

**SECOND AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF ALLYLIX INC.,
a Delaware Corporation**

Allylix Inc., a corporation organized and existing under and by virtue of the General Corporation Law of Delaware (the "Corporation"), does hereby certify as follows:

FIRST: The original Certificate of Incorporation of the Corporation (the "Initial Certificate of Incorporation") was filed with the Delaware Secretary of State on April 21, 2004.

SECOND: The First Amended and Restated Certificate of Incorporation of the Corporation (the "First Amendment") was filed with the Delaware Secretary of State on December 31, 2004. The First Amendment amended and restated the Initial Certificate of Incorporation in its entirety.

THIRD: This Second Amended and Restated Certificate of Incorporation (this "Certificate of Incorporation") was approved by the holders of the requisite number of shares of each class of capital stock of the Corporation in accordance with Section 228 of the General Corporation Law of the State of Delaware.

FOURTH: Such amendment and restatement was duly adopted in accordance with the provisions of Section 242 and 245 of the General Corporation Law of the State of Delaware.

FIFTH: The First Amendment is amended and restated in its entirety to read as follows:

ARTICLE I

The name of this corporation is Allylix Inc.

ARTICLE II

The address of the registered office of the Corporation in the State of Delaware is 9 East Loockerman Street, Suite 1B, Dover Delaware 19901. The name of the registered agent at such address is National Registered Agents, Inc.

ARTICLE III

The nature of the business or purposes to be conducted or promoted is to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware.

ARTICLE IV

A. Classes of Stock. The Corporation is authorized to issue two classes of stock to be designated, respectively, "Common Stock" and "Preferred Stock." The total number of shares that the Corporation is authorized to issue is Twenty Million Four Hundred Fifty Two Thousand

Four Hundred Seventy One (20,452,471). Fifteen Million (15,000,000) shares shall be Common Stock, par value \$0.0001 per share, and Five Million Four Hundred Fifty Two Thousand Four Hundred Seventy One (5,452,471) shares shall be Preferred Stock, par value \$0.0001 per share.

B. Rights, Preferences and Restrictions of Preferred Stock. The Preferred Stock authorized by this Certificate of Incorporation may be issued from time to time in one or more series. The rights, preferences, privileges, and restrictions granted to and imposed on the Series A Convertible Preferred Stock ("Series A Preferred Stock"), which series shall consist of One Million Eight Hundred Thirty Eight Thousand Thirteen (1,838,013) shares and the Series B Convertible Preferred Stock ("Series B Preferred Stock"), which series shall consist of Three Million Six Hundred Fourteen Thousand Four Hundred Fifty Eight (3,614,458), are as set forth below in this Article IV(B). The Series A Convertible Preferred Stock and Series B Convertible Preferred Stock shall together be referred to herein as the "Preferred Stock".

1. Dividend Provisions.

(a) The holders of shares of Series A Preferred Stock and Series B Preferred Stock shall be entitled to receive dividends (the "Fixed Dividends"), out of any assets legally available therefor, payable at a per annum rate equal to eight percent (8%) (the "Dividend Rate") of the Series A Original Issue Price (as hereafter defined) and the Series B Original Issue Price (as hereafter defined), respectively, calculated from the date of issuance (the "Accrual Date"). For purposes of this Certificate of Incorporation, the Series A Original Issue Price and the Series B Original Issue Price will each be \$0.83 per share, as adjusted for any stock splits, stock dividends, recapitalizations or the like occurring after the Second Amendment Date (as hereafter defined) with respect to the Series A Preferred Stock or the Series B Preferred Stock, respectively. The accrued Fixed Dividends on shares of Series A Preferred Stock shall be payable in cash when and if declared by the Board or Directors if and only if all accrued Fixed Dividends have been paid to the holders of Series B Preferred Stock. Payment of accrued Fixed Dividends on shares of Series B Preferred Stock shall be payable in cash when and if declared by the Board or Directors. Accrued Fixed Dividends on any shares of Series A Preferred Stock or Series B Preferred Stock shall be cancelled upon conversion of such shares. Any dividends payable by the Corporation in excess of the Fixed Dividends ("Additional Dividends") shall (i) first be paid to the holders of Series B Preferred Stock until such holders have received aggregate Additional Dividends per share of Series B Preferred Stock that are equal to the Series B Original Issue Price, (ii) then to the holders of Series A Preferred Stock until such holders have received aggregate Additional Dividends per share of Series A Preferred Stock that are equal to the Series A Original Issue Price, and (iii) thereafter to the holders of Common Stock, Series A Preferred Stock and Series B Preferred Stock, allocated among such holders on a pro rata basis, based upon the number of shares of Common Stock held by each assuming the full conversion of all shares of Preferred Stock. The dividends will be cumulative from the applicable Accrual Date, and will accrue on a day to day basis from the applicable Accrual Date based, whether or not earned or declared.

