

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION OF
ALVINE PHARMACEUTICALS, INC.

Alvine Pharmaceuticals, 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 Alvine Pharmaceuticals, Inc. The Corporation’s original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on June 22, 2005. The date of filing of the Corporation’s Amended and Restated Certificate of Incorporation was August 7, 2006. A Certificate of Amendment to the Corporation’s Amended and Restated Certificate of Incorporation was filed on January 17, 2008.

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 to read as set forth in EXHIBIT A attached hereto.

IN WITNESS WHEREOF, Alvine Pharmaceuticals, Inc. has caused this Amended and Restated Certificate of Incorporation to be signed by Abhay Joshi, a duly authorized officer of the Corporation, on September 4, 2009.

/s/ Abhay Joshi

Abhay Joshi,
President and Chief Executive Officer

EXHIBIT A

ARTICLE I

The name of the Corporation is Alvine Pharmaceuticals, 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 Delaware.

ARTICLE III

The address of the Corporation's registered office in the State of Delaware is 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

The total number of shares of stock that the corporation shall have authority to issue is One Hundred Fifty-Two Million (152,000,000), consisting of Eighty-Six Million (86,000,000) shares of Common Stock, \$0.001 par value per share, and Sixty-Six Million (66,000,000) shares of Preferred Stock, \$0.001 par value per share. The first Series of Preferred Stock shall be designated "**Series A Preferred Stock**" and shall consist of Thirty-Six Million (36,000,000) shares; the second series of Preferred Stock shall be designated "**Series A2 Preferred Stock**" and shall consist of Thirty Million (30,000,000) 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) "**Conversion Price**" shall mean \$0.75 per share for the Series A Preferred Stock and the Series A2 Preferred Stock (subject to adjustment from time to time for Recapitalizations and as otherwise set forth elsewhere herein).

(b) "**Convertible Securities**" shall mean any evidence of indebtedness, shares or other securities convertible into or exchangeable for Common Stock.

(c) "**Corporation**" shall mean Alvine Pharmaceuticals, Inc.

(d) "**Distribution**" shall mean the transfer of cash or other property without consideration 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 of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries at no greater than cost 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, (iii) repurchase of capital stock of the Corporation in connection with the settlement of disputes with any stockholder if such settlement is approved by the Corporation's Board of Directors, or (iv) any other repurchase or redemption of capital stock of the Corporation approved by the holders of at least sixty percent (60%) of the Preferred Stock of the Corporation, voting as a single class on an as-converted to Common Stock basis.

(e) **"Dividend Rate"** shall mean an annual rate of \$0.06 per share for the Series A Preferred Stock and the Series A2 Preferred Stock (subject to adjustment from time to time for Recapitalizations as set forth elsewhere herein).

(f) **"Liquidation Preference"** shall mean \$0.75 per share for the Series A Preferred Stock and the Series A2 Preferred Stock (subject to adjustment from time to time for Recapitalizations as set forth elsewhere herein).

(g) **"Options"** shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Common Stock or Convertible Securities.

(h) **"Original Issue Date"** for the Series A Preferred Stock and the Series A2 Preferred Stock shall mean the date on which the first share of each such series was issued.

(i) **"Original Issue Price"** shall mean \$0.75 per share for the Series A Preferred Stock and the Series A2 Preferred Stock (subject to adjustment from time to time for Recapitalizations as set forth elsewhere herein).

(j) **"Preferred Stock"** shall mean the Series A Preferred Stock and the Series A2 Preferred Stock.

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

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. 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.

(d) Consent to Certain Distributions. As authorized by Section 402.5(c) of the California Corporations Code, if Section 502 or Section 503 of the California Corporations Code is applicable to a payment made by the Corporation then such applicable section or sections shall not apply if such payment is a payment made by the Corporation in connection with (i) repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries at no greater cost than 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, (iii) repurchase of capital stock of the Corporation in connection with the settlement of disputes with any stockholder if such settlement is approved by the Corporation's Board of Directors, or (iv) any other repurchase or redemption of capital stock of the Corporation approved by the holders of at least sixty percent (60%) of the Preferred Stock of the Corporation, voting as a single class on an as-converted to common stock basis.

