State of Delaware Secretary of State Division of Corporations Delivered 09:57 PM 03/31/2004 FILED 09:57 PM 03/31/2004 SRV 040239373 - 2874572 FILE

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

AGY THERAPEUTICS, INC.

The undersigned, Cynthia Ladd and Stephen Thau, hereby certify that:

- 1. They are the duly elected and acting Chief Executive Officer and Assistant Secretary, respectively, of AGY Therapeutics, Inc., a Delaware corporation.
- 2. The Certificate of Incorporation of this corporation was originally filed with the Secretary of State of Delaware on March 20, 1998 (the "Original Filing Date"). This corporation was originally incorporated under the name "AGY Pharmaceuticals, Inc."
- 3. The Certificate of Incorporation of this corporation shall be amended and restated to read in full as follows:

"ARTICLE I

The name of this corporation is AGY Therapeutics, Inc. (the "Corporation").

ARTICLE II

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

ARTICLE III

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

ARTICLE IV

- (A) <u>Classes of Stock</u>. The Corporation is authorized to issue two classes of stock to be designated, respectively, "<u>Common Stock</u>" and "<u>Preferred Stock</u>." The total number of shares which the Corporation is authorized to issue is One Hundred Fourteen Million Eight Hundred Sixty-Four Thousand Ninety-Eight (114,864,098) shares, each with a par value of \$0.001 per share. Sixty-Eight Million (68,000,000) shares shall be Common Stock and Forty-Six Million Eight Hundred Sixty-Four Thousand Ninety-Eight (46,864,098) shares shall be Preferred Stock.
- (B) Rights, Preferences and Restrictions of Preferred Stock. The Preferred Stock authorized by this Amended and Restated Certificate of Incorporation may be issued from time to time in one or more series. The first series of Preferred Stock shall be designated "Series A

Preferred Stock" and shall consist of Two Million Eight Hundred Sixty Thousand (2,860,000) shares. The second series of Preferred Stock shall be designated "Series B Preferred Stock" and shall consist of Five Million Nine Hundred Twelve Thousand Four Hundred Seventy-Nine (5,912,479) shares. The third series of Preferred Stock shall be designated "Series B-2 Preferred Stock" and shall consist of Four Million Seven Hundred Fifty-Four Thousand Five Hundred Forty (4,754,540) shares. The fourth series of Preferred Stock shall be designated "Series C Preferred Stock" and shall consist of Twenty-Two Million Three Hundred Thirty-Seven Thousand Seventy-Nine (22,337,079) shares. The fifth series of Preferred Stock shall be designated "Series C-1 Preferred Stock" and shall consist of Eleven Million (11,000,000) shares The rights, preferences, privileges, and restrictions granted to and imposed on the Preferred Stock are as set forth below in this Article IV(B).

1. <u>Dividend Provisions.</u> The holders of shares of Preferred Stock shall be entitled to receive dividends, out of any assets legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock or other securities and rights convertible into or entitling the holder thereof to receive, directly or indirectly, additional shares of Common Stock of the Corporation) on the Common Stock of the Corporation, at the rate of (a) \$0.07 per share per annum on each outstanding share of Series B Preferred Stock, (b) \$0.14 per share per annum on each outstanding share of Series B-2 Preferred Stock, (d) \$0.11 per share per annum on each outstanding share of Series C Preferred Stock and (c) \$0.11, per share per annum on each outstanding share of Series C-1 Preferred Stock, payable when as and if declared by the Board of Directors. Such dividends shall not be cumulative. After payment of such preferential dividends, any additional dividend that is declared by the Board of Directors shall be distributed, to all holders of Common Stock and Preferred Stock pro rata based on the number of shares of Common Stock held by each such holder (calculated on an asconverted basis).

2. Liquidation,

or winding up of the Corporation, either voluntary or involuntary, the holders of the Series C-1 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 Series A, Series B, Series B-2 or Series C Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to \$1.50 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) for each share of Series C-1 Preferred Stock then held by them, plus declared but unpaid dividends. If, upon the occurrence of such event, the assets and funds thus distributed among the holders of the Series C-1 Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of the Series C-1 Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive.

