

AMENDED AND RESTATED

CERTIFICATE OF INCORPORATION OF

ACHAOGEN, INC.

Achaogen, Inc., a corporation organized and existing under the laws of the State of Delaware (the “**Corporation**”), certifies that:

A. The name of the Corporation is Achaogen, Inc. The Corporation was originally incorporated under the name “VVII NewCo 2003, Inc.” The Corporation’s original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on November 26, 2002. An Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on January 27, 2014.

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, and restates, integrates and further amends the provisions of the Corporation’s Certificate of Incorporation.

C. The text of the Certificate of Incorporation is amended and restated in its entirety to read as set forth in EXHIBIT A attached hereto.

IN WITNESS WHEREOF, the Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by Kenneth J. Hillan, a duly authorized officer of the Corporation, on March 10, 2014.

/s/ Kenneth J. Hillan

Kenneth J. Hillan

President and Chief Executive Officer

EXHIBIT A

ARTICLE I

The name of the Corporation is Achaogen, Inc.

ARTICLE II

The purpose of this corporation is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE III

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

ARTICLE IV

1. Reverse Stock Split.

(a) Effective upon the filing of this Amended and Restated Certificate of Incorporation (the “**Restated Certificate**”) with the Secretary of State of the State of Delaware (the “**Effective Time**”), each eleven (11) shares of Common Stock (as defined below) issued and outstanding shall be reclassified as one (1) share of Common Stock, and each eleven (11) shares of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock (as each is defined below) issued and outstanding shall be reclassified as one (1) share of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock, respectively (the “**Reverse Stock Split**”).

(b) Each stock certificate representing shares of any class or series of Common Stock or Preferred Stock (as defined below)

immediately prior to the Effective Time shall, from and after the Effective Time, represent that number of shares of the class or series of Common Stock or Preferred Stock into which such shares shall have been reclassified pursuant to the Reverse Stock Split; provided, however, that each holder of any stock certificate(s) that represented shares of Common Stock or Preferred Stock immediately prior to the Effective Time shall be entitled to receive, upon surrender of such certificate(s), one or more certificates (or book entry shares) evidencing and representing the number of shares of Common Stock or Preferred Stock into which the shares represented by such certificate(s) shall have been reclassified pursuant to the Reverse Stock Split.

(c) No fractional shares shall be issued for shares of Preferred Stock or Common Stock pursuant to the Reverse Stock Split. If the Reverse Stock Split would result in the issuance of any fractional share of any class or series of Common Stock or Preferred Stock, the Corporation shall, in lieu of issuing any such fractional share, pay cash in an amount equal to the fair value of such fractional share (as determined in good faith by the Board of Directors). All share, per share and dollar references in this Restated Certificate have been adjusted for the Reverse Stock Split.

2. The total number of shares of stock that the Corporation shall have authority to issue is Two Hundred Ninety-Five Million Two Hundred Two Thousand Nine Hundred Ten (295,202,910), consisting of One Hundred Sixty Three Million (163,000,000) shares of Common Stock, \$0.001 par value per share (“**Common Stock**”), and One Hundred Thirty-Two Million Two Hundred Two Thousand Nine Hundred Ten (132,202,910) shares of Preferred Stock, \$0.001 par value per share (“**Preferred Stock**”). The first series of Preferred Stock shall be designated “**Series A Preferred Stock**” and shall consist of Twelve Million Three Hundred Eighty-Six Thousand Seventy-One (12,386,071) shares. The second series of Preferred Stock shall be designated “**Series B Preferred Stock**” and shall consist of Fourteen Million Two Hundred Sixty-Six Thousand Eight Hundred Thirty-Nine (14,266,839) shares. The third series of Preferred Stock shall be designated “**Series C Preferred Stock**” and shall consist of Fifty-Two Million Fifty-Five Hundred Thousand (52,550,000) shares. The fourth series of Preferred Stock shall be designated “**Series D Preferred Stock**” and shall consist of Fifty Three Million (53,000,000) shares.

ARTICLE V

The terms and provisions of the Common Stock and Preferred Stock are as follows:

1. Definitions. For purposes of this ARTICLE V, the following definitions shall apply:

(a) “**Affiliate**” shall mean, with respect to any holder of shares of Preferred Stock, any person, entity or firm which, directly or indirectly, controls, is controlled by or is under common control with such holder, including, without limitation, any entity of which the holder is a partner or member, any partner, officer, director, member or employee of such holder and any venture capital fund now or hereafter existing of which the holder is a partner or member which is controlled by or under common control with one or more general partners of such holder or shares the same management company with such holder.

(b) “**Bridge Notes**” shall mean those convertible promissory notes issued pursuant to that certain Note Purchase Agreement, dated November 20, 2012, by and between the Corporation and the persons and entities listed on the schedule of investors attached thereto.

(c) “**Committed Second Closing Shares**” shall mean the number of Second Closing Shares committed to be purchased by a holder of Series D Preferred Stock and set forth opposite such holder’s name under the column titled “Shares of Series D Preferred Stock Committed to Purchase in Second Closing” on Exhibit A-2 attached to the Series D Purchase Agreement.

(d) “**Conversion Price**” shall mean \$13.42 per share for the Series A Preferred Stock, \$15.73 per share for the Series B Preferred Stock, \$11.99 per share for the Series C Preferred Stock and \$11.99 per share for the Series D Preferred Stock (each subject to adjustment from time to time for Recapitalizations and as otherwise set forth elsewhere herein, except with respect to the Reverse Stock Split).

(e) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities convertible into or exchangeable for Common Stock.

(f) “**Corporation**” shall mean Achaogen, Inc. a corporation organized and existing under the laws of the State of Delaware.