(b) The Board will fix a record date for the determination of the holders of Series A Preferred Stock and Series B Preferred Stock entitled to receive payment of a dividend declared thereon, which record date will not be more than forty-five (45) days prior to the date fixed for payment of such dividends. Accrued Fixed Dividends on the Series A Preferred Stock

or Series B Preferred Stock which are not declared and paid will compound quarterly on each Dividend Compounding Date for each such Series at the Dividend Rate. For purposes of this Certificate of Incorporation, the "Dividend Compounding Date" means January 1, 2005, and the first day of each April, July, October and January thereafter for the Series A Preferred Stock and October 1, 2006 and each January, April, July and October thereafter for the Series B Preferred Stock.

(c) Unless all accrued Fixed Dividends (whether or not declared) on each share of Series A Preferred Stock and Series B Preferred Stock are paid, and the holders of each such share of Series A Preferred Stock and Series B Preferred Stock have received aggregate Additional Dividends per share of Series A Preferred Stock and Series B Preferred Stock which are equal to the Original Issue Price for each such share: (i) no dividends or other distributions (other than a dividend or distribution payable solely in Common Stock) may be declared, made or paid on any shares of Common Stock; (ii) no shares of Common Stock may be repurchased, exchanged, redeemed or otherwise acquired for any consideration by the Corporation, any subsidiary of the Corporation or any entity which the Corporation owns or controls (whether directly or indirectly), 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 of the Corporation pursuant to agreements under which the Corporation or such subsidiary has the option to repurchase such shares at cost upon the occurrence of certain events, such as the termination of employment; and (iii) no funds may be set apart or reserved with respect to any of the actions described in clauses (i) or (ii).

(d) 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, assets (excluding cash dividends pursuant to this Section 1) or options or rights not referred to in subsection 4(c)(i), then, in each such case the property so distributed shall be valued for purposes of this Section 1 at its then fair market value per share as determined by both the Corporation and the vote or written consent of the holders of more than fifty percent (50%) of the then outstanding shares of the Series A Preferred Stock and Series B Preferred Stock, voting as a single class (the "Required Majority"), or, if the Corporation and the Required Majority cannot agree on the fair market value per share, the fair market value per share as determined by a qualified independent appraiser selected by the Corporation and by the vote or written consent of the Required Majority; or if the Corporation and the Required Majority cannot agree on an appraiser, the average of the fair market value per share as determined by a qualified independent appraiser selected by the Corporation and the fair market value per share as determined by a qualified independent appraiser selected by the vote or written consent of the Required Majority.

(e) In the event the amount of Fixed Dividends to be paid on the Series A Preferred Stock or the Series B Preferred Stock at any time is not sufficient to pay the accrued but unpaid Fixed Dividends in full on such Series, any partial payment of such Fixed Dividends will be made to the holders of such Series ratably (on an as-if converted basis) in proportion to the aggregate accrued but unpaid portion of the Fixed Dividends on the shares of the applicable Series of Preferred Stock held by such holders.

