

AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

OF

AGAMATRIX, INC.

The following Amended and Restated Certificate of Incorporation (i) amends and restates the provisions of the Certificate of Incorporation, as amended, of AgaMatrix, Inc. (the "Corporation") originally filed with the Secretary of State of Delaware on September 17, 2001; (ii) supersedes such Certificate of Incorporation and all amendments thereto and restatements thereof; and (iii) has been duly proposed by the Board of Directors of the Corporation and duly adopted by the stockholders of the Corporation pursuant to Sections 228, 242 and 245 of the Delaware General Corporation Law.

FIRST: The name of the Corporation is:

AgaMatrix, Inc.

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

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

FOURTH: The total number of shares of all classes of capital stock that the Corporation shall have authority to issue is (i) 60,000,000 shares of common stock, \$.001 par value per share ("Common Stock"), and (ii) 32,614,227 shares of Preferred Stock, \$.01 par value per share ("Preferred Stock"), of which (A) 21,179,370 shares of Preferred Stock shall be designated as Series A Convertible Preferred Stock, \$.01 par value per share, ("Series A Preferred Stock"), (B) 4,292,000 shares of Preferred Stock shall be designated as Series B Convertible Preferred Stock, \$.01 par value per share ("Series B Preferred Stock") and (C) 7,142,857 shares of Preferred Stock shall be designated as Series C Convertible Preferred Stock, \$.01 par value per share ("Series C Preferred Stock"), each with the rights and preferences set forth below.

A. COMMON STOCK

1. **Voting Rights**. Subject to the rights and preferences of any Preferred Stock outstanding, the holders of Common Stock shall be entitled to one vote for each share held with respect to all matters voted on by the shareholders of the Corporation at all meetings of stockholders (and written actions in lieu of any meeting).

2. **Dividends**. Dividends may be paid on the Common Stock out of funds legally available therefor when, as and if declared by the Board of Directors. However, except for any dividend on the Common Stock payable solely in Common Stock, no dividend on the Common Stock shall be declared or paid unless there shall simultaneously be declared and paid dividends to all holders of Preferred Stock in an amount which such holders would have received had all

shares of Preferred Stock been converted (on the date for determination of stockholders entitled to such dividend) to Common Stock at the applicable Conversion Price then in effect.

3. Liquidation Rights. Subject to the prior and superior right of any Preferred Stock outstanding, upon any voluntary or involuntary liquidation, dissolution or winding-up of the affairs of the Corporation, the holders of Common Stock shall be entitled to receive distributions as provided in Article FOURTH, Part B below.

4. Relative Rights of Preferred Stock and Common Stock. All preferences, voting powers, relative, participating, optional or other special rights and privileges, and qualifications, limitations or restrictions, of the Common Stock are expressly made subject and subordinate to those that may be fixed with respect to any shares of Preferred Stock.

5. Increase/Decrease of Common Stock. Notwithstanding the provisions of Section 242(b)(2) of the Delaware General Corporation Law, the number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares then outstanding) by the affirmative vote of the holders of a majority of the outstanding shares of capital stock of the Corporation, voting as a single class, with each such share being entitled to such number of votes per share as is provided in this Article FOURTH.

B. PREFERRED STOCK

1. Dividends.

(a) Except as otherwise provided in this Section 1, the holders of shares of Preferred Stock shall not be entitled to receive dividends. When, as and if dividends are declared payable in cash, property or shares of the Corporation's capital stock on shares of Common Stock, the Corporation shall (except as otherwise provided in Sections 3(f)(iii)(2) or 3(g)) declare at the same time and pay to each holder of Preferred Stock a dividend equal to the dividend that would have been payable to such holder if the shares of Preferred Stock held by such holder had been converted into Common Stock on the record date for the determination of holders of Common Stock entitled to receive such dividend.

(b) The holders of the Series A Preferred Stock shall be entitled to receive, when, as and if declared, out of any funds legally available therefor, preferential cumulative dividends in cash at the rate of eight percent (8.0%) per share per annum of the stated value thereof. For such purposes, the "stated value" of each share of Series A Preferred Stock shall be \$0.20687242 (which amount shall be subject to equitable adjustment whenever there shall occur a stock dividend, stock split, combination of shares, reclassification or similar event with respect to the Series A Preferred Stock). Such dividends shall be cumulative and shall accrue from the date of issuance of the Series A Preferred Stock, whether or not earned or declared and, to the extent not previously declared, shall be deemed accrued and payable upon any liquidation or redemption event affecting the Series A Preferred Stock in accordance with Sections 2 and 5 herein, respectively, and whether or not in any fiscal year there shall be net profits or surplus available for the payment of dividends in such fiscal year, so that if in any fiscal year or years, such dividends are not paid in whole or in part upon the Series A Preferred Stock, the portion of such dividends as shall be unpaid shall accumulate as against the holders of the Common Stock.

(c) The holders of the Series B Preferred Stock shall be entitled to receive, when, as and if declared, out of any funds legally available therefor, preferential cumulative dividends in cash at the rate of three percent (3.0%) per share per annum of the stated value thereof. For such purposes, the "stated value" of each share of Series B Preferred Stock shall be \$4.00 (which amount in each case shall be subject to equitable adjustment whenever there shall occur a stock dividend, stock split, combination of shares, reclassification or similar event with respect to the Series B Preferred Stock). Such dividends shall be cumulative and shall accrue from the date of issuance of the Series B Preferred Stock, whether or not earned or declared and, to the extent not previously declared, shall be deemed accrued and payable upon any liquidation or redemption event affecting the Series B Preferred Stock in accordance with Sections 2 and 5 herein, respectively, whether or not in any fiscal year there shall be net profits or surplus available for the payment of dividends in such fiscal year, so that if in any fiscal year or years, such dividends are not paid in whole or in part upon the Series B Preferred Stock, the portion of such dividends as shall be unpaid shall accumulate as against the holders of the Common Stock.