(g) “**Distribution**” shall mean the transfer of cash or other property whether by way of dividend or otherwise, other than dividends on Common Stock payable in Common Stock, or the purchase or redemption of shares of the Corporation for cash or property other than:

(i) repurchases at cost of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase, (ii) repurchases of Common

Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such right, and (iii) any other repurchase or redemption of capital stock of the Corporation approved by the holders of the Common and Preferred Stock of the Corporation voting as separate classes.

(h) **“Dividend Rate”** shall mean an annual rate of \$1.232 per share for the Series A Preferred Stock, \$1.672 per share for the Series B Preferred Stock, \$0.9592 per share for the Series C Preferred Stock and \$0.9592 per share for the Series D Preferred Stock (each subject to adjustment from time to time for Recapitalizations as set forth elsewhere herein, except with respect to the Reverse Stock Split).

(i) **“Eligible Transferee”** shall have the meaning given such term in the Series D Purchase Agreement.

(j) **“Excluded Holder”** shall mean any holder of Preferred Stock as of March 5, 2013 that, together with its Affiliates, held less than 1,400,000 shares of Preferred Stock, on an absolute basis (not on an as-converted-to-Common-Stock basis), as of March 5, 2013, prior to giving effect to the Reverse Stock Split.

(k) **“Filing Date”** shall mean the date of effectiveness of the filing of this Restated Certificate with the Secretary of State of the State of Delaware.

(l) **“First Closing”** shall have the meaning given such term in the Series D Purchase Agreement.

(m) **“First Closing Conversion Portion”** shall mean the number shares of Preferred Stock determined by multiplying the number of shares of each series of Preferred Stock held by such First Closing Non-Participating Investor as of 12:00 a.m. Pacific Daylight Time on May 2, 2013 by the quotient of (x) the result of (A) such investor’s Pro Rata Share *minus* (B) the aggregate dollar amount of shares either purchased by such First Closing Non-Participating Investor (by itself or through one or more of its Affiliates) in the First Closing or any Supplemental Closing or irrevocably committed to be purchased by such First Closing Non-Participating Investor (by itself or through one or more of its Affiliates) in the Second Closing, *divided by* (y) such investor’s Pro Rata Share.

(n) **“First Closing Date”** shall have the meaning given such term in the Series D Purchase Agreement.

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(o) **“Liquidation Preference”** shall mean \$15.40 per share for the Series A Preferred Stock, \$20.90 per share for the Series B Preferred Stock, \$11.99 per share for the Series C Preferred Stock and \$11.99 per share for Series D Preferred Stock (each subject to adjustment from time to time for Recapitalizations as set forth elsewhere herein, except with respect to the Reverse Stock Split).

(p) **“Mandatory Conversions”** shall mean the conversions that may occur pursuant to Section 4(c).

(q) **“Options”** shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities; *provided, however*, that the term “Option” as used herein shall not include the right and commitment by the parties to the Series D Purchase Agreement to purchase shares of Series D Preferred Stock in the Second Closing.

(r) **“Original Issue Price”** shall mean \$15.40 per share for the Series A Preferred Stock, \$20.90 per share for the Series B Preferred Stock, \$11.99 per share for the Series C Preferred Stock and \$11.99 per share for the Series D Preferred Stock (each subject to adjustment from time to time for Recapitalizations as set forth elsewhere herein, except with respect to the Reverse Stock Split).

(s) **“Preferred Stock”** shall mean the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock.

(t) **“Pro Rata Share”** shall be determined by multiplying \$25,000,000.00 by the quotient of (x) the number of shares of Preferred Stock (other than Series D Preferred Stock) held by such holder as of 11:59 p.m. Pacific Daylight Time on May 1, 2013, on an as-converted-to-Common-Stock basis, *divided by* (y) the aggregate number of shares of Preferred Stock (other than Series D Preferred Stock) held by all stockholders (other than Excluded Holders) as of 11:59 p.m. Pacific Daylight Time on May 1, 2013, on an as-converted-to-Common-Stock basis.

(u) **“Recapitalization”** shall mean any stock dividend, stock split, combination of shares, reorganization, recapitalization, reclassification or other similar event.

(v) **“Second Closing Conversion Portion”** shall mean the number shares of Preferred Stock determined by multiplying the number of shares of each series of Preferred Stock (other than Series D Preferred Stock) held by such Second Closing Non-Participating Investor as of 11:59 p.m. Pacific Daylight Time on May 1, 2013 by the quotient of (x) the result of (A) such investor’s Pro Rata Share *minus* (B) the aggregate dollar amount of shares purchased by such Second Closing Non-Participating Investor in the First Closing, any Supplemental Closing and the Second Closing, *divided by* (y) such investor’s Pro Rata Share.

(w) “**Second Closing Date**” shall have the meaning given such term in the Series D Purchase Agreement.

(x) “**Second Closing Shares**” shall have the meaning given such term in the Series D Purchase Agreement.

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(y) “**Series D Conversion Portion**” shall mean the number shares of Series D Preferred Stock purchased by such Second Closing Non-Participating Investor in the First Closing and any Supplemental Closing multiplied by the quotient of (x) the result of (A) the Committed Second Closing Shares *minus* (B) the number of Second Closing Shares purchased by such Second Closing Non-Participating Investor in the Second Closing, *divided by* (y) the Committed Second Closing Shares.

(z) “**Series D Purchase Agreement**” shall mean that certain Series D Preferred Stock Purchase Agreement, dated March 6, 2013, by and among the Corporation and the parties named therein, as such may be amended from time to time.

(aa) “**Subsequent Closing**” shall have the meaning given such term in the Series D Purchase Agreement.

(bb) “**Supplemental Closing**” shall have the meaning given such term in the Series D Purchase Agreement.