2. Liquidation Preference.

(a) In the event of any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, the holders of Series B Preferred Stock will be entitled to receive in preference to the holders of all other equity securities of the Corporation an amount per share equal to the greater of (A) the Series B Original Issue Price plus all accrued but unpaid Fixed Dividends thereon, and (B) the aggregate amount that would be distributable with respect to the aggregate number of shares of Common Stock issuable upon conversion of such share of Series B Preferred Stock (assuming for purposes of such calculation, the conversion of all other shares of Preferred Stock). If upon the occurrence of such event, the assets and funds thus distributed among the holders of Series B 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 Series B Preferred Stock in proportion to the preferential amount each such holder would otherwise be entitled to receive. Thereafter, the holders of Series A Preferred Stock will be entitled to receive in preference to the holders of Common Stock an amount per share equal to the greater of (X) the Series A Original Issue Price plus all accrued but unpaid Fixed Dividends thereon, and (Y) the aggregate amount that would be distributable with respect to the aggregate number of shares of Common Stock issuable upon conversion of such share of Series A Preferred Stock (assuming for purposes of such calculation, the conversion of all other shares of Preferred Stock). If upon the occurrence of such event, the assets and funds thus distributed among the holders of Series A 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 Series A Preferred Stock in proportion to the preferential amount each such holder would otherwise be entitled to receive.

(b) Upon the completion of the distribution required by subparagraph (a) of this Section 2, the remaining assets and funds of the Corporation legally available for distribution to stockholders of the Corporation shall be distributed as set forth in Article IV.C.2.

(c) (i) For purposes of this Article IV, unless otherwise agreed by the vote or written consent of the Required Majority, a liquidation, dissolution or winding up of the Corporation shall mean any of the following transactions: (A) the acquisition of the Corporation by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation) that results in the transfer of eighty percent (80%) or more of the outstanding voting power of the Corporation; or (B) a sale of all or substantially all of the assets of the Corporation.

(ii) If the consideration received by the Corporation upon a liquidation, dissolution or winding up of 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 covered by (B) below:

(1) If traded on a securities exchange, the value shall be deemed to be the average of the closing prices of the securities on such exchange over the thirty (30) day period ending three (3) days prior to the closing of such event;

(2) If actively traded over-the-counter, the value shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) over the thirty (30) day period ending three (3) days prior to the closing of such event; and

(3) If there is no active public market, the value shall be the fair market value thereof, as mutually determined by the Corporation and the vote or written consent of the Required Majority; or, if the Corporation and the Required Majority cannot agree on the fair market value, the fair market value as determined by a qualified independent appraiser selected by the Corporation and the vote or written consent of the Required Majority; or if the Corporation and the Required Majority cannot agree on an appraiser, the average of the fair market value as determined by a qualified independent appraiser selected by the Corporation and the fair market value as determined by a qualified independent appraiser selected by the vote or written consent of the Required Majority.

(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 fair market value determined as above in (A) (1), (2) or (3) to reflect the approximate fair market value thereof, as mutually determined by the Corporation and the vote or written consent of the Required Majority; or, if the Corporation and the Required Majority cannot agree on the discount, the discount as determined by a qualified independent appraiser selected by the Corporation and the vote or written consent of the Required Majority; or if the Corporation and the Required Majority cannot agree on an appraiser, the average of the discount as determined by a qualified independent appraiser selected by the Corporation and the discount as determined by a qualified independent appraiser selected by the vote or written consent of the Required Majority.