(d) The holders of the Series C Preferred Stock shall be entitled to receive, when, as and if declared, out of any funds legally available therefor, preferential cumulative dividends in cash at the rate of eight percent (8.0%) per share per annum of the stated value thereof (the "Series C Dividend"). For such purposes, the "stated value" of each share of Series C Preferred Stock shall be \$3.50 (which amount in each case shall be subject to equitable adjustment whenever there shall occur a stock dividend, stock split, combination of shares, reclassification or similar event with respect to the Series C Preferred Stock). Such dividends shall be cumulative and shall accrue from the date of issuance of the Series C Preferred Stock, whether or not earned or declared and, to the extent not previously declared, shall be deemed accrued and payable upon any liquidation or redemption event affecting the Series C Preferred Stock in accordance with Sections 2 and 5 herein, respectively, whether or not in any fiscal year there shall be net profits or surplus available for the payment of dividends in such fiscal year, so that if in any fiscal year or years, such dividends are not paid in whole or in part upon the Series C Preferred Stock, the portion of such dividends as shall be unpaid shall accumulate as against the holders of the Common Stock.

(e) At the time of conversion of any shares of Preferred Stock pursuant to Section 3, any dividend accrued but unpaid on any Series of Preferred Stock shall not be paid by the Corporation and shall be deemed forfeited as of the effective date of such conversion.

2. Liquidation.

(a) Payment to Series C Preferred Stock, Series B Preferred Stock, Series A Preferred Stock and Common Stock upon Liquidation.

(i) Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, the holders of each share of Series C Preferred Stock shall be entitled to receive an amount, such amount to be paid first out of the assets of the Corporation available for distribution to holders of the capital stock of all classes, before any other distribution on account of any other class or series of capital stock of Corporation, equal to the greater of (i) \$5.25 per share (which amount shall be subject to equitable adjustment whenever there shall occur a stock dividend, distribution, combination of shares, reclassification of shares

or other similar event) or (ii) (x) \$3.50 per share (which amount shall be subject to equitable adjustment whenever there shall occur a stock dividend, distribution, combination of shares, reclassification of shares or other similar event) plus (y) all cumulative and unpaid dividends to and including the date that full payment, and whether or not previously declared (the amount set forth in this clause (ii) being referred to herein as the "Series C Accreted Value"), shall be tendered to the holders of Series C Preferred Stock with respect to such liquidation, dissolution or winding-up.

If the assets of the Corporation shall be insufficient to permit the payment in full to the holders of the Series C Preferred Stock of all amounts distributable to them under this Section 2(a)(i), then the entire assets of the Corporation available for such distribution shall be distributed ratably among the holders of the Series C Preferred Stock on a pari passu basis in proportion to the full preferential amount each such holder is otherwise entitled to receive.

(ii) Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, after payment of the preferential amount of the Series C Preferred Stock set forth in Section 2(a)(i) above shall have been made in full to the holders of the Series C Preferred Stock or funds necessary for such payment shall have been set aside by the Corporation in trust for the account of holders of Series C Preferred Stock so as to be available for such payments in accordance with Section 2(a)(i) above, the holders of each share of Series B Preferred Stock shall be entitled to receive an amount, such amount to be paid out of the assets of the Corporation available for distribution to holders of the capital stock of all classes, before any other distribution on account of any other class or series of capital stock of the Corporation (other than the Series C Preferred Stock), equal to (i) \$4.00 per share (which amount shall be subject to equitable adjustment whenever there shall occur a stock dividend, distribution, combination of shares, reclassification of shares or other similar event) plus (ii) all dividends declared or accrued but unpaid to and including the date full payment (and whether or not previously declared) shall be tendered to the holders of Series B Preferred Stock with respect to such liquidation, dissolution or winding-up.

If the assets of the Corporation shall be insufficient to permit the payment in full to the holders of Series B Preferred Stock of all amounts distributable to them under this Section 2(a)(ii), then the entire assets of the Corporation available for such distribution shall be distributed ratably among the holders of the Series B Preferred Stock on a pari passu basis in proportion to the full preferential amount each such holder is otherwise entitled to receive.

(iii) Upon any liquidation, dissolution or winding-up of the Corporation, whether voluntary or involuntary, after payment of the preferential amount of the Series C Preferred Stock set forth in Section 2(a)(i) and the Series B Preferred Stock set forth in Section 2(a)(ii) shall have been made in full to the holders of the Series C Preferred Stock and Series B Preferred Stock or funds necessary for such payment shall have been set aside by the Corporation in trust for the account of holders of Series C Preferred Stock and Series B Preferred Stock so as to be available for such payments in accordance with Sections 2(a)(i) and 2(a)(ii) above, the holders of each share of Series A Preferred Stock shall be entitled to receive an amount, such amount to be paid out of the assets of the Corporation available for distribution to holders of the capital stock of all classes, before any other distribution on account of any other class or series of capital stock of the Corporation (other than the Series C Preferred Stock and

Series B Preferred Stock), equal to (i) \$0.41374484 per share (which amount shall be subject to equitable adjustment whenever there shall occur a stock dividend, distribution, combination of shares, reclassification of shares or other similar event) plus (ii) all dividends declared or accrued but unpaid to and including the date full payment (and whether or not previously declared) shall be tendered to the holders of Series A Preferred Stock with respect to such liquidation, dissolution or winding-up.

If the assets of the Corporation shall be insufficient to permit the payment in full to the holders of Series A Preferred Stock of all amounts distributable to them under this Section 2(a)(iii), then the entire assets of the Corporation available for such distribution shall be distributed ratably among the holders of the Series A Preferred Stock on a pari passu basis in proportion to the full preferential amount each such holder is otherwise entitled to receive.

(iv) Upon any liquidation, dissolution or winding up of the Corporation, whether voluntary or involuntary, after such payments shall have been made in full to the holders of the Series C Preferred Stock, Series B Preferred Stock and Series A Preferred Stock, in accordance with Sections 2(a)(i), 2(a)(ii) and 2(a)(iii) above, or funds necessary for such payments shall have been set aside by the Corporation in trust for the account of holders of Series C Preferred Stock, Series B Preferred Stock and Series A Preferred Stock so as to be available for such payments in accordance with Sections 2(a)(i), 2(a)(ii) and 2(a)(iii) above, the remaining assets available for distribution shall be distributed among the holders of the Common Stock, the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock ratably in proportion to the number of shares of Common Stock held by them or, in the case of holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock, the number of shares of Common Stock into which each share of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock held by such holders could be converted, at the applicable Conversion Price in effect, on the record date for the determination of stockholders entitled to distributions under this Section 2.