3. Liquidation Rights.

(a) Series A2 Liquidation Preference. In the event of any liquidation, dissolution, or winding up of the Corporation, either voluntary or involuntary (a "**Liquidation Event**," as further defined in Section 3(e) below), the holders of the Series A2 Preferred Stock shall be entitled to receive, prior and in preference to any Distribution of any of the assets of the Corporation to the holders of the Series A Preferred Stock or Common Stock by reason of their ownership of such stock, an amount per share for each share of Series A2 Preferred Stock held by them equal to the sum of (i) the Liquidation Preference specified for such share Series A2 Preferred Stock and (ii) all declared but unpaid dividends (if any) on such share of Series A2 Preferred Stock. If upon the Liquidation Event, the assets of the Corporation legally available for distribution to the holders of the Series A2 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 Series A2 Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(a).

(b) Series A Liquidation Preference. After payment or the setting aside for payment in full of the amounts specified in Section 3(a) above, the holders of Series A Preferred

Stock shall be entitled to receive, 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 Series A Preferred Stock held by them equal to the sum of (i) the Liquidation Preference specified for such share of Series A Preferred Stock and (ii) all declared but unpaid dividends (if any) on such share of Series A Preferred Stock. If upon the Liquidation Event, the assets of the Corporation legally available for distribution to the holders of the Series A Preferred Stock are insufficient to permit the payment to such holders of the full amounts specified in this Section 3(b), 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 Series A Preferred Stock in proportion to the full amounts they would otherwise be entitled to receive pursuant to this Section 3(b).

(c) Remaining Assets. After the payment or setting aside for payment to the holders of Preferred Stock of the full amounts specified 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.

(d) Shares not Treated as Both Preferred Stock and Common Stock in any Distribution. Shares of Preferred Stock shall not be entitled to be converted into shares of Common Stock in order to participate in any Distribution, or series of Distributions, as shares of Common Stock, without first foregoing participation in the Distribution, or series of Distributions, as shares of Preferred Stock.

(e) Reorganization. For purposes of this Section 3, a “**Liquidation Event**” 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) an exclusive license of all or substantially all of the Corporation’s intellectual property assets or a sale, lease or other conveyance of all or substantially all of the assets of the Corporation, in each case in a transaction or series of transactions; or (c) any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary. A Liquidation Event may be waived by the holders of at least seventy-five percent (75%) of the then-outstanding shares of Preferred Stock of the Corporation, voting together as a single class on an as-converted to Common Stock basis.

(f) Reorganization Process. In the event that the Company is a party to a reorganization deemed to be a Liquidation Event (as defined in Section 3(e) above), then each holder of Preferred Stock shall be entitled to receive, for each share of Preferred Stock then held, out of the proceeds of such reorganization, only the greater of (i) the amount of cash, securities or other property to which such holder would be entitled to receive in a Liquidation Event pursuant to

Section 3(a) above or (ii) the amount of cash, securities or other property to which such holder would be entitled to receive in a Liquidation Event with respect to such shares if such shares had been converted to Common Stock immediately prior to such reorganization, but in no event shall a holder of Preferred Stock be entitled to receive both of the amounts set forth in subsections (i) and (ii) of this Section 3(f).

(g) Valuation of Non-Cash Consideration. If any assets of the Corporation distributed to stockholders in connection with a Liquidation Event 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 any publicly-traded securities to be distributed to stockholders in a Liquidation Event 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 lesser of (a) 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 or (b) the closing price the day prior to the announcement of the Liquidation Event;

(ii) if the securities are actively traded over-the-counter, then the value of the securities shall be deemed to be the lesser of (a) 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 or (b) the closing price the day prior to the announcement of the Liquidation Event.

In the event of a merger or other acquisition of the Corporation by another entity, the Distribution date shall be deemed to be the date such transaction closes.