3. Redemption.

(a) At any time and from time to time after December 31, 2011, any holders of shares of Series A Preferred Stock or Series B Preferred Stock may, with the vote or written consent of the Required Majority, require that the Corporation purchase the shares of Series A Preferred Stock and Series B Preferred Stock held by such holders, on a date selected by the Required Majority (a "Redemption Date") that is at least six (6) months after written notice is given to the Corporation, and the Corporation shall purchase such shares, for a price per share equal to the greater of: (A) the sum of (i) the Series A Original Issue Price or the Series B Original Issue Price, as applicable, plus (ii) all accrued but unpaid dividends with respect to such share, (B) an amount which, after taking into account the receipt of all prior Fixed Dividends and Additional Dividends, provides a holder of such share with an amount equal to 150% of the Series A Original Issue Price or the Series B Original Issue Price, as applicable, or (C) the fair market value of such share as of the date of such notice as mutually determined by the Corporation and the vote or written consent of the Required Majority, or, if the Corporation and the Required Majority cannot agree on the fair market value, the fair market value as determined by

a qualified independent appraiser selected by the Corporation and by the vote or written consent of the Required Majority; or, if the Corporation and the Required Majority cannot agree on an appraiser, the average of the fair market value as determined by a qualified independent appraiser selected by the Corporation and the fair market value as determined by a qualified independent appraiser selected by the vote or written consent of the Required Majority.

(b) At least fifteen (15) but no more than thirty (30) days prior to each Redemption Date, written notice (the "Redemption Notice") shall be mailed, first class postage prepaid, to each holder of record (at the close of business on the business day next preceding the day on which notice is given) of the Series A Preferred Stock and Series B Preferred Stock to be redeemed, at the address last shown on the records of the Corporation for such holder, notifying such holder of the redemption to be effected on the applicable Redemption Date, specifying the number of shares to be redeemed from such holder, the Redemption Date, the applicable Redemption Price, the place at which payment may be obtained and calling upon such holder to surrender to the Corporation, in the manner and at the place designated, the holder's certificate or certificates representing the shares to be redeemed (the "Redemption Shares"). Except as provided in subsection (3)(c), on or after each Redemption Date, each holder of the Redemption Shares to be redeemed on such Redemption Date shall surrender to the Corporation the certificate or certificates representing such shares, in the manner and at the place designated in the Redemption Notice, and thereupon the applicable Redemption Price of such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof and each surrendered certificate shall be canceled. In the event less than all the shares represented by any such certificate are redeemed, a new certificate shall be issued representing the unredeemed shares.

(c) From and after the applicable Redemption Date, unless there shall have been a default in payment of any applicable Redemption Price, all rights of the holders of Redemption Shares designated for redemption on such Redemption Date in the Redemption Notice as holders of such Series A Preferred Stock or Series B Preferred Stock (except the right to receive the applicable Redemption Price without interest upon surrender of their certificate or certificates) shall cease with respect to such shares, and such shares shall not thereafter be transferred on the books of the Corporation or be deemed to be outstanding for any purpose whatsoever. If the funds of the Corporation legally available for the redemption of the Redemption Shares on a Redemption Date are insufficient to redeem the total number of shares to be redeemed on such date, those funds that are legally available will be used to redeem the maximum possible number of such shares, first among the holders of Series B Preferred Stock (ratably, if necessary) and then among the holders of such shares of Series A Preferred Stock (ratably, if necessary) to be redeemed such that each holder of a share of Series B Preferred Stock to be redeemed receives for such share the same percentage of the applicable Redemption Price as each other holder receives for any such share and such that each holder of a share of Series A Preferred Stock to be redeemed receives for such share the same percentage of the applicable Redemption Price as each other holder receives for any such share. The Redemption Shares not redeemed shall remain outstanding and entitled to all the rights and preferences provided herein and the Fixed Dividends as provided for in Section 1 shall continue to accrue with respect to such shares. At any time thereafter when additional funds of the Corporation are legally available for the redemption of Redemption Shares, such funds will immediately be used to redeem first the balance of the shares of Series B Preferred Stock, and then the balance of

shares of Series A Preferred Stock, that the Corporation has become obliged to redeem on the Redemption Date but that it has not redeemed.