(v) Upon conversion of shares of Series A Preferred Stock, Series B Preferred Stock, or Series C Preferred Stock into shares of Common Stock pursuant to Section 3, the holder of such Common Stock shall not be entitled to any preferential payment or distribution in case of any liquidation, dissolution or winding-up of the Corporation, but shall share ratably in any distribution of the assets of the Corporation to all the holders of Common Stock.

(b) Distributions Other than Cash. Whenever the distribution provided for in this Section 2 shall be payable in property other than cash, the value of such distribution shall be the fair market value of such property as determined in good faith by the Board of Directors of the Corporation.

(c) Merger as Liquidation, etc. Any transaction, including a merger or consolidation of the Corporation into or with another corporation, which results in the stockholders immediately prior to such transaction ceasing to hold at least a majority of the voting power of the Corporation or the surviving or continuing corporation or the sale of all or substantially all of the assets of the Corporation (other than to a wholly-owned subsidiary of the Corporation), shall be deemed to be a liquidation, dissolution or winding-up of the Corporation for purposes of this Section 2, unless the holders of at least two-thirds of the then outstanding shares of Series A

Preferred Stock, a majority of the Series B Preferred Stock and a majority of the Series C Preferred Stock (each voting as a separate class on an as-converted basis) elect to the contrary by giving written notice thereof to the Corporation at least five days before the effective date of such event. If such notice is given, the provisions of Section 3(i) shall apply. The amount deemed distributed to the holders of Preferred Stock upon any such merger or consolidation shall be the cash or the value of the property, rights or securities distributed to such holders by the acquiring person, firm or other entity. The value of such property, rights or other securities shall be determined in good faith by the Board of Directors of the Corporation.

(d) Notice and Opportunity to Exercise Conversion Rights. Notwithstanding anything to the contrary that may be inferred from the provisions of this Section 2, each holder of shares of Preferred Stock shall be entitled to receive notice from the Corporation of any proposed liquidation, dissolution or winding-up of the Corporation at least ten (10) days prior to date on which any such liquidation, dissolution or winding-up of the Corporation is scheduled to occur and, at any time prior to any such liquidation, dissolution or winding-up of the Corporation, to convert any or all of such holder's shares of Preferred Stock into shares of Common Stock pursuant to Section 3 hereof.

(e) In the event of an initial public offering of Common Stock of the Corporation registered under the Securities Act of 1933, as amended, which offering does not qualify as a Qualifying Initial Public Offering (defined below), the Series C Preferred Stock shall convert into Common Stock at the then applicable Conversion Price in accordance with the provisions of Section 3 hereof, upon consummation of such public offering, and, immediately prior thereto, the holders of the Series C Preferred Stock shall receive, in cash, an amount per share of Series C Preferred Stock equal to the Series C Accreted Value in accordance with Section 2 hereof.

3. Conversion. The holders of the Preferred Stock shall have conversion rights as follows (the "Conversion Rights"):

(a) Right to Convert; Series A Conversion Price. Each share of Series A Preferred Stock shall be convertible, without the payment of any additional consideration by the holder thereof and at the option of the holder thereof, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for the Series A Preferred Stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing \$0.20687242 by the Series A Conversion Price, determined as hereinafter provided, in effect at the time of conversion. The Series A Conversion Price at which shares of Common Stock shall be deliverable upon conversion without the payment of any additional consideration by the holders of Series A Preferred Stock shall initially be \$0.20687242 per share (the "Series A Conversion Price"). The initial Series A Conversion Price shall be subject to adjustment, in order to adjust the number of shares of Common Stock into which the Series A Preferred Stock is convertible, as hereinafter provided.

(b) Right to Convert; Series B Conversion Price. Each share of Series B Preferred Stock shall be convertible, without the payment of any additional consideration by the holder thereof and at the option of the holder thereof, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for the Series B Preferred Stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by

dividing \$4.00 by the Series B Conversion Price, determined as hereinafter provided, in effect at the time of conversion. The Series B Conversion Price at which shares of Common Stock shall be deliverable upon conversion without the payment of any additional consideration by the holders of Series B Preferred Stock shall initially be \$4.00 per share (the "Series B Conversion Price"). The initial Series B Conversion Price shall be subject to adjustment, in order to adjust the number of shares of Common Stock into which the Series B Preferred Stock is convertible, as hereinafter provided.

(c) Right to Convert; Series C Conversion Price. Each share of Series C Preferred Stock shall be convertible, without the payment of any additional consideration by the holder thereof and at the option of the holder thereof, at any time after the date of issuance of such share, at the office of the Corporation or any transfer agent for the Series C Preferred Stock, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing \$3.50 by the Series C Conversion Price, determined as hereinafter provided, in effect at the time of conversion. The Series C Conversion Price at which shares of Common Stock shall be deliverable upon conversion without the payment of any additional consideration by the holders of Series C Preferred Stock shall initially be \$3.50 per share (the "Series C Conversion Price"). The initial Series C Conversion Price shall be subject to adjustment, in order to adjust the number of shares of Common Stock into which the Series C Preferred Stock is convertible, as hereinafter provided.