- (b) Series C Preference. Upon the completion of the distribution required by Section 2(a) above, the holders of the Series C 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 Series A, Series B or Series B-2 Preferred Stock or Common Stock by reason of their ownership thereof, an amount per share equal to \$1.50 per share (as adjusted for stock splits, stock dividends, reclassifications or the like) for each share of Series C Preferred Stock then held by them, plus declared but unpaid dividends. If, upon the occurrence of such event, the assets and funds thus distributed among the holders of the Series C Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of the Series C Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive.
- (c) Junior Preferred Preference. Upon the completion of the distributions required by Sections 2(a) and 2(b) above, the holders of the Series A, Series B and Series B-2 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 Common Stock by reason of their ownership thereof, an amount per share equal to (i) \$1.00 per share for each share of Series A Preferred Stock then held by them, (ii) \$2.00 per share for each share of Series B Preferred Stock then held by them and (iii) \$2.75 per share for each share of Series B-2 Preferred Stock then held by them (each as adjusted for any stock splits, stock dividends, recapitalizations or the like), plus declared but unpaid dividends on such shares. If, upon the occurrence of such event, the assets and funds thus distributed among the holders of the Series A, Series B and Series B-2 Preferred Stock shall be insufficient to permit the payment to such holders of the full aforesaid preferential amounts, then, the entire assets and funds of the Corporation legally available for distribution shall be distributed ratably among the holders of the Series A, Series B and Series B-2 Preferred Stock in proportion to the preferential amount each such holder is otherwise entitled to receive.
- (d) Remaining Assets. Upon the completion of the distributions required by Sections 2(a), 2(b) and 2(c) above, the remaining assets of the Corporation available for distribution to stockholders shall be distributed among the holders of the Series C-1 and Series C Preferred Stock and the Common Stock pro rata on an as-converted basis until, (i) with respect to the holders of the Series C-1 Preferred Stock, such holders shall have received for each share of Series C-1 Preferred Stock an aggregate of \$3.00 per share, exclusive of any amounts paid pursuant to Section 2(a) above (as adjusted for stock splits, stock dividends, reclassifications and the like), and (ii) with respect to the holders of the Series C Preferred Stock, such holders shall have received for each share of Series C Preferred Stock an aggregate of \$3.00 per share, exclusive of any amounts paid pursuant to Section 2(b) above (as adjusted for stock splits, stock dividends, reclassifications and the like).

(d) Certain Acquisitions.

(i) <u>Deemed Liquidation</u>. For purposes of this Section 2, a liquidation, dissolution or winding up of the Corporation shall be deemed to occur if the Corporation shall sell, convey, or otherwise dispose of or encumber all or substantially all of its

property or business (including without limitation a grant of an exclusive license or exclusive licenses to all or substantially all of the Corporation's intellectual property) or merge into or consolidate with any other corporation (other than a wholly-owned subsidiary corporation) or effect any other transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Corporation is disposed of, provided that this Section 2(d)(i) shall not apply to a merger effected exclusively for the purpose of changing the domicile of the Corporation, or to an equity financing in which the Corporation is the surviving corporation.

(ii) <u>Valuation of Consideration</u>. In the event of a deemed liquidation as described in Section 2(d)(i) above, if the consideration received by the Corporation is other than cash, its value will be deemed its fair market value. Any securities shall be valued as follows:

(A) Securities not subject to investment letter or other similar restrictions on free marketability:

(1) If traded on a securities exchange or The Nasdaq National Market, the value shall be based on a formula approved by the Board of Directors and derived from the closing prices of the securities on such exchange or Nasdaq over a specified time period;

(2) If actively traded over-the-counter, the value shall be based on a formula approved by the Board of Directors and derived from the closing bid or sales prices (whichever is applicable) of such securities over a specified time period; and

(3) If there is no active public market, the value shall be the fair market value thereof, as mutually determined in good faith by the Board of Directors and the holders of at least a majority of the voting power of the then outstanding shares of Preferred Stock.

(B) The method of valuation of securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate) shall be to make an appropriate discount from the market value determined as above in Section 2(d)(ii)(A) to reflect the approximate fair market value thereof, as mutually determined in good faith by the Board of Directors and the holders of at least a majority of the voting power of the then outstanding shares of Preferred Stock.

holder of record of Preferred Stock written notice of such impending transaction not later than ten (10) days prior to the stockholders' meeting called to approve such transaction, or ten (10) days prior to the closing of such transaction, whichever is earlier, and shall also notify such holders in writing of the final approval of such transaction. The first of such notices shall describe the material terms and conditions of the impending transaction and the provisions of this Section 2, and the Corporation shall thereafter give such holders prompt notice of any material

changes. The transaction shall in no event take place sooner than ten (10) days after the Corporation has given the first notice provided for herein or sooner than ten (10) days after the Corporation has given notice of any material changes provided for herein; provided, however, that such periods may be shortened upon the written consent of the holders of Preferred Stock that are entitled to such notice rights or similar notice rights and that represent at least a majority of the voting power of all then outstanding shares of such Preferred Stock.