For the purposes of this subsection 3(f), “**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 or Nasdaq, 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 last reported sales price as of the end of the regular hours trading period for such exchange, market or system. Notwithstanding the foregoing, if after the date hereof, the closing price as of the end of the regular hours trading period for any relevant exchange, market or system as of a given trading day shall be determined in a different manner than as set forth above, then the fair market value shall be determined to be the closing price of the stock as of such other established end of the regular hours trading period for such exchange, market, or system. However, if the definitive agreement for a Liquidation Event values the securities to be received by the Corporation’s stockholders based on different time periods from those set forth above, the fair market value shall be determined as of the time periods set forth in such definitive agreement, notwithstanding anything in this subsection 3(f) to the contrary.

4. Conversion. The holders of the Preferred Stock shall have conversion rights as follows:

(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 of issuance of such share 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. (The 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 each 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 that the offering price per share is not less than \$3.00 (as adjusted for Recapitalizations) and the aggregate gross proceeds to the Corporation are not less than Forty Million dollars (\$40,000,000), or (ii) upon the receipt by the Corporation of a written request for such conversion from the holders of at least sixty percent (60%) of the Preferred Stock of the Corporation, together as a single class on an as-converted to common stock basis, or, if later, the effective date for conversion specified in such requests (each of the events referred to in (i) and (ii) are referred to herein as an “**Automatic Conversion Event**”).

(c) 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 therefor, he 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 he 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 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 the certificates evidencing such shares of Common Stock shall not then be actually delivered to such holder.

The Corporation shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of delivery of the notice of conversion set forth above, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; provided, however, that if the conversion is in connection with an underwritten offer of securities registered pursuant to the Securities Act or a merger, sale, financing, or liquidation of the Corporation or other event, the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of such transaction or upon the occurrence of such event, in which case the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such transaction or the occurrence of such event.

(d) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definition. For purposes of this paragraph 4(d), “**Additional Shares of Common**” shall mean all shares of Common Stock issued (or, pursuant to paragraph 4(d)(iii), deemed to be issued) by the Corporation after the filing of this Amended and Restated Certificate of Incorporation, other than issuances or deemed issuances of:

(1) shares of Common Stock issued or issuable upon conversion of the Preferred Stock;

(2) 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 (including the approval of the directors elected solely by the holders of the Preferred Stock), or upon exercise of options or warrants granted to such parties pursuant to any such plan or arrangement;

(3) shares of Common Stock issued upon the exercise or conversion of Options or Convertible Securities outstanding as of the date of the filing of this Amended and Restated Certificate of Incorporation;

(4) 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 paragraph 4(e), 4(f) or 4(g) hereof;

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

(6) 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 (including the approval of the directors elected solely by the holders of the Preferred Stock);

(7) 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 (including the approval of the directors elected solely by the holders of the Preferred Stock);

(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 (including the approval of the directors elected solely by the holders of the Preferred Stock);

(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 (including the approval of the directors elected solely by the holders of the Preferred Stock); and

(10) shares of Common Stock issued or issuable in a transaction approved by the holders of at least sixty percent (60%) of the Preferred Stock of the Corporation, voting together as a single class on an as-converted to common stock basis.

(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 paragraph 4(d)(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 such series of 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 Original Issue Date shall issue any Options or 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 to the anti-dilution provisions of such Options or Convertible Securities such as this Section 4(d) or pursuant to Recapitalization provisions of such Options or Convertible Securities such as Sections 4(e), 4(f) and 4(g) hereof), the Conversion Price of the 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 the 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

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(d)(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 paragraph 4(d)(iii) as of the actual date of their issuance.

(iv) Adjustment of Conversion Price Upon Issuance of Additional Shares of Common. In the event this Corporation shall issue Additional Shares of Common (including Additional Shares of Common deemed to be issued pursuant to paragraph 4(d)(iii)) without consideration or for a consideration per share less than the applicable Conversion Price of Preferred Stock in effect on the date of and immediately prior to such issue, then, the Conversion Price of the 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, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus 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 the denominator of which shall be the number of shares of Common Stock outstanding immediately prior to such issue plus the number of such Additional Shares of Common so issued. Notwithstanding the foregoing, 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 Subsection 4(d)(iv), 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 subsection 4(d), the aggregate 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 paragraph 4(d)(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.

(e) 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), into a greater number of shares of Common Stock, the Conversion Price of Preferred Stock in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. In the event the outstanding shares of Common Stock shall be combined (by reclassification or otherwise) 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.