(d) Automatic Conversion. Each share of each series of Preferred Stock shall automatically be converted into shares of Common Stock at the then effective applicable Conversion Price (as used herein, the term "applicable Conversion Price" means, with respect to the Series A Preferred Stock, the Series A Conversion Price as then in effect, in the case of the Series B Preferred Stock, the Series B Conversion Price as then in effect and in the case of the Series C Preferred Stock, the Series C Conversion Price as then in effect) (i) with respect to shares of Series A Preferred Stock, upon the written election of holders of at least two-thirds of the Series A Preferred Stock then outstanding, voting as a single class (the "Series A Conversion Election"); (ii) with respect to shares of Series B Preferred Stock, upon the written election of holders of at least a majority of the Series B Preferred Stock then outstanding, voting as a single class (the "Series B Conversion Election"); (iii) with respect to shares of Series C Preferred Stock, upon the written election of holders of at least a majority of the Series C Preferred Stock then outstanding, voting as a single class (together with the Series A Conversion Election and Series B Conversion Election, each is hereinafter an "Automatic Conversion Election"); or (iv) the closing of a public offering, underwritten by an investment banking firm approved by the holders of a majority in voting power of the shares of Preferred Stock then outstanding, pursuant to an effective registration statement under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Corporation to the public at an initial price per share of Common Stock of not less than \$6.00 (subject to equitable adjustment in the event of any stock split, stock dividend, combination, reclassification of shares or other similar event affecting the Common Stock) and with gross proceeds to the Corporation of not less than \$75,000,000 (a "Qualifying Initial Public Offering"). In the event of a Qualifying Initial Public Offering, the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted their Preferred Stock until the closing of the Qualifying Initial Public Offering.

Upon the effective date of an Automatic Conversion Election or the closing of the Qualifying Initial Public Offering, those shares of Preferred Stock with respect to which such Automatic Conversion Election shall have been made or all shares of Preferred Stock with respect to a Qualifying Initial Public Offering (as the case may be), 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, however, that the Corporation shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such conversion unless certificates evidencing such shares of the Preferred Stock being converted are either delivered to the Corporation or its transfer agent, or the holder of such shares notifies the Corporation or any 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 therewith. Upon the automatic conversion of the Preferred Stock, the holders of such Preferred Stock shall surrender the certificates representing such shares at the office of the Corporation or of its transfer agent. Thereupon, there shall be issued and delivered to such holder, promptly at such office and in his name as shown on such surrendered certificate or certificates, a certificate or certificates for the number of shares of Common Stock into which the shares of the Preferred Stock surrendered were convertible on the date on which such automatic conversion occurred. No fractional shares of Common Stock shall be issued upon conversion of the 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 effective applicable Conversion Price.

(e) Mechanics of Conversion. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, such holder shall surrender the certificate or certificates therefor, duly endorsed for transfer or with duly executed stock transfer powers sufficient to permit transfer attached, at the office of the Corporation or of any transfer agent for the Preferred Stock (or such holder shall notify the Corporation or any transfer agent that such certificates have been lost, stolen or destroyed and shall execute an agreement reasonably satisfactory to the Corporation to indemnify the Corporation from any loss incurred by it in connection therewith), and shall give written notice to the Corporation at such office that such holder elects to convert the same and shall state therein such holder's name or the name or names of such holder's nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. No fractional shares of Common Stock shall be issued upon conversion of the 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 effective applicable Conversion Price. The Corporation shall, as soon as practicable thereafter, issue and deliver at such office to such holder of Preferred Stock, or to such holder's nominee or nominees, a certificate or certificates for the number of shares of Common Stock to which such holder shall be entitled as aforesaid, together with cash in lieu of any fraction of a share. Except as set forth in the second paragraph of Section 3(c), such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the certificates for the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date.

(f) Adjustments to Conversion Price for Diluting Issues.

(i) Special Definitions. For purposes of this Section 3(f), the following definitions shall apply:

- (1) “Option” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire either Common Stock or Convertible Securities.
- (2) “Series A Original Issue Date” shall mean November 21, 2003.
- (3) “Series B Original Issue Date” shall mean March 30, 2007.
- (4) “Series C Original Issue Date” shall mean November 7, 2007.
- (5) “Convertible Securities” shall mean any evidences of indebtedness, shares (other than shares of Common Stock, Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock) or other securities directly or indirectly convertible into or exchangeable for Common Stock.
- (6) “Additional Shares of Common Stock” shall mean all shares of Common Stock issued (or, pursuant to Section 3(f)(iii), deemed to be issued) by the Corporation after the Series C Original Issue Date, other than:
 - (A) shares of Common Stock issued or issuable upon conversion of shares of Preferred Stock;
 - (B) shares of Preferred Stock issued or issuable upon exercise of warrants issued on or prior to the Series C Original Issue Date;
 - (C) up to 8,265,584 shares of Common Stock issued or issuable to officers, employees or directors of, or consultants to, the Corporation pursuant to either (i) a stock purchase or option plan or other employee stock bonus arrangement in existence prior to the Series C Original Issue Date or (ii) any stock purchase or option plan adopted by the Corporation before or after the Series C Original Issue Date that is approved by the affirmative vote of a majority of the Board of Directors (collectively with the plans or arrangements identified in subclause (i), the “Plans” and each individually a “Plan”); provided, however, that the number of shares referred to in this clause may be adjusted pursuant to antidilution provisions contained in any such Plan; and
 - (D) Common Stock issued or issuable upon exercise of Options or Convertible Securities issued to any vendor, lender or other business entity in connection with a loan, strategic alliance, joint venture or other business transaction, the primary purpose of which is not the raising of equity capital, that is approved by the affirmative vote of a majority of the Board of Directors and the Compensation Committee of the Board of Directors.

(ii) No Adjustment of Conversion Price. No adjustment in the number of shares of Common Stock into which the Preferred Stock is convertible shall be made, by adjustment in the applicable Conversion Price, in respect of the issuance of Additional Shares of Common Stock or otherwise, unless the consideration per share for an Additional Share of Common Stock issued or deemed to be issued by the Corporation is less than the applicable Conversion Price in effect on the date of, and immediately prior to, the issue of such Additional Share of Common Stock.

(iii) Issue or Sale of Securities Deemed Issue of Additional Shares of Common Stock.