- (iv) <u>Effect of Noncompliance</u>. In the event the requirements of this Section 2(d) are not complied with, the Corporation shall forthwith either cause the closing of the transaction to be postponed until such requirements have been complied with, or cancel such transaction, in which event the rights, preferences and privileges of the holders of the Preferred Stock shall revert to and be the same as such rights, preferences and privileges existing immediately prior to the date of the first notice referred to in Section 2(d)(iii) hereof.
 - 3. **Redemption.** The Preferred Stock is not redeemable.
- 4. <u>Conversion</u>. The holders of the Preferred Stock shall have conversion rights as follows (the "<u>Conversion Rights</u>"):
- (a) Right to Convert. Subject to Section 4(c), 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 such stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing (i) \$1.00 in the case of the Series A Preferred Stock, (ii) \$2.00 in the case of the Series B Preferred Stock, (iii) \$2.75 in the case of the Series B-2 Preferred Stock, (iv) \$1.50 in the case of the Series C-1 Preferred Stock by the Conversion Price applicable to such share, determined as hereafter provided, in effect on the date the certificate is surrendered for conversion. The initial Conversion Price per share shall be \$1.00 for shares of Series A Preferred Stock, \$1.73470 for shares of Series B Preferred Stock, \$2.08676 for shares of Series C-1 Preferred Stock. Such initial Conversion Price shall be subject to adjustment as set forth in Section 4(d) below.
- (b) Automatic Conversion. Each share of Preferred Stock shall automatically be converted into fully paid, non-assessable shares of Common Stock at the Conversion Price at the time in effect for such share immediately upon the earlier of (i) except as provided below in Section 4(c), the Corporation's sale of its Common Stock in a firm commitment underwritten public offering pursuant to a registration statement under the Securities Act of 1933, as amended (the "Securities Act") at a pre-offering market capitalization of at least \$225,000,000 (calculated based on capital stock outstanding on an as-converted basis, assuming conversion or exercise of all convertible or exercisable securities and including all shares reserved for issuance pursuant to any stock option or similar plan) and which results in aggregate cash proceeds to the Corporation in excess of \$30,000,000 (prior to underwriting discounts and commissions) or (ii) the date specified by written consent or agreement of the holders of a majority of the then outstanding shares of Preferred Stock.

Mechanics of Conversion. Before any holder of Preferred Stock (¢) shall be entitled to convert the same into shares of Common Stock, 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 such series of Preferred Stock or (B) notify the Corporation or its transfer agent that such certificates have been lost, stolen or destroyed and execute an agreement reasonably 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 its principal corporate office, of the election to convert the same and shall state therein the name or names in which the certificate or certificates for shares of Common Stock are to be issued; provided, however, that on the date of an automatic conversion of the Preferred Stock pursuant to Section 4(b) above, 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 event unless 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 reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection with such certificates. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Preferred Stock, or to the nominee or nominees of such holder, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of such series of Preferred Stock to be converted, 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 as of such date. If the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act or a merger, sale or liquidation of the Corporation, the conversion may, at the option of any holder tendering such Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering or the closing of the merger, sale or liquidation, in which event the person(s) entitled to receive Common Stock upon conversion of such Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such transaction.

(d) <u>Conversion Price Adjustments of Preferred Stock for Certain</u>
<u>Dilutive Issuances, Splits and Combinations.</u> The Conversion Price of the Preferred Stock shall be subject to adjustment from time to time as follows:

(i) <u>Issuance of Additional Stock below Purchase Price</u>. If the Corporation shall issue, after the date of filing of this Amended and Restated Certificate of Incorporation, any Additional Stock (as defined below) without consideration or for a consideration per share less than the Conversion Price for a series of Preferred Stock in effect immediately prior to the issuance of such Additional Stock, the Conversion Price for such series of Preferred Stock in effect immediately prior to each such issuance shall automatically be adjusted as set forth in this Section 4(d)(i), unless otherwise provided in this Section 4(d)(i).

- (A) <u>Adjustment Determination</u>. Whenever the Conversion Price is adjusted pursuant to this Section (4)(d)(i), the new Conversion Price shall be determined as follows:
- (1) With respect to the Series C-1 Preferred Stock, the Conversion Price for such series shall be adjusted to a price equal to the price paid per share for such Additional Stock.
- (2) With respect to the Series A, Series B, Series B-2 and Series C Preferred Stock, by multiplying the Conversion Price for such series then in effect by a fraction, (x) the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (the "Outstanding Common") plus the number of shares of Common Stock that the aggregate consideration received by the Corporation for such issuance would purchase at such Conversion Price; and (y) the denominator of which shall be the number of shares of Outstanding Common plus the number of shares of such Additional Stock (as defined below). For purposes of the foregoing calculation, the term "Outstanding Common" shall include shares of Common Stock deemed issued pursuant to Section 4(d)(i)(E) below.
- (B) <u>Definition of "Additional Stock"</u>. For purposes of this Section 4(d)(i), "<u>Additional Stock</u>" shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to Section 4(d)(i)(E) by the Corporation after the Original Filing Date of the Certificate of Incorporation of the Corporation) other than:
- (1) Common Stock issued pursuant to a transaction described in Section 4(d)(ii) hereof,
- (2) Shares of Common Stock issued to employees, consultants or directors of the Corporation directly or pursuant to a stock option plan or restricted stock plan approved by the Board of Directors of the Corporation,
- (3) Shares of capital stock, or options or warrants to purchase capital stock up to an aggregate of 651,979 shares (as adjusted for stock splits, stock dividends, recapitalizations or the like) issued to financial institutions or lessors in connection with commercial credit arrangements, equipment financings, commercial property lease transactions or similar transactions,
- (4) Shares of Common Stock or Preferred Stock issuable upon exercise of warrants outstanding as of the date of this Amended and Restated Certificate of Incorporation,
- (5) Capital stock or warrants or options to purchase capital stock issued in connection with bona fide acquisitions, mergers or similar transactions, other than a transaction pursuant to Section 2(d)(i) above, the terms of which are approved by the Board of Directors of the Corporation, including the approval of at least one

director appointed by the holders of the Series C and Series C-1 Preferred Stock, voting together as a class,