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

(g) Adjustments for Reclassification, Exchange and Substitution. Subject to Section 3 above ("**Liquidation Rights**"), if the Common Stock issuable upon conversion of the Preferred Stock shall be changed 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 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.

(h) 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 (i) such adjustments and readjustments, (ii) the Conversion Price at the time in effect and (iii) 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.

(i) Waiver of Adjustment of Conversion Price. Notwithstanding anything herein to the contrary, any downward adjustment of the Conversion Price of Preferred Stock may be waived by the consent or vote of the holders of at least sixty percent (60%) of the Preferred Stock of the Corporation, voting together as a single class on an as-converted to common stock basis, either before or after the issuance causing the adjustment.

(j) Notices of Record Date. In the event that this Corporation shall propose at any time:

(i) to declare any Distribution upon its Common Stock, whether in cash, property, stock or other securities, whether or not a regular cash dividend and whether or not out of earnings or earned surplus;

(ii) to effect any reclassification or recapitalization of its Common Stock outstanding involving a change in the Common Stock; or

(iii) to voluntarily liquidate or dissolve or to enter into any transaction deemed to be a Liquidation Event pursuant to Section 3(e);

then, in connection with each such event, this Corporation shall send to the holders of the Preferred Stock at least 10 days' prior written notice of the date on which a record shall be taken for such Distribution (and specifying the date on which the holders of Common Stock shall be entitled thereto and, if applicable, the amount and character of such Distribution) or for determining rights to vote in respect of the matters referred to in (ii) and (iii) above.

Such written notice shall be given by first class mail (or express courier), postage prepaid, addressed to the holders of Preferred Stock at the address for each such holder as shown on the books of the Corporation and shall be deemed given on the date such notice is mailed.

The notice provisions set forth in this section may be shortened or waived prospectively or retrospectively by the vote or written consent of the holders of at least sixty percent (60%) of the Preferred Stock of the Corporation, voting together as a single class on an as-converted to common stock basis.

(k) 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.

(l) Special Mandatory Conversion in Connection with Series A2 Financing. If, at any time after the filing of this Amended and Restated Certificate of Incorporation (the “**Filing Date**”), the Corporation consummates the final sale and issuance of shares of its Series A2 Preferred Stock (a “**Series A2 Financing**”) pursuant to terms of a Series A2 Preferred Stock Purchase Agreement dated as of a date on or after the Filing Date (the “**Series A2 Purchase Agreement**”), then, effective upon the date of a determination by the Company’s Board of Directors (the “**Special Mandatory Conversion Date**”) that (i) such Series A2 Financing is complete and (ii) that one or more investors (each, a “**Defaulting Investor**”) in the Series A2 Financing failed to purchase all of the shares of Series A2 Preferred Stock that such investor or investors committed to purchase at any closing pursuant to the Series A2 Purchase Agreement (the “**Series A2 Commitment**”), then a portion of such Defaulting Investors’ outstanding shares of Series A2 Preferred Stock and Series A Preferred Stock shall automatically be converted into shares of Common Stock at the then applicable Conversion Rate for such Series A2 Preferred Stock and Series A Preferred Stock, and a portion of any securities convertible into or exercisable for shares of Series A2 Preferred Stock or Series A Preferred Stock held by such Defaulting Investors (“**Conversion Securities**”) shall be converted into securities convertible into or exercisable for shares of Common Stock at the then applicable Conversion Rate for such Series A2 Preferred Stock or Series A Preferred Stock. The portion of each Defaulting Investor’s shares of Series A Preferred Stock, Series A2 Preferred Stock and Conversion Securities converted into Common Stock pursuant to this Section 4(l) shall be equal to a fraction, the numerator of which shall be such Defaulting Investor’s Series A-2 Commitment minus the number of shares of Series A2 Preferred actually purchased by such Defaulting Investor, and the denominator of which shall be such Defaulting Investor’s Series A2 Commitment.