2. Dividends.

(a) Preferred Stock. In any calendar year, the holders of outstanding shares of Preferred Stock shall be entitled to receive dividends, when, as and if declared by the Board of Directors, out of any assets at the time legally available therefor, at the Dividend Rate specified for such shares of Preferred Stock payable in preference and priority to any declaration or payment of any Distribution on Common Stock of the Corporation in such calendar year. No Distributions shall be made with respect to the Common Stock until all declared dividends on the Preferred Stock have been paid or set aside for payment to the Preferred Stock holders. Payment of any dividends to the holders of the Preferred Stock shall be on a pro rata, pari passu basis in proportion to the Dividend Rates for each series of Preferred Stock. The right to receive dividends on shares of Preferred Stock shall not be cumulative, and no right to such dividends shall accrue to holders of Preferred Stock by reason of the fact that dividends on said shares are not declared or paid in any calendar year.

(b) Additional Dividends. After the payment or setting aside for payment of the dividends described in Section 2(a), any additional dividends (other than dividends on Common Stock payable solely in Common Stock) declared or paid in any fiscal year shall be declared or paid among the holders of the Preferred Stock and Common Stock then outstanding in proportion to the greatest whole number of shares of Common Stock which would be held by each such holder if all shares of Preferred Stock were converted at the then-effective Conversion Rate (as defined in Section 4 hereof).

(c) Non-Cash Distributions. Whenever a Distribution provided for in this Section 2 shall be payable in property other than cash, the value of such Distribution shall be deemed to be the fair market value of such property as determined in good faith by the Board of Directors.

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3. Liquidation Rights.

(a) Liquidation Preference. In the event of any liquidation, dissolution or winding up of the Corporation, either voluntary or involuntary, the holders of the Preferred Stock shall be entitled to receive out of the funds and assets legally available therefore, prior and in preference to any Distribution of any of the assets of the Corporation to the holders of the Common Stock by reason of their ownership of such stock, an amount per share for each share of Preferred Stock held by them equal to the sum of (i) the Liquidation Preference specified for such share of Preferred Stock and (ii) all declared but unpaid dividends (if any) on such share of Preferred Stock. If upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation legally available for distribution to the holders of the Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(a), then the entire assets of the Corporation legally available for distribution shall be distributed with equal priority and pro rata among the holders of the Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(a).

(b) Remaining Assets. After the payment or setting aside for payment to the holders of Preferred Stock of the full amounts specified in Section 3(a) above, the entire remaining assets of the Corporation legally available for distribution shall be distributed *pro rata* to holders of the Common Stock of the Corporation in proportion to the number of shares of Common Stock held by them.

(c) Shares not Treated as Both Preferred Stock and Common Stock in any Distribution. Notwithstanding Sections 3(a) and 3(b) above, solely for purposes of determining the amount that each holder of shares of Preferred Stock is entitled to receive with respect to a liquidation, dissolution or winding up of the Corporation, the holder of each share of each series of Preferred Stock shall be treated as if such holder had

converted such holder's shares of such series into shares of Common Stock immediately prior to such liquidation, dissolution or winding up of the Corporation if, as a result of an actual conversion of any series of Preferred Stock (including taking into account the operation of this Section 3(c) with respect to all series of Preferred Stock), each holder of such series would receive (with respect to the shares of such series), in the aggregate, an amount greater than the amount that would be distributed to holders of such series (with respect to the shares of such series) if such holders had not converted such series of Preferred Stock into shares of Common Stock. If holders of any series are treated as if they had converted shares of Preferred Stock into Common Stock pursuant to this Section 3(c), then such holders shall not be entitled to receive any distribution pursuant to Section 3(a) that would otherwise be made to holders of such series of Preferred Stock.

(d) Reorganization. For purposes of this Section 3, a liquidation, dissolution or winding up of the Corporation shall be deemed to be occasioned by, or to include, (a) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions to which the Corporation is party (including, without limitation, any stock acquisition, reorganization, merger or consolidation, but excluding any sale of stock for capital raising purposes) other than a transaction or series of transactions in which the holders of the voting securities of the Corporation outstanding immediately prior to such transaction continue to retain (either by such voting securities remaining outstanding or by such voting securities

being converted into voting securities of the surviving entity), as a result of shares in the Corporation held by such holders prior to such transaction, at least fifty percent (50%) of the total voting power represented by the voting securities of the Corporation or such surviving entity outstanding immediately after such transaction or series of transactions; (b) a sale, lease, exclusive license or other conveyance of all or substantially all of the assets of the Corporation; or (c) any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary.

(e) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to stockholders in connection with any liquidation, dissolution, or winding up of the Corporation are other than cash, then the value of such assets shall be their fair market value as determined in good faith by the Board of Directors, *except that*, unless otherwise provided for in the definitive agreements pertaining to any Corporate Transaction, any publicly-traded securities to be distributed to stockholders in a liquidation, dissolution, or winding up of the Corporation shall be valued as follows:

(i) If the securities are then traded on a national securities exchange or The NASDAQ Stock Market (or a similar national quotation system), then the value of the securities shall be deemed to be the average of the closing prices of the securities on such exchange or system over the ten (10) trading day period ending five (5) trading days prior to the Distribution;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the average of the closing bid prices of the securities over the ten (10) trading day period ending five (5) trading days prior to the Distribution.