- (6) Shares of Common Stock issued or issuable upon conversion of the Preferred Stock,
- (7) Shares of Common Stock issued or issuable in a public offering prior to or in connection with which all outstanding shares of Preferred Stock will be converted to Common Stock,
- (8) Shares of Common Stock issued or issuable that are otherwise excluded from this Section 4(d)(i) by vote or written consent of the holders of at least 66 2/3% of the Preferred Stock, and
- (9) Up to 15,000,000 shares of Common Stock issued or issuable upon exercise of warrants issued in connection with the sale of the Company's Series C-1 Preferred Stock.
- (C) <u>No Fractional Adjustments</u>. No adjustment of the Conversion Price for the Preferred Stock shall be made in an amount less than one cent per share, provided that any adjustments which are not required to be made by reason of this sentence shall be carried forward and shall be either taken into account in any subsequent adjustment made prior to three years from the date of the event giving rise to the adjustment being carried forward, or shall be made at the end of three years from the date of the event giving rise to the adjustment being carried forward.
- (D) <u>Determination of Consideration</u>. In the case of the issuance of Additional Stock for eash, the consideration shall be deemed to be the amount of cash paid therefor before deducting any reasonable discounts, commissions or other expenses allowed, paid or incurred by the Corporation for any underwriting or otherwise in connection with the issuance and sale thereof. In the case of the issuance of the Additional Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be deemed to be the fair value thereof as determined in good faith by the Board of Directors irrespective of any accounting treatment,
- (E) <u>Deemed Issuances of Common Stock</u>. In the case of the issuance (whether before, on or after the applicable Purchase Date) of options to purchase or rights to subscribe for Common Stock, securities by their terms convertible into or exchangeable for Common Stock or options to purchase or rights to subscribe for such convertible or exchangeable securities, the following provisions shall apply for all purposes of this Section 4(d)(i):
- (1) The aggregate maximum number of shares of Common Stock deliverable upon exercise (assuming the satisfaction of any conditions to exercisability, including without limitation, the passage of time, but without taking into account potential antidilution adjustments) of such options to purchase or rights to subscribe for Common

Stock shall be deemed to have been issued at the time such options or rights were issued and for a consideration equal to the consideration (determined in the manner provided in Section 4(d)(i)(D)), if any, received by the Corporation upon the issuance of such options or rights plus the minimum exercise price provided in such options or rights (without taking into account potential antidilution adjustments) for the Common Stock covered thereby.

of Common Stock deliverable upon conversion of or in exchange (assuming the satisfaction of any conditions to convertibility or exchangeability, including, without limitation, the passage of time, but without taking into account potential antidilution adjustments) for any such convertible or exchangeable securities or upon the exercise of options to purchase or rights to subscribe for such convertible or exchangeable securities and subsequent conversion or exchange thereof shall be deemed to have been issued at the time such securities were issued or such options or rights were issued and for a consideration equal to the consideration, if any, received by the Corporation for any such securities and related options or rights (excluding any cash received on account of accrued interest or accrued dividends), plus the minimum additional consideration, if any, to be received by the Corporation (without taking into account potential antidilution adjustments) upon the conversion or exchange of such securities or the exercise of any related options or rights (the consideration in each case to be determined in the manner provided in Section 4(d)(i)(D).

shares of Common Stock deliverable or in the consideration payable to the Corporation upon exercise of such options or rights or upon conversion of or in exchange for such convertible or exchangeable securities, including, but not limited to, a change resulting from the antidilution provisions thereof, the Conversion Price of the Series A, Series B, Series B-2, Series C or Series C-1 Preferred Stock, to the extent in any way affected by or computed using such options, rights or securities, shall be recomputed to reflect such change, but no further adjustment shall be made for the actual issuance of Common Stock or any payment of such consideration upon the exercise of any such options or rights or the conversion or exchange of such securities.

(4) Upon the expiration of any such options or rights, the termination of any such rights to convert or exchange or the expiration of any options or rights related to such convertible or exchangeable securities, the Conversion Price of the Series A, Series B, Series B-2, Series C or Series C-1 Preferred Stock, to the extent in any way affected by or computed using such options, rights or securities or options or rights related to such securities, shall be recomputed to reflect the issuance of only the number of shares of Common Stock (and convertible or exchangeable securities which remain in effect) actually issued upon the exercise of such options or rights, upon the conversion or exchange of such securities or upon the exercise of the options or rights related to such securities.

(5) The number of shares of Common Stock deemed issued and the consideration deemed paid therefor pursuant to Sections 4(d)(i)(E)(1) and 4(d)(i)(E)(2) shall be appropriately adjusted to reflect any change, termination or expiration of the type described in either Section 4(d)(i)(E)(3) or 4(d)(i)(E)(4).