(1) Options and Convertible Securities. In the event the Corporation at any time or from time to time after the Series C Original Issue Date shall issue or sell any Options or Convertible Securities (other than those excluded from the definition of Additional Shares of Common Stock in Section 3(f)(i)(6) pursuant to clause, (A), (B), (C) or (D) thereof) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares (as set forth in the instrument relating thereto without regard to any provisions contained therein for a subsequent adjustment of such number) of Common Stock issuable upon the exercise of such Options or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Common Stock issued as of the time of such issuance or sale or, in case such a record date shall have been fixed, as of the close of business on such record date; provided, however, that with respect to any series of Preferred Stock, Additional Shares of Common Stock shall not be deemed to have been issued unless the consideration per share (determined pursuant to Section 3(f)(vi)) received for such Additional Shares of Common Stock would be less than the applicable Conversion Price of such series in effect on the date of and immediately prior to such issue or sale or such record date, as the case may be; and provided further, that in any such case in which Additional Shares of Common Stock are deemed to be issued:

(A) no further adjustment in the applicable Conversion Price shall be made upon the subsequent issue of Convertible Securities or shares of Common Stock upon the exercise of such Options or conversion or exchange of such Convertible Securities;

(B) if such Options or Convertible Securities by their terms provide, with the passage of time or otherwise, for any change in the consideration payable to the Corporation, or change in the number of shares of Common Stock issuable, upon the exercise, conversion or exchange thereof, the applicable Conversion Price of such series computed upon the original issue thereof (or upon the occurrence of a record date with respect thereto), and any subsequent adjustments based thereon, shall, upon any such change becoming effective, be recomputed to reflect such

change insofar as it affects such Options or the rights of conversion or exchange under such Convertible Securities;

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

(I) in the case of Convertible Securities or Options for Common Stock, the only Additional Shares of Common Stock issued were the shares of Common Stock, if any, actually issued upon the exercise of such Options or the conversion or exchange of such Convertible Securities, and the consideration received therefor was the consideration actually received by the Corporation for the issue of all such Options, whether or not exercised, plus the consideration actually received by the Corporation upon such exercise, or for the issue of all such Convertible Securities that were actually converted or exchanged, plus the additional consideration, if any, actually received by the Corporation upon such conversion or exchange; and

(II) in the case of Options for Convertible Securities, only the Convertible Securities, if any, actually issued upon the exercise thereof were issued at the time of issue of such Options, and the consideration received by the Corporation for the Additional Shares of Common Stock deemed to have been then issued was the consideration actually received by the Corporation for the issue of all such Options, whether or not exercised, plus the consideration deemed to have been received by the Corporation (determined pursuant to Section 3(f)(vi)) upon the issue of the Convertible Securities with respect to which such Options were actually exercised;

(D) in the case of any Options that expire by their terms not more than 30 days after the date of issue thereof, no adjustment of the applicable Conversion Price of such series shall be made until the expiration or exercise of all such Options, whereupon such adjustment shall be made in the same manner provided in clause (C) above; and

(E) if such record date shall have been fixed and such Options or Convertible Securities are not issued on the date fixed therefor, the adjustment previously made in the applicable Conversion Price of such series that became effective on such record date shall be cancelled as of the close of business on such record date, and thereafter the applicable

Conversion Price shall be adjusted pursuant to this Section 3(f)(iii) as of the actual date of their issuance.

(2) Stock Dividends, Stock Distributions and Subdivisions. In the event the Corporation at any time or from time to time after the Series C Original Issue Date shall declare or pay any dividend or make any other distribution on the Common Stock payable in Common Stock or effect a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise) then and in any such event, Additional Shares of Common Stock shall be deemed to have been issued:

(A) in the case of any such dividend or distribution, immediately after the close of business on the record date for the determination of holders of any class of securities entitled to receive such dividend or distribution, or

(B) in the case of any such subdivision, at the close of business on the date immediately prior to the date upon which such corporate action becomes effective.

If such record date shall have been fixed and no part of such dividend shall have been paid on the date fixed therefor, the adjustment previously made in the applicable Conversion Price that became effective on such record date shall be cancelled as of the close of business on such record date, and thereafter the Conversion Price shall be adjusted pursuant to this Section 3(f)(iii) as of the time of actual payment of such dividend.

(iv) Adjustment of Series A Conversion Price Upon Issuance, Sale or Deemed Issuance of Additional Shares of Common Stock. In the event that at any time or from time to time after the Series C Original Issue Date, the Corporation shall issue or sell Additional Shares of Common Stock (including, without limitation, Additional Shares of Common Stock deemed to be issued pursuant to Section 3(f)(iii)(1) but not including Additional Shares of Common Stock deemed to be issued pursuant to Section 3(f)(iii)(2) as a result of a dividend or other distribution on the Common Stock payable in Common Stock or a subdivision of outstanding shares of Common Stock), without consideration or for a consideration per share less than the Series A Conversion Price in effect on the date of and immediately prior to such issue or sale, then and in such event, with respect to the Series A Preferred Stock, the Series A Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-thousandth of one cent) determined by dividing the aggregate consideration received by the Corporation for all such Additional Stock by the total number of shares of all such Additional Stock; provided, however, that if such issue is for no consideration, then for purposes of calculating the reduction in the Series A Conversion Price in accordance with this Section 3(f)(iv), the consideration received by the Corporation for such Additional Shares of Common Stock shall be deemed to be \$.01 per share.

Anything contained in this Section 3(f)(iv) to the contrary notwithstanding, the Series A Conversion Price shall not be reduced at any time if the amount of such reduction would be an amount less than \$.01, but any such amount shall be carried forward and reduction with respect

thereto made at the time of and together with any subsequent reduction that, together with such amount and any other amount or amounts so carried forward, shall aggregate \$.01 or more.