For the purposes of this Section 3(e), “**trading day**” shall mean any day which the exchange or system on which the securities to be distributed are traded is open and “**closing prices**” or “**closing bid prices**” shall be deemed to be: (i) for securities traded primarily on the New York Stock Exchange, the American Stock Exchange or The NASDAQ Stock Market, the last reported trade price or sale price, as the case may be, at 4:00 p.m., New York time, on that day and (ii) for securities listed or traded on other exchanges, markets and systems, the market price as of the end of the regular hours trading period that is generally accepted as such for such exchange, market or system. If, after the Filing Date, the benchmark times generally accepted in the securities industry for determining the market price of a stock as of a given trading day shall change from those set forth above, the fair market value shall be determined as of such other generally accepted benchmark times.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

(a) Right to Convert. Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time after the date that is 180 days following the Filing Date, at the office of the Corporation or any transfer agent for the Preferred Stock, into that number of fully-paid, nonassessable shares of Common Stock determined by dividing the Original Issue Price for the relevant series by the Conversion Price for such series (such number of shares of Common Stock into which each share of Preferred Stock of a series may be

converted is hereinafter referred to as the “**Conversion Rate**” for such series). Upon any decrease or increase in the Conversion Price for any series of Preferred Stock, as described in this Section 4, the Conversion Rate for such series shall be appropriately increased or decreased.

(b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully-paid, non-assessable shares of Common Stock at the then effective Conversion Rate for such share (i) immediately prior to the closing of a firm commitment underwritten initial public offering pursuant to an effective registration statement filed under the Securities Act of 1933, as amended (the “**Securities Act**”), covering

the offer and sale of the Corporation's Common Stock, *provided, however*, that the fully diluted valuation of the Corporation is not less than \$200,000,000 and the aggregate gross proceeds to the Corporation (before deduction of underwriter's commissions and expenses) are not less than \$40,000,000, or (ii) upon the receipt by the Corporation of a written request for such conversion from the holders of a majority of the Preferred Stock then outstanding on an as-converted-to-Common-Stock basis, or, if later, the effective date for conversion specified in such request (each of the events referred to in (i) and (ii) are referred to herein as an "**Automatic Conversion Event**").

(c) Special Mandatory Conversion.

(i) In the event that a holder of Preferred Stock (other than an Excluded Holder) as of 12:00 a.m. Pacific Daylight Time on May 2, 2013 (a "**First Closing Obligee**") has not, prior to May 2, 2013, by itself or through one or more of its Affiliates (subject to Section 4(c)(vii) below), purchased in the First Closing or a Supplemental Closing and, by execution of the Series D Purchase Agreement, irrevocably committed to purchase in the Second Closing (taken together with the First Closing and any Supplemental Closings, the "**Mandatory Financing**"), an aggregate amount in the Mandatory Financing at least equal to such holder's Pro Rata Share, then the First Closing Conversion Portion of each series of Preferred Stock (other than Series D Preferred Stock) held by such holder (a "**First Closing Non-Participating Investor**") shall automatically, and without further action on the part of such holder, be converted into Common Stock at ten (10) times the applicable Conversion Price of such series of Preferred Stock. The amount of principal and interest of any Bridge Note converted by a holder into Series D Preferred Stock at the First Closing shall be deemed to have been purchased by such holder for the purpose of the foregoing calculation. Upon conversion pursuant to this Section 4(c)(i), the shares of Preferred Stock so converted shall be cancelled and not subject to reissuance.

(ii) In the event that a holder or an Eligible Transferee commits in the Series D Preferred Stock Purchase Agreement to purchase Second Closing Shares in the Second Closing (a "**Second Closing Obligee**") but does not, by itself or through one or more of its Affiliates (subject to Section 4(c)(vii) below), purchase at the Second Closing (if such occurs) at least the number of Second Closing Shares set forth opposite such Second Closing Obligee's name in the column titled "Shares of Series D Preferred Stock Committed to Purchase in Second Closing" on Exhibit A-2 attached to the Series D Purchase Agreement, then (i) the Second Closing Conversion Portion of each series of Preferred Stock (other than Series D Preferred Stock) held by such Second Closing Obligee (a "**Second Closing Non-Participating Investor**") shall automatically, and without further action on the part of such holder, be converted into Common Stock at ten (10) times the applicable Conversion Price of such series of Preferred

Stock, and (ii) the Series D Conversion Portion of the Series D Preferred Stock held by such Second Closing Non-Participating Investor and originally issued in the First Closing and any Supplemental Closing shall automatically, and without further action on the part of such holder, be converted into Common Stock at ten (10) times the Conversion Price of the Series D Preferred Stock. Upon conversion pursuant to this Section 4(c)(ii), the shares of Preferred Stock so converted shall be cancelled and not subject to reissuance. Shares of Preferred Stock that are held by a Second Closing Obligee as of 11:59 p.m. Pacific Daylight Time on May 1, 2013, including any shares of Series D Preferred Stock purchased by such Second Closing Obligee in the First Closing or any Supplemental Closing, will remain subject to conversion under this provision through the date of the Second Closing, even if such shares are transferred to another holder prior to the Second Closing, and will be converted on the terms provided in the forgoing sentence as if such shares of Preferred Stock were still held by such Second Closing Obligee.

(iii) For the avoidance of doubt and notwithstanding the Mandatory Conversions, the Conversion Prices of the shares of Preferred Stock not converted pursuant to Sections 4(c)(i)-(ii) shall not be affected by the Mandatory Conversions.

(iv) The conversions that may occur pursuant to Sections 4(c)(i) shall be effective as of 12:00 a.m. Pacific Daylight Time on May 2, 2013 and the conversions that may occur pursuant to Section 4(c)(ii) shall be effective immediately following the Second Closing, in each case, whether or not the certificates evidencing such shares are surrendered to the Corporation or its transfer agent, *provided, however*, that the Corporation shall not be obligated to issue certificates or book entry shares evidencing the shares of Common Stock issuable upon such conversions unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates.

(v) On the date of the occurrence of any Mandatory Conversion, each holder whose shares are subject to conversion shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that certificates or book entry shares evidencing such shares of Common Stock shall not then be actually delivered to such holder.