- (F) <u>No Increased Conversion Price</u>. Notwithstanding any other provisions of this Section (4)(d)(i), except to the limited extent provided for in Sections 4(d)(i)(E)(3) and 4(d)(i)(E)(4), no adjustment of the Conversion Price pursuant to this Section 4(d)(i) shall have the effect of increasing the Conversion Price above the Conversion Price in effect immediately prior to such adjustment.
- (ii) Stock Splits and Dividends. In the event the Corporation should at any time or from time to time after the Purchase Date fix a record date for the effectuation of a split or subdivision of the outstanding shares of Common Stock or the determination of holders of Common Stock entitled to receive a dividend or other distribution payable in additional shares of Common Stock or other securities or rights convertible into, or entitling the holder thereof to receive directly or indirectly, additional shares of Common Stock (hereinafter referred to as "Common Stock Equivalents") without payment of any consideration by such holder for the additional shares of Common Stock or the Common Stock Equivalents (including the additional shares of Common Stock issuable upon conversion or exercise thereof), then, as of such record date (or the date of such dividend distribution, split or subdivision if no record date is fixed), the Conversion Price of the Series A, Series B, Series B-2, Series C and Series C-1 Preferred Stock shall be appropriately decreased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase of the aggregate of shares of Common Stock outstanding and those issuable with respect to such Common Stock Equivalents with the number of shares issuable with respect to Common Stock Equivalents determined from time to time in the manner provided for deemed issuances in Section 4(d)(i)(E).
- (iii) Reverse Stock Splits. If the number of shares of Common Stock outstanding at any time after the Purchase Date is decreased by a combination of the outstanding shares of Common Stock, then, following the record date of such combination, the Conversion Price for each series of Preferred Stock shall be appropriately increased so that the number of shares of Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in outstanding shares.
- (e) Other Distributions. In the event the Corporation shall declare a distribution payable in securities of other persons, evidences of indebtedness issued by the Corporation or other persons or entities, assets (excluding cash dividends) or options or rights not referred to in Section 4(d)(ii), then, in each such case for the purpose of this Section 4(e), the holders of Preferred Stock shall be entitled to a proportionate share of any such distribution as though they were the holders of the number of shares of Common Stock of the Corporation into which their shares of Preferred Stock are convertible as of the record date fixed for the determination of the holders of Common Stock of the Corporation entitled to receive such distribution.
- (f) <u>Recapitalizations</u>. If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination or merger or sale of assets transaction provided for elsewhere in this Section 4 or Section 2) provision shall be made so that the holders of the Preferred Stock shall thereafter be entitled to receive upon

conversion of such Preferred Stock the number of shares of stock or other securities or property of the Corporation or otherwise, to which a holder of Common Stock deliverable upon conversion would have been entitled on such recapitalization. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 4 with respect to the rights of the holders of such Preferred Stock after the recapitalization to the end that the provisions of this Section 4 (including adjustment of the Conversion Price then in effect and the number of shares purchasable upon conversion of such Preferred Stock) shall be applicable after that event and be as nearly equivalent as practicable.

(g) <u>No Impairment</u>. The Corporation will not, by amendment of its Certificate of Incorporation or through any reorganization, recapitalization, transfer of assets, consolidation, 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.

(h) No Fractional Shares and Certificate as to Adjustments.

(i) No fractional shares shall be issued upon the conversion of any share or shares of the Series A, Series B, Series B-2, Series C and Series C-1 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 in good faith 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 eash. The number of shares issuable upon such conversion shall be determined on the basis of the total number of shares of Series A, Series B, Series B-2, Series C or Series C-1 Preferred Stock the holder is at the time converting into Common Stock and the number of shares of Common Stock issuable upon such aggregate conversion.

(ii) Upon the occurrence of each adjustment or readjustment of the Conversion Price of Series A, Series B, Series B-2, Series C or Series C-1 Preferred Stock pursuant to this Section 4, the Corporation, at its expense, shall promptly compute such adjustment or readjustment in accordance with the terms hereof and prepare and furnish to each holder of such 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 Series A, Series B, Series B-2, Series C or Series C-1 Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (A) such adjustment and readjustment, (B) the Conversion Price for such series of Preferred Stock at the time in offect, and (C) 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 such series of Preferred Stock.

- (i) Notices of Record Date. In the event of any taking by the Corporation of a record of the holders of any class of securities for the purpose of determining the holders thereof who are entitled to receive any dividend (other than a cash dividend) or other distribution, any right to subscribe for, purchase or otherwise acquire any shares of stock of any class or any other securities or property, or to receive any other right, the Corporation shall mail to each holder of Scries A, Series B, Series B-2, Series C or Series C-1 Preferred Stock, at least ten (10) days prior to the date specified therein, a notice specifying the date on which any such record is to be taken for the purpose of such dividend, distribution or right, and the amount and character of such dividend, distribution or right.
- (j) 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 Series Λ, Series B, Series B-2, Series C or Series C-1 Preferred Stock, such number of its shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of such series of 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 such series of Preferred Stock, in addition to such other remedies as shall be available to the holder of such 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 purposes, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate of Incorporation.
- (k) <u>Notices.</u> Any notice required by the provisions of Section 2 or this Section 4 to be given to the holders of shares of Series Λ, Series B, Series B-2, Series C or Series C-1 Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, or by facsimile upon confirmation of transmission and addressed to each holder of record at such holder's address or facsimile number appearing on the books of the Corporation.