4. Conversion. The holders of Series A Preferred Stock and Series B Preferred Stock shall have conversion obligations and rights as follows:

(a) Conversion Ratio. Each share of Series A Preferred Stock and Series B Preferred Stock may at any time be converted as set forth below into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the Series A Original Issue Price or the Series B Original Issue Price, as applicable, by the Conversion Price applicable to such Series, determined as hereafter provided, in effect on the date the certificate is surrendered for conversion. The initial Conversion Price per share for Series A Preferred Stock and Series B Preferred Stock shall be the Series A Original Issue Price and the Series B Original Issue Price, respectively; provided, however, that the Conversion Price for Series A Preferred Stock and Series B Preferred Stock shall be subject to adjustment as set forth in subsection 4(c). Such conversion shall automatically occur immediately upon the Corporation's sale of its Common Stock in an underwritten public offering pursuant to a registration statement on Form S-1 or Form SB-2 or any comparable successor form then in effect under the Securities Act of 1933, as amended, the public offering price of which is not less than \$4.15 per share (adjusted to reflect subsequent stock dividends, stock splits or recapitalizations occurring after the Second Amendment Date) and the net proceeds to the Corporation of which are not less than \$20,000,000 in the aggregate (net of underwriters' discounts and expenses) (a "Qualifying IPO")

(b) Mechanics of Conversion. Before any holder of Series A Preferred Stock or Series B Preferred Stock shall be entitled to voluntarily convert the same into shares of Common Stock, such holder shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Corporation or of any transfer agent for the Series, 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. Any automatic conversion of Series A Preferred Stock and Series B Preferred Stock will be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which event the conversion shall be deemed to have been made and the persons entitled to receive the Common Stock upon conversion of the Series A Preferred Stock or Series B Preferred Stock shall be deemed to have converted such Series A Preferred Stock and Series B Preferred Stock immediately prior to the closing of such sale of securities. Upon delivery of duly endorsed certificates for shares of Series A Preferred Stock or Series B Preferred Stock to be voluntarily converted, or deemed to be automatically converted, the Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of shares of Series A Preferred Stock or Series B 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.

(c) Conversion Price Adjustments of Preferred Stock for Splits and Combinations. The applicable Conversion Price of the Series A Preferred Stock and Series B Preferred Stock shall be subject to adjustment from time to time as follows:

(i)

(A) If the Corporation shall issue, at any time after August 2, 2006, any Additional Stock (as hereafter defined) without consideration or for a consideration per share less than the Conversion Price for either the Series A Preferred Stock or Series B Preferred Stock in effect immediately prior to the issuance of such Additional Stock, the Conversion Price for such Series in effect immediately prior to each such issuance shall forthwith be adjusted to the price per share of Additional Stock at which such Additional Stock is so issued or sold or deemed issued or sold.

(B) In the case of the issuance of Common Stock for cash, the consideration shall be deemed to be the amount of cash paid therefore 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.

(C) In the case of the issuance of the Common Stock for 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 by the Board of Directors irrespective of any accounting treatment.

(D) In the case of the issuance 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 subsection 4(c)(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 consideration equal to the consideration (determined in the manner provided in subsections 4(c)(i)(B) and 4(c)(i)(C)), 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.

(2) The aggregate maximum number of shares of Common Stock deliverable upon conversion of, or in exchange for (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), 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 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 subsections 4(c)(i)(B) and 4(c)(i)(C)).

(3) In the event of any change in the number of 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 Preferred Stock and Series B 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 Preferred Stock and Series B Preferred Stock, to the extent in any way affected by such options, rights or securities or options or rights related to such securities, shall be readjusted as if such options, rights or securities or options or rights related to such securities had not been issued.