(vi) In the event that (A) a holder of Preferred Stock converts any Preferred Stock into Common Stock pursuant to Section 4(a) any time during the period beginning ninety (90) days prior to the First Closing Date and ending on the Second Closing Date (the shares of Preferred Stock so converted, the "**Early Converted Preferred**"), and (B) the Early Converted Preferred would otherwise have been converted pursuant to Sections 4(c)(i) or (ii) if such holder had not exercised its conversion rights under Section 4(a), such holder's Preferred Stock

(including its Early Converted Preferred) shall be deemed to have been converted to Common Stock at ten (10) times the applicable Conversion Price of such series of Preferred Stock to the extent that such Preferred Stock would have been converted pursuant to Sections 4(c)(i) and (ii) had such holder not exercised its conversion rights under Section 4(c).

(vii) The ability of one or more Affiliates to satisfy a holder's Pro Rata Share for purposes of Section 4(c)(i) or Second Closing obligation for purposes of Section 4(c)(ii) is conditioned on each such Affiliate's own satisfaction in full of such Affiliate's own Pro Rata Share or Second Closing obligation, if any. No amounts invested by a holder or any Affiliate of a holder may be counted more than once so as to satisfy the Pro Rata Share or Second Closing obligations of more than one holder.

(d) Mechanics of Conversion. No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the then fair market value of a share of Common Stock as determined by the Board of Directors. For such purpose, all shares of Preferred Stock held by each holder of Preferred Stock shall be aggregated, and any resulting fractional share of Common Stock shall be paid in cash. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates or book entry shares therefor, such holder shall either (A) surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Preferred Stock or (B) notify the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and execute an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates, and shall give written notice to the Corporation at such office that such holder elects to convert the same; *provided, however*, that on the date of an Automatic Conversion Event, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Corporation or its transfer agent; *provided further, however*, that the Corporation shall not be obligated to issue certificates or book entry shares evidencing the shares of Common Stock issuable upon such Automatic Conversion Event unless either the certificates evidencing such shares of Preferred Stock are delivered to the Corporation or its transfer agent as provided above, or the holder notifies the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. On the date of the occurrence of an Automatic Conversion Event, each holder of record of shares of Preferred Stock shall be deemed to be the holder of record of the Common Stock issuable upon such conversion, notwithstanding that the certificates representing such shares of Preferred Stock shall not have been surrendered at the office of the Corporation, that notice from the Corporation shall not have been received by any holder of record of shares of Preferred Stock, or that certificates or book entry shares evidencing such shares of Common Stock shall not then be actually delivered to such holder.

(e) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this Section 4(e), "**Additional Shares of Common**" shall mean all shares of Common Stock issued (or, pursuant to Section 4(e)(iii), deemed to be issued) by the Corporation after the Filing Date, other than issuances or deemed issuances of:

(1) shares of Common Stock issued or issuable to officers, directors and employees of, or consultants to, the Corporation pursuant to stock grants, option

plans, purchase plans or other employee stock incentive programs or arrangements approved by the Board of Directors, or upon exercise of options or warrants granted to such parties pursuant to any such plan or arrangement;

(2) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the Filing Date;

(3) shares of Common Stock issued or issuable as a dividend or distribution on Preferred Stock or pursuant to any event for which adjustment is made pursuant to Sections 4(f), 4(g) or 4(h) hereof;

(4) shares of Common Stock issued in a registered public offering under the Securities Act;

(5) shares of Common Stock issued or issuable pursuant to the acquisition of another corporation by the Corporation by merger, purchase of substantially all of the assets or other reorganization or to a joint venture agreement, provided, that such issuances are approved by the Board of Directors;

(6) shares of Common Stock issued or issuable to banks, equipment lessors or other financial institutions pursuant to a

debt financing or commercial leasing transaction approved by the Board of Directors;

(7) shares of Common Stock issued or issuable in connection with any settlement of any action, suit, proceeding or litigation approved by the Board of Directors;

(8) shares of Common Stock issued or issuable in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board of Directors;

(9) shares of Common Stock issued or issuable to suppliers or third party service providers in connection with the provision of goods or services pursuant to transactions approved by the Board of Directors; and

(10) any other shares of Common Stock issued or issuable if the holders of a majority of the then outstanding shares of Preferred Stock agree in writing that such shares shall not constitute Additional Shares of Common Stock.

(ii) No Adjustment of Conversion Price. No adjustment in the Conversion Price of a particular series of Preferred Stock shall be made in respect of the issuance of Additional Shares of Common unless the consideration per share (as determined pursuant to Section 4(e)(v)) for an Additional Share of Common issued or deemed to be issued by the Corporation is less than the Conversion Price in effect on the date of, and immediately prior to such issue, for the Series D Preferred Stock.

(iii) Deemed Issue of Additional Shares of Common. In the event the Corporation at any time or from time to time after the Filing Date shall issue any Options or

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Convertible Securities or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities, the conversion or exchange of such Convertible Securities or, in the case of Options for Convertible Securities, the exercise of such Options and the conversion or exchange of the underlying securities, shall be deemed to have been issued as of the time of such issue or, in case such a record date shall have been fixed, as of the close of business on such record date, provided that in any such case in which shares are deemed to be issued:

(1) no further adjustment in the Conversion Price of any series of Preferred Stock shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock in connection with the exercise of such Options or conversion or exchange of such Convertible Securities;

