock ledger, a list of its stockholders, and its other books and records for a purpose reasonably related to his or her position as a director. The Court of Chancery is hereby vested with the exclusive jurisdiction to determine whether a director is entitled to the inspection sought. The Court may summarily order the corporation to permit the director to inspect any and all books and records, the stock ledger, and the stock list and to make copies or extracts therefrom. The Court may, in its discretion, prescribe any limitations or conditions with reference to the inspection, or award such other and further relief as the Court may deem just and proper.

7.3 REPRESENTATION OF SHARES OF OTHER CORPORATIONS

Unless otherwise directed by the Board, the Chief Executive Officer, the President, or any other person authorized by the President, is authorized to vote, represent, and exercise on behalf of the corporation all rights incident to any and all shares of any other corporation(s) standing in the name of the 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.

ARTICLE VIII

GENERAL MATTERS

8.1 CHECKS

From time to time, the Board shall determine by resolution which person or persons may sign or endorse all checks, drafts, other orders for payment of money, notes or other evidences of indebtedness that are issued in the name of or payable to the corporation, and only the persons so authorized shall sign or endorse those instruments.

8.2 EXECUTION OF CORPORATE CONTRACTS AND INSTRUMENTS

The Board, except as otherwise provided in these Bylaws, may authorize any officer or officers, or agent or agents, to enter into any contract or execute any 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 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.

8.3 STOCK CERTIFICATES; PARTLY PAID SHARES

The shares of a corporation shall be represented by certificates, provided that the Board may provide by resolution 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. Notwithstanding the adoption of such a resolution by the Board, every holder of stock represented by certificates and upon request every holder of uncertificated shares shall be entitled to have a certificate signed by, or in the name of the corporation by the Chairman of the Board or Chief Executive Officer, or the President or Vice-President, and by the Chief Financial Officer 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 he were such officer, transfer agent or registrar at the date of issue.

The corporation may issue the whole or any part of its shares as partly paid and subject to call for the remainder of the consideration to be paid therefor. Upon the face or back of each stock certificate issued to represent any such partly paid shares, upon the books and records of the corporation in the case of uncertificated partly paid shares, the total amount of the consideration to be paid therefor and the amount paid thereon shall be stated. Upon the declaration of any dividend on fully paid shares, the corporation shall declare a dividend upon partly paid shares of the same class, but only upon the basis of the percentage of the consideration actually paid thereon.

8.4 SPECIAL DESIGNATION ON CERTIFICATES

If the corporation is authorized to issue more than one (1) class of stock or more than one (1) 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 General Corporation Law of Delaware, 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, 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.

8.5 LOST CERTIFICATES

Except as provided in this Section 8.5, 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, or may require any transfer agent, if any, for the shares to require, the owner of the lost, stolen or destroyed certificate, or his, her or its 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.

8.6 CONSTRUCTION; DEFINITIONS

Unless the context requires otherwise, the general provisions, rules of construction and definitions in the Delaware General Corporation Law 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 a corporation and a natural person.

8.7 DIVIDENDS

The directors of the corporation, subject to any restrictions contained in the Certificate, may declare and pay dividends upon the shares of its capital stock pursuant to the General Corporation Law of Delaware. Dividends may be paid in cash, in property or in shares of the corporation's capital stock.

The directors of the corporation 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.

8.8 FISCAL YEAR

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

8.9 SEAL

This corporation may have a corporate seal, which may be adopted or altered at the pleasure of the Board, and may use the same by causing it or a facsimile thereof, to be impressed or affixed or in any other manner reproduced.

8.10 TRANSFER OF STOCK

Upon surrender to the corporation or the transfer agent of the corporation, if any, of a certificate for shares duly endorsed or accompanied by proper evidence of succession, assignation or authority to transfer (as determined by legal counsel to the corporation), it shall be the duty of the corporation, as the corporation may so instruct its transfer agent, if any, to issue a new certificate to the person entitled thereto, cancel the old certificate, and record the transaction in its books.

8.11 REGISTERED STOCKHOLDERS

The corporation 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, shall be entitled to hold liable for calls and assessments the person registered on its books as the owner of shares, and 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 IX

AMENDMENTS

The Bylaws of the corporation may be adopted, amended or repealed by the stockholders entitled to vote; *provided, however*, that the corporation may, in its Certificate, confer the power to adopt, amend or repeal bylaws upon the Board. The fact that such power has been so conferred upon the Board shall not divest the stockholders of the power, nor limit their power to adopt, amend or repeal bylaws.

Effective upon the closing of a firm commitment underwritten public offering of Common Stock of the Corporation and notwithstanding the foregoing, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate, the amendment or repeal of all or any portion of Article II, Section 3.2 (number of directors), Section 3.3 (election, qualification and term of office of directors), Section 3.4 (resignation and vacancies), Section 3.14 (removal of directors), Article VI or this Article IX by the stockholders of the corporation shall require the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of the then outstanding shares of voting stock entitled to vote generally in the election of directors, voting together as a single class.