(ii) "Additional Stock" shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to subsection 4(c)(i)(D)) by the Corporation after August 2, 2006 other than:

(A) Shares of Common Stock issued pursuant to a transaction described in subsection 4(c)(ii) hereof;

(B) Shares of Series B Preferred Stock or warrants to purchase shares of Common Stock (the "Warrants") issued pursuant to that certain Confidential Private Placement Memorandum of the Corporation dated July 7, 2006, as amended or supplemented from time to time;

(C) Shares of Common Stock issued upon conversion of the Series A Preferred or the Series B Preferred Stock or upon the exercise of any Warrants;

(D) Shares of Common Stock issuable or issued to employees, consultants, directors or vendors (if in transactions with primarily compensatory, non-financing purposes) of the Corporation (i) directly or (ii) pursuant to any stock option plans or restricted stock plan approved by the Board of Directors or assumed pursuant to an acquisition;

(E) Shares of Common Stock or options or warrants exercisable for Common Stock issued with the approval of the Board of Directors to banks, savings and loan associations, equipment lessors or other similar lending institutions in connection with such entities providing credit facilities or financing to the Corporation;

(F) Shares of Common Stock issued or issuable from time to time pursuant to the acquisition of another business entity or business segment of any such entity

by the Corporation by merger, purchase of substantially all the assets or other reorganization (other than a merger or other transaction described in Section 2(c)).

(ii) In the event the Corporation should at any time or from time to time after the Accrual 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 Preferred Stock and Series B 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 subsection 4(c)(i)(D).

(iii) If the number of shares of Common Stock outstanding at any time after the Accrual 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 the Series A Preferred Stock and Series B 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.

(d) Recapitalizations. If at any time or from time to time there shall be a recapitalization of the Common Stock (other than a subdivision, combination, reorganization or merger or sale of assets transaction provided for elsewhere in this Section 4 or in Section 2), provision shall be made so that the holders of Series A Preferred Stock and Series B Preferred Stock shall thereafter be entitled to receive upon conversion of such Series, in lieu of each share of Common Stock otherwise issuable upon such conversion, the number of shares of stock or other securities or property of the Company or otherwise, to which a holder of the number of shares of Common Stock deliverable upon conversion would have been entitled upon 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 Series A Preferred Stock and Series B 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 the Series A Preferred Stock and Series B Preferred Stock) shall be applicable after that event as nearly equivalent as may be practicable.

(e) No Impairment. The Corporation shall not, by amendment of this 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 Series A Preferred Stock and Series B Preferred Stock set forth in this Section 4 against impairment.

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

(i) No fractional shares shall be issued upon the conversion of any share or shares of Series A Preferred Stock or Series B Preferred Stock, and the number of shares of Common Stock to be issued shall be rounded to the nearest whole share. Whether or not fractional shares are issuable upon such conversion shall be determined on the basis of the total number of shares of Series A Preferred Stock and Series B 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 the Series A Preferred Stock and Series B 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 Series A Preferred Stock and Series B 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 Preferred Stock or Series B 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 at the time in effect, and (C) the number of shares of Common Stock and the amount, if any, of other property that at the time would be received upon the conversion of such Series.

(g) 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 Series A Preferred Stock and Series B 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.

(h) 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 Series A Preferred Stock and Series B Preferred Stock, such number of shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding shares of Series A Preferred Stock and Series B 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 Series A Preferred Stock and Series B Preferred Stock, in addition to such other remedies as shall be available to the holders of Series A Preferred Stock and Series B Preferred Stock, the Corporation will take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such pur-

poses, including, without limitation, engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Certificate of Incorporation.

(i) Notices. Any notice required by the provisions of this Section 4 to be given to the holders of Series A Preferred Stock and Series B Preferred Stock shall be deemed given if deposited in the United States mail, postage prepaid, and addressed to each holder of record at his address appearing on the books of the Corporation.

5. Voting Rights. The holder of each share of Series A Preferred Stock and Series B Preferred Stock shall have the right to one vote for each share of Common Stock into which such Series A Preferred Stock or Series B 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 Preferred Stock and Series B Preferred Stock held by each holder could then be converted) shall be rounded to the nearest whole number (with one-half being rounded upward).