(2) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any change in the consideration payable to the Corporation or in the number of shares of Common Stock issuable upon the exercise, conversion or exchange thereof (other than a change pursuant a Mandatory Conversion or the anti-dilution provisions of such Options or Convertible Securities such as this Section 4(e) or pursuant to Recapitalization provisions of such Options or Convertible Securities such as Sections 4(f), 4(g) and 4(h) hereof), the Conversion Price of each series of Preferred Stock and any subsequent adjustments based thereon shall be recomputed to reflect such change as if such change had been in effect as of the original issue thereof (or upon the occurrence of the record date with respect thereto);

(3) no readjustment pursuant to clause (2) above shall have the effect of increasing the Conversion Price of a series of Preferred Stock to an amount above the Conversion Price that would have resulted from any other issuances of Additional Shares of Common and any other adjustments provided for herein between the original adjustment date and such readjustment date;

(4) upon the expiration of any such Options or any rights of conversion or exchange under such Convertible Securities which shall not have been exercised, the Conversion Price of each series of Preferred Stock computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto) and any subsequent adjustments based thereon shall, upon such expiration, be recomputed as if:

(A) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities and the consideration received therefor was the consideration actually received by the Corporation for the issue of such exercised Options plus the consideration actually received by the Corporation upon such exercise or for the issue of all such Convertible Securities which were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange, and

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(B) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common deemed to have been then issued was the consideration actually received by the Corporation for the issue of such exercised Options, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 4(e)(v)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised; and

(5) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the Conversion Price which became effective on such record date shall be canceled as of the close of business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this Section 4(e)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common

(1) Adjustment of Conversion Price of Series D Preferred Stock Upon Issuance of Additional Shares of Common.

(A) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(e)(iii)) after the Filing Date without consideration or for consideration per share less than the then existing Conversion Price for the Series D Preferred Stock, then, the Conversion Price of the Series D Preferred Stock shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, (i) the numerator of which shall be (A) the number of shares of Common Stock outstanding immediately prior to such issue plus (B) the number of shares which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and (ii) the denominator of which shall be (A) the number of shares of Common Stock outstanding immediately prior to such issue plus (B) the number of such Additional Shares of Common so issued.

(B) Notwithstanding Section 4(e)(iv)(1)(A), if the Corporation shall at any time issue any Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(e)(iii)) in a Subsequent Closing under the Series D Purchase Agreement for consideration per share (such price, the “**Subsequent Closing Price**”) less than the then existing Conversion Price of the Series D Preferred Stock, then, in lieu of the adjustments provided for in Section 4(e)(iv)(1)(A), the Conversion Price of the Series D Preferred Stock shall be reduced, concurrently with such issue to the Subsequent Closing Price.

(2) Adjustments to the Conversion Price of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock.

(A) In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to Section 4(e)(iii)) after the Filing Date without consideration or for consideration per share less than the then existing Conversion Price for the Series C Preferred Stock (a “**Dilutive Issuance**”), then, the Conversion Price of the Series C Preferred Stock shall be reduced, concurrently with such issue, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, (i) the numerator of which shall be (A) the number of shares of Common Stock outstanding immediately prior to such issue plus (B) the number of shares which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common so issued would purchase at such Conversion Price, and (ii) the denominator of which shall be (A) the number of shares of Common Stock outstanding immediately prior to such issue plus (B) the number of such Additional Shares of Common so issued. Immediately after the Conversion Price for the Series C Preferred Stock has been adjusted as a result of each Dilutive Issuance pursuant to this Section 4(e)(iv)(2)(A), the Conversion Prices for the Series A Preferred Stock and Series B Preferred Stock shall each respectively be adjusted to a price equal to the then-effective Conversion Price for the Series C Preferred Stock immediately following the adjustment set forth in this Section 4(e)(iv) for the Dilutive Issuance and the denominator of which shall be the Conversion Price of the Series C Preferred Stock immediately prior to the adjustment set forth in this Section 4(e)(iv) for the Dilutive Issuance. For purposes of illustration only, if the Conversion Price for the Series C Preferred Stock after a Dilutive Issuance is adjusted to \$0.8175, from the initial Conversion Price of the Series C Preferred Stock of \$1.09, then the Conversion Prices for the Series A Preferred Stock and the Conversion Price for the Series B Preferred Stock would be adjusted to \$0.91239 and \$1.0656225, respectively, in connection with such Dilutive Issuance, representing an adjustment factor of 0.75 from the current Conversion Price of each such series.

(B) Notwithstanding Section 4(e)(iv)(2)(A), in the event of a Subsequent Closing as a result of which the Conversion Price of the Series D Preferred Stock is adjusted pursuant to Section 4(e)(iv)(1)(B) (a “**Subsequent Closing Adjustment**”), the Conversion Price of the Series C Preferred Stock shall be reduced, concurrently with such Subsequent Closing Adjustment, to a price (calculated to the nearest cent) determined by multiplying such Conversion Price by a fraction, (i) the numerator of which shall be (A) the number of shares of Common Stock outstanding immediately prior to such Subsequent Closing plus (B) the number of shares which the aggregate consideration received by the Corporation for the total number of Additional Shares of Common issued in such Subsequent Closing would purchase at such Conversion Price, and (ii) the denominator of which shall be (A) the number of shares of Common Stock outstanding immediately prior to such Subsequent Closing

plus (B) the number of such Additional Shares of Common issued in such Subsequent Closing, plus (C) the Series D Adjustment Additional Shares with respect to such Subsequent Closing Adjustment. The “**Series D Adjustment Additional Shares**” with respect to a Subsequent Closing Adjustment shall be equal to the product of (i) the aggregate number of shares of Series D Preferred Stock issued in the First Closing, any Supplemental Closings and the Second Closing (if such has occurred) that are outstanding at the time of the Subsequent Closing and (ii) the