5. <u>Voting Rights; Directors.</u>

(a) The holder of each share of Preferred Stock shall have the right to one vote for each share of Common Stock into which such Preferred Stock could then be converted, and with respect to such vote, such holder shall have full voting rights and powers equal to the voting rights and powers of the holders of Common Stock, and shall be entitled, notwithstanding any provision hereof, to notice of any stockholders' meeting in accordance with the bylaws of the Corporation, and shall be entitled to vote, together with holders of Common Stock, with respect to any question upon which holders of Common Stock have the right to vote. Fractional votes shall not, however, be permitted and any fractional voting rights available on an as-converted basis (after aggregating all shares into which shares of Series A, Series B, Series B-2, Series C or Series C-1 Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (with one-half being rounded upward).

- (b) 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.
- At each meeting of stockholders at which members of the Board of (c) Directors are to be elected, or whenever members of the Board of Directors are to be elected by written consent of the stockholders, (i) the holders of a majority of the then outstanding shares of the Series C and Scries C-1 Preferred Stock, voting together as a separate class, shall be entitled to elect two (2) members of the Board of Directors (the "Series C Directors"); (ii) the holders of a majority of the then outstanding shares of the Scrics B Preferred Stock, voting together as a separate class, shall be entitled to elect one (1) member of the Board of Directors (the "Series B Director"); (iii) the holders of a majority of the then outstanding shares of the Series A Preferred Stock, voting together as a separate class, shall be entitled to elect one (1) member of the Board of Directors (the "Series A Director"); (iv) the holders of a majority of the then outstanding shares of the Common Stock, voting together as a separate class, shall be entitled to elect one (1) member of the Board of Directors (the "Common Director"); and (v) the holders of a majority of the then outstanding shares of the Common Stock and Preferred Stock, voting together as a single class on an as-converted basis, shall be entitled to elect three (3) members of the Board of Directors (the "Joint Directors").
- (d) In the case of any vacancy on the Board of Directors occurring because of the death, resignation or removal of a director a successor shall be elected to serve for the unexpired term of the director whose office is vacant by the vote or written consent of the holders of the class or series of shares entitled to elect such director in accordance with the provisions of Section 5(c) above.

6. Protective Provisions.

- (a) So long as at least 3,000,000 shares of Preferred Stock are outstanding (as adjusted for stock splits, stock dividends or recapitalizations), the Corporation shall not without first obtaining the approval (by vote or written consent, as provided by law) of the holders of at least 66 2/3% of the then outstanding shares of Preferred Stock, voting together as a class:
 - (i) effect a transaction described in Section 2(d)(i) above;
- (ii) increase or decrease (other than by conversion) the total number of authorized shares of Preferred Stock;
- (iii) redeem, purchase or otherwise acquire (or pay into or set funds aside for a sinking fund for such purpose) any share or shares of Common Stock; provided, however, that this restriction shall not apply to the repurchase of shares of Common Stock from employees, officers, directors, consultants or other persons performing services for the Corporation or any subsidiary pursuant to agreements under which the Corporation has the option to repurchase such shares at cost upon the occurrence of certain events, such as the termination of employment, or through the exercise of any right of first refusal;

- (iv) declare, pay or distribute any dividend to holders of Common Stock;
- (v) sell, convey, or otherwise transfer any all or substantially all of the assets of the Corporation (including without limitation a grant of an exclusive license or exclusive licenses to all or substantially all of the Corporation's intellectual property) to any person or entity other than a wholly-owned subsidiary of the Corporation; or
 - (vi) approve the liquidation or dissolution of the Corporation.
- (b) So long as at least 1,000,000 shares of Series B Preferred Stock remain outstanding (as adjusted for stock splits, stock dividends or recapitalizations), 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 then outstanding shares of Series B Preferred Stock, voting together as a class:
- (i) alter or change the rights, preferences or privileges of the shares of Series B Preferred Stock so as to affect adversely the shares of Series B Preferred Stock; or
- (ii) increase or decrease (other than by conversion) the total number of authorized shares of Series B Preferred Stock.
- (c) So long as at least 1,500,000 shares of Series B-2 Preferred Stock remain outstanding (as adjusted for stock splits, stock dividends or recapitalizations), 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 then outstanding shares of Series B-2 Preferred Stock, voting together as a class:
- (i) alter or change the rights, preferences or privileges of the shares of Series B-2 Preferred Stock so as to affect adversely the shares of Series B-2 Preferred Stock; or
- (ii) increase or decrease (other than by conversion) the total number of authorized shares of Series B-2 Preferred Stock.
- (d) So long as at least 2,500,000 shares of Series C and Series C-1 Preferred Stock remain outstanding (as adjusted for stock splits, stock dividends or recapitalizations), 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 then outstanding shares of Series C and Series C-1 Preferred Stock, voting together as a class:
- (i) alter or change the rights, preferences or privileges of the shares of Series C or Series C-1 Preferred Stock so as to affect adversely the shares of Series C or Series C-1 Preferred Stock;