6. Status of Converted or Redeemed Stock. In the event any shares of Series A Preferred Stock or Series B Preferred Stock shall be redeemed or converted pursuant to Section 3 or Section 4 hereof, the shares so converted or redeemed shall be cancelled and thereafter shall not be issuable. This Certificate of Incorporation shall be deemed appropriately amended to effect the corresponding reduction in the Corporation's authorized capital stock.

7. Preemptive Rights. Any holder of shares of Preferred Stock shall have such preemptive rights as are granted in any agreement to which the Corporation and such holder are a party.

C. Common Stock.

1. Dividend Rights. The holders of 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, dividends as provided in Section B.1(a)(iii) of this Article IV.

2. Liquidation Rights. Upon the liquidation, dissolution or winding up of the Corporation, the assets and funds of the Corporation not distributed pursuant to Section B.2 of this Article IV shall be distributed to the holders of shares of Common Stock on a pro rata basis based upon the number of shares of Common Stock held by such holder.

3. Redemption. The Common Stock is not redeemable.

4. Voting Rights. 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.

5. Preemptive Rights. Any holder of shares of Common Stock shall have such preemptive rights as are granted in any agreement to which the Corporation and such holder are a party.

ARTICLE V

Except as otherwise provided in this Certificate of Incorporation, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

ARTICLE VI

The number of directors of the Corporation shall be fixed from time to time in the manner provided in the Bylaws of the Corporation.

ARTICLE VII

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

ARTICLE VIII

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 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.

ARTICLE IX

A director of the Corporation shall, to the fullest extent permitted by the General Corporation Law of the State of Delaware as it now exists or as it may hereafter be amended, not be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, except for liability (i) for any breach of the director's duty of loyalty to the Corporation or its stockholders, (ii) for acts or omissions not in good faith or that involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the General Corporation Law of the State of Delaware, or (iv) for any transaction from which the director derived any improper personal benefit. If the General Corporation Law of the State of Delaware is amended, after approval by the stockholders of this Article, to authorize corporation action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law of the State of Delaware, as so amended.

Any amendment, repeal or modification of the foregoing provisions of this Article IX, or the adoption of any additional provisions to this Certificate of Incorporation inconsistent with this Article IX, shall not apply to or adversely affect any right or protection of a director of the Corporation existing that the time of, or increase the liability of such director with respect to any

acts or omissions of such director occurring prior to, such amendment, repeal, modification or adoption.

ARTICLE X

To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law of the State of Delaware permits the Corporation to provide indemnification) through bylaw provisions, agreements with such directors, officers, agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law of the State of Delaware, subject only to limits created by applicable provisions of the General Corporation Law of the State of Delaware (statutory or non-statutory), with respect to actions for breach of duty to the Corporation, its stockholders, and others.

The Corporation may purchase and maintain in force a directors and officers insurance policy, the amount of which shall be determined from time to time by the Board of Directors.

Any amendment, repeal or modification of the foregoing provisions of this Article X, or the adoption of any additional provisions to this Certificate of Incorporation inconsistent with this Article X, shall not apply to or adversely affect any right or protection of a director, officer or agent of the Corporation, or other person, existing at the time of, or increase the liability of such director, officer, agent or other person with respect to any acts or omissions of such director, officer, agent or other person occurring prior to, such amendment, repeal or modification.

ARTICLE XI

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

This Second Amended and Restated Certificate of Incorporation has been duly adopted in accordance with the provisions of Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware by the Board of Directors and the stockholders of the Corporation. The holders of a majority of the outstanding shares of Common Stock and the holders of a majority of the outstanding shares of Series A Preferred Stock approved this Second Amended and Restated Certificate of Incorporation by written consent in accordance with Section 228 of the General Corporation Law of the State of Delaware and written notice of such was given by the Corporation in accordance with said Section 228.

IN WITNESS WHEREOF, the undersigned has executed this Second Amended and Restated Certificate of Incorporation on August 2, 2006 (the "Second Amendment Date").

ALLYLIX INC.

By: 
Carolyn I. Fritz, Chief Executive Officer

ATTEST:


Paul Kelley, Secretary