result of (a) the Conversion Rate applicable to the Series D Preferred Stock immediately following such Subsequent Closing Adjustment, minus (b) the Conversion Rate applicable to the Series D Preferred Stock immediately prior to such Subsequent Closing Adjustment. Immediately after the Conversion Price for the Series C Preferred Stock has been adjusted as a result of a Subsequent Closing Adjustment pursuant to this Section 4(e)(iv)(2)(B), the Conversion Prices for the Series A Preferred Stock and Series B Preferred Stock shall each respectively be adjusted to a price equal to the then-effective Conversion Price for the Series A Preferred Stock and Series B Preferred Stock, as applicable, multiplied by a fraction, the numerator of which shall be the Conversion Price for the Series C Preferred Stock immediately following the adjustment set forth in this Section 4(e)(iv)(2)(B) and the denominator of which shall be the Conversion Price of the Series C Preferred Stock immediately prior to the adjustment set forth in this Section 4(e)(iv)(2)(B). The adjustments provided by this Section 4(e)(iv)(2)(B) shall be in lieu of any adjustments that would be provided by Section 4(e)(iv)(2)(A) with respect to such Subsequent Closing.

(3) Notwithstanding Sections 4(e)(iv)(1)-(2), the Conversion Price shall not be reduced at such time if the amount of such reduction would be less than \$0.01, but any such amount shall be carried forward, and a reduction will be made with respect to such amount at the time of, and together with, any subsequent reduction which, together with such amount and any other amounts so carried forward, equal \$0.01 or more in the aggregate. For the purposes of this Section 4(e)(iv)(3), all shares of Common Stock issuable upon conversion of all outstanding shares of Preferred Stock and the exercise and/or conversion of any other outstanding Convertible Securities and all outstanding Options shall be deemed to be outstanding.

(v) Determination of Consideration. For purposes of this Section 4(e), the consideration received by the Corporation for the issue (or deemed issue) of any Additional Shares of Common shall be computed as follows:

(1) Cash and Property. Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation before deducting any reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with such issuance;

(B) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issue, as determined in good faith by the Board of Directors; and

(C) in the event Additional Shares of Common are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be the proportion of such consideration so received, computed as provided in clauses (a) and (b) above, as reasonably determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common deemed to have been issued pursuant to Section 4(e)(iii) shall be determined by dividing

(x) the total amount, if any, received or receivable by the Corporation as consideration for the issue of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by

(y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(f) Adjustments for Subdivisions or Combinations of Common Stock. In the event the outstanding shares of Common Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise) after the Filing Date into a greater number of shares of Common Stock, the Conversion Price of each series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. Except for the Reverse Stock Split, in the event the outstanding shares of Common Stock shall be

combined (by reclassification or otherwise) after the Filing Date into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(g) Adjustments for Subdivisions or Combinations of Preferred Stock. In the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be subdivided (by stock split, by payment of a stock dividend or otherwise) after the Filing Date into a greater number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. Except for the Reverse Stock Split, in the event the outstanding shares of Preferred Stock or a series of Preferred Stock shall be combined (by reclassification or otherwise) after the Filing Date into a lesser number of shares of Preferred Stock, the Dividend Rate, Original Issue Price and Liquidation Preference of the affected series of Preferred Stock in effect immediately prior to such combination shall, concurrently with the effectiveness of such combination, be proportionately increased.

(h) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 3 above, and except for the Reverse Stock Split, if the Common Stock issuable upon conversion of the Preferred Stock shall be changed after the Filing Date into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares

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provided for above), then, in any such event, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive each holder of such Preferred Stock shall have the right thereafter to convert such shares of Preferred Stock into a number of shares of such other class or classes of stock which a holder of the number of shares of Common Stock deliverable upon conversion of such series of Preferred Stock immediately before that change would have been entitled to receive in such reorganization or reclassification, all subject to further adjustment as provided herein with respect to such other shares.

(i) No Impairment. The Corporation will not through any reorganization, transfer of assets, merger, dissolution, issue or sale of securities or any other voluntary action, avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Corporation but will at all times in good faith assist in the carrying out of all the provisions of this Section 4 and in the taking of all such action as may be necessary or appropriate in order to protect the Conversion Rights of the holders of Preferred Stock against impairment. Notwithstanding the foregoing, nothing in this Section 4(i) shall prohibit the Corporation from amending its Certificate of Incorporation with the requisite consent of its stockholders and the board of directors.

(j) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 4, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (1) such adjustments and readjustments, (2) the Conversion Price at the time in effect and (3) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(k) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of any series of Preferred Stock may be waived by the consent or vote of the holders of the majority of the outstanding shares of such series either before or after the issuance causing the adjustment.

(l) Reservation of Stock Issuable Upon Conversion. The Corporation shall at all times reserve and keep available out of its authorized but unissued shares of Common Stock solely for the purpose of effecting the conversion of the shares of the Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation will take such corporate action as may, in the opinion of its counsel, be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purpose.

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5. Voting.

(a) Restricted Class Voting. Except as otherwise expressly provided herein or as required by law, the holders of Preferred Stock and the holders of Common Stock shall vote together and not as separate classes.

(b) No Series Voting. Other than as provided herein or required by law, there shall be no series voting.

(c) Preferred Stock. Each holder of Preferred Stock shall be entitled to the number of votes equal to the number of shares of Common Stock into which the shares of Preferred Stock held by such holder could be converted as of the record date. The holders of shares of the Preferred Stock shall be entitled to vote on all matters on which the Common Stock shall be entitled to vote. Holders of Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of the Corporation. Fractional votes shall not, however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted), shall be disregarded.