- (ii) increase or decrease (other than by conversion) the total number of authorized shares of Series C or Series C-1 Preferred Stock;
- (iii) authorize or issue, or obligate itself to issue (by reclassification or otherwise), any other equity security, including any security (other than Series C-1 Preferred Stock) convertible into or exercisable for any equity security, having a preference over, or being on a parity with, the Series C or Series C-1 Preferred Stock with respect to voting, dividends, conversion or upon liquidation; or
 - (iv) effect a transaction described in Section 2(d)(i) above.
- 7. <u>Status of Converted Stock.</u> In the event any shares of Preferred Stock shall be converted pursuant to Section 4 hereof, the shares so converted shall be cancelled and shall not be issuable by the Corporation. The Certificate of Incorporation of the Corporation shall be appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.
- 8. <u>Special Mandatory Conversion</u>. In the event that the Corporation shall undertake a Dilutive Financing (as defined below), and the Board of Directors determines that the holders of Series C Preferred Stock (each a "<u>Series C Holder</u>," and collectively, the "<u>Series C Holders</u>") shall have the right to purchase their Pro Rata Amount (as defined below) of a portion of the shares to be sold and issued in such Dilutive Financing pursuant to this Section 8, then
- (a) If a Series C Holder purchases no portion of its Pro Rata Amount (a "Non-Participating Holder") at or prior to the Dilutive Financing Closing (as defined below), then effective immediately coincident with such Dilutive Financing Closing, all Series C Preferred Stock held by such Non-Participating Holder shall automatically convert into such number of fully paid and nonassessable shares of Common Stock at the applicable Conversion Price as set forth in Article IV(B), Section 4 above (the "Mandatory Conversion"), without giving effect to any adjustments that would have resulted from the issuance of Additional Stock in any Dilutive Financing Closing.
- (b) If a Series C Holder agrees to purchase a portion but not all of its Pro Rata Amount (a "Non-Fully Participating Holder") at the Dilutive Financing Closing, then effective immediately coincident with such Dilutive Financing Closing, the Converted Portion (as defined below) of such Non-Fully Participating Holder's Series C Preferred Stock shall automatically convert into such number of fully paid and nonassessable shares of Common Stock at the applicable Conversion Price as set forth in Article IV(B), Section 4 above (the "Mandatory Conversion"), without giving effect to any adjustments that would have resulted from the issuance of Additional Stock in any Dilutive Financing Closing.
- (c) As soon as reasonably practicable after the consummation of the Dilutive Financing, each Non-Participating Holder or Non-Fully Participating Holder shall deliver to the Corporation during regular business hours at the office of any transfer agent of the Corporation, or at such other place as may be designated by the Corporation, the certificate or

certificates representing the shares converted pursuant to Sections 8(a) or 8(b), duly endorsed or assigned in blank or to the Corporation (or an affidavit and indemnity undertaking with respect to lost, stolen or destroyed certificates in a form reasonably acceptable to the Corporation). As promptly thereafter as is practicable, the Corporation shall issue and deliver to each Non-Participating Holder or Non-Fully Participating Holder, at the place designated by each Non-Participating Holder or Non-Fully Participating Holder, a certificate or certificates for the number of full shares of Common Stock to which such Non-Participating Holder or Non-Fully Participating Holder's conversion of Series C Preferred Stock pursuant to Sections 8(a) or 8(b). Notwithstanding the foregoing, the failure by a Non-Participating Holder or Non-Fully Participating Holder to deliver to the Corporation the certificate or certificate(s) representing the shares so converted shall not in any way affect the conversion of such holder's shares of Series C Preferred Stock into Common Stock pursuant to Sections 8(a) or 8(b). The person or entity in whose name the certificate for such shares of Common Stock is to be issued shall be deemed to have become a stockholder of such shares of Common Stock on the effective date of the Mandatory Conversion.

(d) For purposes of this Section 8, all shares of Preferred Stock held or acquired by Series C Holders and their Affiliates (as defined below) shall be aggregated together for the purpose of determining such holders' Pro Rata Amounts and the allocation of the Converted Portion amongst such Holders, such that if a Series C Holder, together with any of its Affiliates, purchases at least the sum of the Pro Rata Amounts of such Series C Holder and any such Affiliates, then none of the shares of Series C Preferred Stock held by such Holder or such Holder's Affiliates shall be converted into Common Stock pursuant to Sections 8(a) or 8(b).