(v) Adjustment of Series B Conversion Price Upon Issuance, Sale or Deemed Issuance of Additional Shares of Common Stock. In the event that at any time or from time to time after the Series C Original Issue Date, the Corporation shall issue or sell Additional Shares of Common Stock (including, without limitation, Additional Shares of Common Stock deemed to be issued pursuant to Section 3(f)(iii)(1) but not including Additional Shares of Common Stock deemed to be issued pursuant to Section 3(f)(iii)(2) as a result of a dividend or other distribution on the Common Stock payable in Common Stock or a subdivision of outstanding shares of Common Stock), without consideration or for a consideration per share less than the Series B Conversion Price (in effect on the date of and immediately prior to such issue or sale) with respect to the Series B Preferred Stock, then and in such event, with respect to the Series B Preferred Stock, the Series B Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-thousandth of one cent) determined by multiplying the applicable Series B Conversion Price then in effect by a fraction, (A) the numerator of which shall be (1) the number of shares of Common Stock outstanding immediately prior to such issue (calculated assuming conversion of all issued and outstanding shares of Preferred Stock and the exercise, exchange or conversion of all other then outstanding Options and Convertible Securities) plus (2) the number of shares of Common Stock which the aggregate consideration received or to be received by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at the applicable Series B Conversion Price then in effect; and (B) the denominator of which shall be (1) the number of shares of Common Stock outstanding immediately prior to such issue (calculated assuming conversion of all issued and outstanding shares of Preferred Stock and the exercise, exchange or conversion of all other then outstanding Options and Convertible Securities) plus (2) the number of such Additional Shares of Common Stock so issued; provided, however, that if such issue is for no consideration, then for purposes of calculating the reduction in the Series B Conversion Price in accordance with this Section 3(f)(v), the consideration received by the Corporation for such Additional Shares of Common Stock shall be deemed to be \$.01 per share; and provided further, that the number of shares of Common Stock deemed issuable upon exercise or conversion of such outstanding Options and Convertible Securities shall not give effect to any adjustments to the conversion price or conversion rate of such Options or Convertible Securities resulting from the issuance of Additional Shares of Common Stock that is the subject of this calculation.

Anything contained in this Section 3(f)(v) to the contrary notwithstanding, the Series B Conversion Price shall not be reduced at any time if the amount of such reduction would be an amount less than \$.01, but any such amount shall be carried forward and reduction with respect thereto made at the time of and together with any subsequent reduction that, together with such amount and any other amount or amounts so carried forward, shall aggregate \$.01 or more.

(vi) Adjustment of Series C Conversion Price Upon Issuance, Sale or Deemed Issuance of Additional Shares of Common Stock. In the event that at any time or from time to time after the Series C Original Issue Date, the Corporation shall issue or sell Additional Shares of Common Stock (including, without limitation, Additional Shares of Common Stock deemed to be issued pursuant to Section 3(f)(iii)(1) but not including Additional Shares of Common Stock deemed to be issued pursuant to Section 3(f)(iii)(2) as a result of a dividend or other

distribution on the Common Stock payable in Common Stock or a subdivision of outstanding shares of Common Stock), without consideration or for a consideration per share less than the Series C Conversion Price (in effect on the date of and immediately prior to such issue or sale) with respect to the Series C Preferred Stock, then and in such event, with respect to the Series C Preferred Stock, the Series C Conversion Price shall be reduced, concurrently with such issue, to a price (calculated to the nearest one-thousandth of one cent) determined by multiplying the applicable Series C Conversion Price then in effect by a fraction, (A) the numerator of which shall be (1) the number of shares of Common Stock outstanding immediately prior to such issue (calculated assuming conversion of all issued and outstanding shares of Preferred Stock and the exercise, exchange or conversion of all other then outstanding Options and Convertible Securities) plus (2) the number of shares of Common Stock which the aggregate consideration received or to be received by the Corporation for the total number of Additional Shares of Common Stock so issued would purchase at the applicable Series C Conversion Price then in effect; and (B) the denominator of which shall be (1) the number of shares of Common Stock outstanding immediately prior to such issue (calculated assuming conversion of all issued and outstanding shares of Preferred Stock and the exercise, exchange or conversion of all other then outstanding Options and Convertible Securities) plus (2) the number of such Additional Shares of Common Stock so issued; provided, however, that if such issue is for no consideration, then for purposes of calculating the reduction in the Series B Conversion Price in accordance with this Section 3(f)(vi), the consideration received by the Corporation for such Additional Shares of Common Stock shall be deemed to be \$.01 per share; and provided further, that the number of shares of Common Stock deemed issuable upon exercise or conversion of such outstanding Options and Convertible Securities shall not give effect to any adjustments to the conversion price or conversion rate of such Options or Convertible Securities resulting from the issuance of Additional Shares of Common Stock that is the subject of this calculation.

Anything contained in this Section 3(f)(vi) to the contrary notwithstanding, the Series C Conversion Price shall not be reduced at any time if the amount of such reduction would be an amount less than \$.01, but any such amount shall be carried forward and reduction with respect thereto made at the time of and together with any subsequent reduction that, together with such amount and any other amount or amounts so carried forward, shall aggregate \$.01 or more.

(vii) Determination of Consideration. For purposes of this Section 3(f), the consideration received by the Corporation for the issue of any Additional Shares of Common Stock shall be computed as follows:

(1) Cash and Property: Such consideration shall:

(A) insofar as it consists of cash, be computed at the aggregate amounts of cash received by the Corporation excluding amounts paid or payable for accrued interest or accrued dividends;

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

(C) in the event Additional Shares of Common Stock are issued together with other shares or securities or other assets of the Corporation

for consideration that covers both, be the proportion of such consideration so received, computed as provided in clauses (A) and (B) above, as determined in good faith by the Board of Directors.

(2) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Common Stock deemed to have been issued pursuant to Section 3(f)(iii)(1) relating to Options and Convertible Securities shall be determined by dividing (x) the total amount, if any, received or receivable as consideration for the issue of such Options or Convertible Securities plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities by (y) the maximum number of shares of Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities.

(viii) Adjustment for Dividends, Distributions, Subdivisions, Combinations or Consolidations of Common Stock.

(1) Stock Dividends, Distributions or Subdivisions. In the event Additional Shares of Common Stock shall be deemed to have been issued in a dividend or other distribution on the Common Stock payable in Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise) described in Section 3(f)(iii)(2), the applicable Conversion Price in effect immediately prior to the record date or effectiveness, as the case may be, of such dividend, distribution or subdivision shall, concurrently with such record date or effectiveness, be proportionately decreased.