The holder of any shares of Series A2 Preferred Stock or Series A Preferred Stock, or of securities convertible or exercisable for shares of Series A2 Preferred Stock or Series A Preferred Stock, converted pursuant to this Section 4(l) shall deliver to the Corporation during regular business hours, at the office of any transfer agent of the Corporation for such Series A2 Preferred Stock or

Series A Preferred Stock, or at such other place as may be designated by the Corporation, the certificate or certificates representing the shares or securities so converted, duly endorsed or assigned in blank or to the Corporation. As promptly thereafter as is practicable, the Corporation shall issue and deliver to such holder, at the place designated by such holder, a certificate or certificates for the number of full shares of Common Stock or securities convertible or exercisable for shares of Common Stock to which such holder is entitled. The person in whose name the certificate for such shares of Common Stock or securities convertible or exercisable for shares of Common Stock is to be issued pursuant to this Section 4(l) shall be deemed to have become a holder of such Common Stock or securities convertible or exercisable for Common Stock, as the case may be, upon the Series A2 and Series A Special Mandatory Conversion Date, and the shares of Series A2 Preferred Stock and Series A Preferred Stock to be converted pursuant to this Section 4(l) shall be deemed to have been cancelled and converted at such time without any requirement of further action on the part of the stockholder whose shares are so converted.

5. Voting.

(a) General. 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) Common Stock. Each holder of shares of Common Stock shall be entitled to one vote for each share thereof held. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of shares of stock of the Corporation representing a majority of the votes represented by all outstanding shares of stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law of the State of Delaware.

(d) 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.

(e) Election of Directors. As long as at least 8,000,000 shares of Preferred Stock shall be issued and outstanding (as adjusted for any Recapitalization), (i) the holders of Series A2 Preferred Stock, voting as a separate class, shall be entitled to elect one (1) member of the Corporation's Board of Directors; (ii) the holders of Series A Preferred Stock, voting as a separate class, shall be entitled to elect three (3) 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; (iii) 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 and (iv) the holders of Common Stock and Preferred Stock, voting together as a single 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.

6. Amendments and Changes. As long as at least 8,000,000 shares of Preferred Stock shall be issued and outstanding (as adjusted for any Recapitalization), the Corporation shall not (by amendment, merger, consolidation or otherwise), without first obtaining the approval (by vote or written consent as provided by law) of the holders of at least sixty percent (60%) of the outstanding shares of the Preferred Stock of the Corporation, voting as a single class on an as-converted to Common Stock basis:

(a) amend, alter or repeal any provision of the Certificate of Incorporation of the Corporation;

(b) amend, alter or repeal any provision of the Bylaws of the Corporation if such action would adversely alter the rights, preferences, privileges or powers of, or restrictions provided for the benefit of the Preferred Stock or any series thereof;

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

(d) authorize or create (by reclassification, merger or otherwise) any new class or series of shares having any rights, preferences or privileges with respect to voting rights, dividends, redemption, conversion or payments upon liquidation senior to or on a parity with the Preferred Stock;

(e) sell for capital raising purposes any securities that may be convertible into or exchangeable for equity securities;

(f) redeem or repurchase any shares of Common Stock (other than repurchases of Common Stock issued to or held by employees, officers, directors or consultants of the Corporation or its subsidiaries at no greater than cost upon termination of their employment or services pursuant to agreements providing for the right of said repurchase or 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);

(g) authorize, enter into or consummate any transaction or series of related transactions which would be deemed to be a Liquidation Event pursuant to Section 3(e) hereof;

(h) increase or decrease the number of authorized members of the Board of Directors;

(i) redeem any shares of any series of Preferred Stock (except as provided herein) or repay any indebtedness for borrowed money (other than bank debt or trade debt);

(j) set aside, declare or pay any Distribution with respect to any shares of Common Stock or Preferred Stock of the Corporation; or

(k) amend this Section 6.

7. Reissuance of Preferred Stock. In the event that any shares of Preferred Stock shall be converted pursuant to Section 4 or 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.

ARTICLE VIII

Unless otherwise set forth herein, and subject to the rights of the holders of Preferred Stock set forth in Article V, Section 5 hereof, the number of directors which constitute the Board of Directors of the Corporation shall be designated in the Bylaws of the Corporation.

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 Delaware General Corporation Law 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 shall 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 or officer of the Corporation or any predecessor of the Corporation or serves or served at any other enterprise as a director or officer 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 of the Corporation 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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