(d) Election of Directors. The holders representing a majority of the outstanding Series A Preferred Stock, voting as a separate class, shall be entitled to elect two (2) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. The holders of representing a majority of the outstanding Series B Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. The holders of representing a majority of the outstanding Series C Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. The holders of Common Stock, voting as a separate class, shall be entitled to elect two (2) members of the Corporation's Board of Directors at each meeting or pursuant to each consent of the Corporation's stockholders for the election of directors. Any additional members of the Corporation's Board of Directors shall be elected by the holders of Common Stock and Preferred Stock, voting together as a single class. If a vacancy on the Board of Directors is to be filled by the Board of Directors, only directors elected by the same class or classes of stockholders as those who would be entitled to vote to fill such vacancy shall vote to fill such vacancy.

(e) Adjustment in Authorized Common Stock. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by an affirmative vote of the holders of a majority of the stock of the Corporation.

(f) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held.

(g) California Section 2115. If and only for so long as Section 2115 of the California General Corporation Law purports to make Section 708 subdivisions (a), (b) and (c)

of the California General Corporation Law applicable to the Corporation, the Corporation's stockholders shall have the right to cumulate their votes in connection with the election of directors as provided by Section 708 subdivisions (a), (b) and (c) of the California General Corporation Law.

6. Protective Provisions.

(a) Preferred Stock. For so long as at least 136,363 shares (as adjusted for Recapitalizations that occur after the Filing Date, except with respect to the Reverse Stock Split) of the Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of the Preferred Stock voting together as a single class on an as-converted-to-Common-Stock basis:

(i) amend, alter, waive or repeal any provision of the Certificate of Incorporation or bylaws of the Corporation;

(ii) take any action if such action would alter or change the rights, preferences or privileges of the Preferred Stock (by reclassification, merger, consolidation or otherwise) in a manner that adversely affects the Preferred Stock; *provided, however*, that any action that would alter or change the rights, preferences or privileges of a series of Preferred Stock (by reclassification, merger, consolidation or otherwise) in a manner that adversely affects such series of Preferred Stock shall require the approval (by vote or written consent as provided by law) of at least a majority of the outstanding shares of such series of Preferred Stock voting as a separate class; *provided further, however*, that authorization or creation of any new class or series of shares having powers, preferences, or privileges senior to or on parity with any series of Preferred Stock then outstanding shall not be deemed an action adverse to such series of Preferred Stock;

(iii) increase or decrease (other than for decreases resulting from conversion of the Preferred Stock) the authorized number of shares of any class of stock or any series thereof;

(iv) authorize or create (by reclassification, merger or otherwise) any new class or series of shares having rights, preferences or privileges senior to or on a parity with any series of Preferred Stock;

(v) enter into any transaction or series of related transactions that is, or deemed to be, a liquidation, dissolution or winding up of the Corporation pursuant to Section 3(d) above;

(vi) take any action resulting in the repurchase or redemption of shares of Common Stock or Preferred Stock of the Corporation, except for (i) repurchases at cost of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries upon termination of their employment or services pursuant to agreements providing for the right of said repurchase, (ii) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries pursuant to rights of first refusal contained in agreements providing for such right, and (iii) any other repurchase or redemption of capital stock of the Corporation approved by the holders of the Common Stock and Preferred Stock of the Corporation voting together as separate classes;

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(vii) declare or pay any Distribution with respect to the Common Stock of the Corporation; or

(viii) take any action that the Corporation knows will result in the taxation of the holders of Preferred Stock under Section 305 of the Internal Revenue Code of 1986, as amended.

(b) Series D Preferred Stock. For so long as at least 909,090 shares (as adjusted for Recapitalizations that occur after the Filing Date, except with respect to the Reverse Stock Split) of Series D Preferred Stock shall be issued and outstanding, the Corporation shall not, without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least a majority of the outstanding shares of Series D Preferred Stock voting together as a single class on an as-converted-to-Common-Stock basis:

(i) increase or decrease (other than for decreases resulting from conversion of Series D Preferred Stock) the authorized number of shares of Series D Preferred Stock; or

(ii) authorize or create (by reclassification, merger or otherwise) any new class or series of shares having a liquidation preference or dividend preference senior to the liquidation preference or dividend preference of the Series D Preferred Stock, as applicable.

7. Reissuance of Preferred Stock. In the event that any shares of Preferred Stock shall be converted pursuant to Section 4 or otherwise repurchased by the Corporation, the shares so converted or repurchased shall be cancelled and shall not be issuable by this Corporation.

8. Notices. Any notice required by the provisions of this ARTICLE V to be given to the holders of Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Corporation.

ARTICLE VI

The Corporation is to have perpetual existence.

ARTICLE VII

Elections of directors need not be by written ballot unless a stockholder demands election by written ballot at the meeting and before voting begins or unless the Bylaws of the Corporation shall so provide.

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ARTICLE VIII

Unless otherwise set forth herein, the number of directors which constitute the Board of Directors of the Corporation may be designated in the Bylaws of the Corporation or by action of the Board of Directors.

ARTICLE IX

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

ARTICLE X

1. To the fullest extent permitted by the General Corporation Law of the State of Delaware as the same exists or as may hereafter be amended, a director of the Corporation shall not be personally liable to the Corporation or its stockholders for monetary damages for a breach of fiduciary duty as a director.

2. The Corporation may indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that he, his testator or intestate is or was a director, officer or employee of the Corporation or any predecessor of the Corporation or serves or served at any other enterprise as a director, officer or employee at the request of the Corporation or any predecessor to the Corporation.

3. Neither any amendment nor repeal of this ARTICLE X, nor the adoption of any provision of this Corporation's Certificate of Incorporation inconsistent with this ARTICLE X, shall eliminate or reduce the effect of this ARTICLE X, in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this ARTICLE X, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision.

ARTICLE XI

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Corporation may be kept (subject to any provision contained in the statutes) outside of the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

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