(2) Combinations or Consolidations. In the event the outstanding shares of Common Stock shall be combined or consolidated (by reclassification or otherwise) into a lesser number of shares of Common Stock, the applicable Conversion Price in effect immediately prior to such combination or consolidation shall, concurrently with the effectiveness of such combination or consolidation, be proportionately increased.

(g) Adjustments for Certain Dividends and Distributions. In the event that at any time or from time to time after the Series C Original Issue Date the Corporation shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation other than shares of Common Stock, then and in each such event provision shall be made so that the holders of Preferred Stock shall receive upon conversion thereof in addition to the number of shares of Common Stock receivable thereupon, the amount of securities of the Corporation that they

would have received had their Preferred Stock been converted into Common Stock on the date of such event and had they thereafter, during the period from the date of such event to and including the conversion date, retained such securities receivable by them as aforesaid during such period, giving application during such period to all adjustments called for herein.

(h) Adjustment for Reclassification, Exchange, or Substitution. In the event that at any time or from time to time after the Series C Original Issue Date, the Common Stock issuable upon the conversion of the Preferred Stock shall be changed into the same or a different number of shares of any class or classes of stock, whether by capital reorganization, reclassification, or otherwise (other than a subdivision or combination of shares or stock dividend provided for above, or a merger, consolidation or sale of assets provided for below), then and in each such event the holder of each such share of Preferred Stock shall have the right thereafter to convert such share into the kind and amount of shares of stock and other securities and property receivable upon such reorganization, reclassification or other change, by a holder of the number of shares of Common Stock into which such share of Preferred Stock might have been converted immediately prior to such reorganization, reclassification or change, all subject to further adjustment as provided herein.

(i) Adjustment for Merger, Consolidation or Sale of Assets. In the event that at any time or from time to time after the Series C Original Issue Date, the Corporation shall merge or consolidate with or into another entity or sell all or substantially all of its assets (other than a consolidation, merger or sale that is treated as a liquidation pursuant to Section 2(c)), each share of Preferred Stock shall thereafter be convertible into the kind and amount of shares of stock or other securities or property to which a holder of the number of shares of Common Stock of the Corporation deliverable upon conversion of such Preferred Stock would have been entitled upon such consolidation, merger or sale; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors) shall be made in the application of the provisions in this Section 3 set forth with respect to the rights and interest thereafter of the holders of Preferred Stock, to the end that the provisions set forth in this Section 3 (including provisions with respect to changes in and other adjustments of the applicable Conversion Price) shall thereafter be applicable, as nearly as reasonably may be, in relation to any shares of stock or other property thereafter deliverable upon the conversion of the Preferred Stock.

(j) Waiver of Anti-dilution Protection. To the extent that the provisions of Sections 3(f), 3(g), 3(h) and 3(i) apply to the holders of the Preferred Stock, such provisions may be waived by, in each case and as applicable, (a) with respect to the Series A Preferred Stock, the written consent of the holders of at least two-thirds in voting power of shares of Series A Preferred Stock (voting together as a single class), then outstanding, (b) with respect to the Series B Preferred Stock, the written consent of the holders of at least a majority in voting power of shares of Series B Preferred Stock (voting together as a single class), then outstanding and (c) with respect to the Series C Preferred Stock, the written consent of the holders of at least a majority in voting power of shares of Series C Preferred Stock (voting together as a single class), then outstanding. For the purposes of this Section 3(j), a waiver on one occasion shall not constitute a waiver on any further occasion.

(k) No Impairment. The Corporation shall not, by amendment of its Certificate of Incorporation or through any reorganization, 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 shall at all times in good faith assist in the carrying out of all the provisions of this Section 3 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 the Preferred Stock against impairment.

(l) Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price pursuant to this Section 3, the Corporation at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each affected holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, upon the written request at any time of any affected holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the applicable Conversion Price at the time in effect, and (iii) 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 each share of Preferred Stock.

(m) 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 that is the same as cash dividends paid in previous quarters) or other distribution, the Corporation shall mail to each holder of Preferred Stock at least ten (10) days prior to such record date a notice specifying the date on which any such record is to be taken for the purpose of such dividend or distribution.

(n) Common Stock Reserved. The Corporation shall reserve and keep available out of its authorized but unissued Common Stock such number of shares of Common Stock as shall from time to time be sufficient to effect conversion of the Preferred Stock.

(o) Certain Taxes. The Corporation shall pay any issue or transfer taxes payable in connection with the conversion of the Preferred Stock; provided, however, that the Corporation shall not be required to pay any tax that may be payable in respect of any transfer to a name other than that of the holder of the Preferred Stock.

(p) Closing of Books. The Corporation shall at no time close its transfer books against the transfer of any Preferred Stock or of any shares of Common Stock issued or issuable upon the conversion of any shares of Preferred Stock in any manner that interferes with the timely conversion or transfer of such Preferred Stock or Common Stock, except as may otherwise be required by applicable law.

4. Voting Rights.

(a) Except as otherwise required by law or hereinafter set forth, the holders of Preferred Stock and the holders of Common Stock shall be entitled to notice of any meeting of stockholders and to vote as one class upon any matter submitted to the stockholders for a vote, on the following basis:

(i) Holders of Common Stock shall have one vote per share; and

(ii) Holders of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall have that number of votes per share as is equal to the number of shares of Common Stock into which each such share of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock held by such holder could be converted on the date for determination of stockholders entitled to vote at the meeting or on the date of any written consent.

(b) Without limiting the generality of the foregoing, and notwithstanding the provisions of Section 242(b)(2) of the Delaware General Corporation Law, the number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock and Common Stock, voting as one class in accordance with the provisions of this Section 4(b). Except as otherwise set forth herein, with respect to all questions as to which, under law, stockholders are entitled to vote by classes or series, each of the Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall vote together as a single class separately from the Common Stock.