(e) Definitions (for purposes of this Section 8):

(i) "Affiliate" is defined as (A) an affiliated fund or entity of a holder of capital stock of the Corporation, which means with respect to a limited liability company or a limited liability partnership, a fund or entity managed by the same manager or managing member or general partner or management company or by an entity controlling, controlled by, or under common control with such manager or managing member or general partner or management company, (B) a subsidiary, parent, partner, limited partner, retired partner, member, retired member or stockholder of a holder of capital stock of the Corporation, (C) an entity controlling, controlled by or under common control of a holder of capital stock of the Corporation, (D) a holder of capital stock's child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law (such a relation, a holder's "Immediate Family Member", which term shall include legal adoptive relationships), (E) a trust for the benefit of an individual holder or such holder's Immediate Family Member, or (F) a fund or entity whose members, partners, limited partners or stockholders are all holders of capital stock of the Corporation or Affiliates thereof.

(ii) "Converted Portion" shall mean the product obtained by multiplying (1) the number of shares of outstanding Series C Preferred Stock of the Corporation, as the case may be, held by such Non-Fully Participating Holder times (2) the quotient obtained

by dividing (X) the difference obtained by subtracting (xx) the Non-Fully Participating Holder's Pro Rata Amount minus (yy) the number of shares of Series C-1 Preferred Stock that the Non-Fully Participating Holder purchases on or before the applicable Dilutive Financing Closing by (Y) the Non-Fully Participating Holder's Pro Rata Amount.

- (iii) "<u>Dilutive Financing</u>" shall mean the sale and issuance in one or more closings of Series C-1 Preferred Stock at any time following the date of the filing of this Amended and Restated Certificate of Incorporation for a consideration per share less than the Conversion Price of the Series B-2 Preferred Stock (as adjusted for stock dividends, stock splits, and the like).
- (iv) "<u>Dilutive Financing Closing</u>" shall mean any closing of the sale and issuance of Series C-1 Preferred Stock in the Dilutive Financing, provided that any Non-Participating Holder or Non-Fully Participating Holder shall have received the Notice at least thirty (30) days in advance of the Dilutive Financing Closing with respect to such Holder.
- (v) "Notice" shall mean written notice delivered by certified mail or overnight delivery service to the address of record on the books of the Corporation for the Series C Holders from the Corporation stating (i) the Corporation's bona fide intention to offer shares of Series C-1 Preferred Stock in a Dilutive Financing, (ii) the number of such shares to be offered, (iii) the price and terms, if any, upon which it proposes to offer such Shares and (iv) the closing date or dates that such shares are to be offered.
- (vi) "Pro Rata Amount" shall equal the number of shares of Scries C-1 Preferred Stock obtained by dividing (1) the product obtained by multiplying (X) \$10,000,000 times (Y) the quotient obtained by dividing (xx) the number of shares of Series A, Scries B, Series B-2 and Series C Preferred Stock of the Corporation held by such Series C Holder and its Affiliates as of immediately prior to the Dilutive Financing Closing by (yy) the total number of outstanding shares of Scries A, Series B, Series B-2 and Series C Preferred Stock of the Corporation held by all Series C Holders and their Affiliates as of immediately prior to the Dilutive Financing Closing by (2) \$1.50.

(C) Common Stock.

- 1. <u>Dividend Rights</u>. Subject to the prior rights of holders of all classes of stock at the time outstanding having prior rights as to dividends, the holders of the Common Stock shall be entitled to receive, when and as declared by the Board of Directors, out of any assets of the Corporation legally available therefor, such dividends as may be declared from time to time by the Board of Directors.
- 2. <u>Liquidation Rights.</u> Upon the liquidation, dissolution or winding up of the Corporation, the assets of the Corporation shall be distributed as provided in Section 2 of Article IV(B).
 - 3. Redemption. The Common Stock is not redeemable.

4. <u>Voting Rights.</u> The holder of each share of Common Stock shall have the right to one vote, and shall be entitled to notice of any stockholders' meeting in accordance with the bylaws of the Corporation, and shall be entitled to vote upon such matters and in such manner as may be provided by law.

ARTICLE V

The Board of Directors of the Corporation is expressly authorized to make, after or repeal Bylaws of the Corporation.

ARTICLE VI

Elections of directors need not be by written ballot unless otherwise provided in the Bylaws of the Corporation.

ARTICLE VII

- (A) 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 breach of fiduciary duty as a director.
- (B) 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.
- (C) Neither any amendment nor repeal of this Article VII, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article VII, shall climinate or reduce the effect of this Article VII in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article VII, would accrue or arise, prior to such amendment, repeal or adoption of an inconsistent provision."

* * *

The foregoing Amended and Restated Certificate of Incorporation has been duly adopted by this corporation's Board of Directors and stockholders in accordance with the applicable provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware.

Executed at South San Francisco, California, on March 31, 2004.

/s/ Cynthia Ladd	
Cynthia Ladd, Chief Executive Officer	
lal Stankon D. Thou	
/s/ Stephen B. Thau	
Stephen B. Thau. Assistant Secretary	