(c) The foregoing notwithstanding, at all times during which shares of Series A Preferred Stock remain outstanding, the holders of a majority of such outstanding shares of Series A Preferred Stock shall have the exclusive right, voting separately from the Common Stock, to elect three (3) directors of the Corporation (each such director a "Series A Director" and collectively the "Series A Directors"), the designation of such Series A Directors to be governed by any voting agreement or similar arrangement to which the holders of Series A Preferred Stock may from time to time be party. Any Series A Director may be removed, with or without cause, and a replacement Series A Director may be elected in his or her stead, at any time only by the affirmative vote of the holders of a majority of the outstanding shares of Series A Preferred Stock.

(d) The foregoing notwithstanding, at all times during which shares of Series C Preferred Stock remain outstanding, the holders of a majority of such outstanding shares of Series C Preferred Stock shall have the exclusive right, voting separately from the Common Stock, Series A Preferred Stock and Series B Preferred Stock, to elect one (1) director of the Corporation (such director a "Series C Director"), the designation of such Series C Director to be governed by any voting agreement or similar arrangement to which the holders of Series C Preferred Stock may from time to time be party. Any Series C Director may be removed, with or without cause, and a replacement Series C Director may be elected in his or her stead, at any time only by the affirmative vote of the holders of a majority of the outstanding shares of Series C Preferred Stock.

(e) All other directors will be elected by the holders of a majority of all capital stock of the Corporation voting as a single class.

(f) Notwithstanding any provision of the By-laws of the Corporation to the contrary, the number of directors (including the Series A Directors and Series C Director) constituting the entire Board of Directors of the Corporation shall initially be fixed at seven (7) and may only be increased by the affirmative vote or written consent of (i) the holders of two-thirds of the outstanding shares of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred

Stock and Common Stock, voting together as a single class, and (ii) the holders of at least a majority in voting power of the Series C Preferred Stock, voting separately as a class, or in accordance with the terms of any voting agreement or similar arrangement to which the holders of Preferred Stock may from time to time be party.

5. Redemption.

(a) At the written election of holders of at least two-thirds of the outstanding shares of Series A Preferred Stock made at any time on or after November 7, 2014, the Corporation shall be required to redeem all of the outstanding shares of Series A Preferred Stock upon the terms set forth in this Section 5. Such redemption shall occur on a date (the "Series A Redemption Date") specified by the electing holders in such written election to redeem shares of Series A Preferred Stock, which date shall not be earlier than ninety (90) days following the date of such election. On the Series A Redemption Date, the holders of the Series A Preferred Stock shall surrender the certificate or certificates for the shares to be redeemed duly endorsed for transfer or with duly executed stock transfer powers sufficient to permit transfer attached, at the offices of the Corporation or of any transfer agent for the Series A Preferred Stock. The redemption price per share of Series A Preferred Stock shall be equal to \$0.20687242 (subject to equitable adjustment in the event of any stock dividend, stock split, combination, reclassification of shares or other similar event) plus any dividends declared or accrued but unpaid thereon at the time of such redemption.

(b) At the written election of holders of at least two-thirds of the outstanding shares of Series B Preferred Stock made at any time on or after November 7, 2014, the Corporation shall be required to redeem all of the outstanding shares of Series B Preferred Stock upon the terms set forth in this Section 5. Such redemption shall occur on a date (the "Series B Redemption Date") specified by the electing holders in such written election to redeem shares of Series B Preferred Stock, which date shall not be earlier than ninety (90) days following the date of such election. On the Series B Redemption Date, the holders of the Series B Preferred Stock shall surrender the certificate or certificates for the shares to be redeemed duly endorsed for transfer or with duly executed stock transfer powers sufficient to permit transfer attached, at the offices of the Corporation or of any transfer agent for the Series B Preferred Stock. The redemption price per share of the Series B Preferred Stock shall be equal to \$4.00 (subject in each case to equitable adjustment in the event of any stock dividend, stock split, combination, reclassification of shares or other similar event).

(c) At the written election of holders of at least a majority of the outstanding shares of Series C Preferred Stock made at any time on or after November 7, 2013, the Corporation shall be required to redeem all of the outstanding shares of Series C Preferred Stock upon the terms set forth in this Section 5. Such redemption shall occur on a date (the "Series C Redemption Date") specified by the electing holders in such written election to redeem shares of Series C Preferred Stock, which date shall not be earlier than ninety (90) days following the date of such election. On the Series C Redemption Date, the holders of the Series C Preferred Stock shall surrender the certificate or certificates for the shares to be redeemed duly endorsed for transfer or with duly executed stock transfer powers sufficient to permit transfer attached, at the offices of the Corporation or of any transfer agent for the Series C Preferred Stock. The redemption price per share of the Series C Preferred Stock shall be equal to \$3.50 (subject in

each case to equitable adjustment in the event of any stock dividend, stock split, combination, reclassification of shares or other similar event) plus any dividends declared or accrued but unpaid thereon at the time of such redemption.

(d) Notice of redemption shall be sent by first class mail, postage prepaid, to each holder of record of the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (as the case may be), not less than ten (10) days nor more than sixty (60) days prior to the applicable Redemption Date, at the address of such holder as it appears on the books of the Corporation. Such notice shall set forth (i) the applicable Redemption Date and the place of redemption; and (ii) the redemption price on such date, including all dividends declared or accrued but unpaid to the applicable Redemption Date. In the event that a notice of redemption is given under this Section 5(d), the Corporation shall be obligated to redeem the Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock on the date set forth in the notice. The Corporation, if advised before the close of business on the applicable Redemption Date by written notice from any holder of record of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock to be redeemed, shall credit against the number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (as the case may be) required to be redeemed from such holder, and shall not redeem, the number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock that shall have been converted by such holder on or before such date.

(e) If, on or before the applicable Redemption Date, the funds necessary for such redemption shall have been set aside by the Corporation and deposited with a bank or trust company, in trust for the benefit of the holders of the Series C Preferred Stock that shall have been called for redemption, and, to the extent any remaining funds are available after sufficient funds to redeem all shares of Series C Preferred Stock have been set aside, for the benefit of the holders of the Series A Preferred Stock or Series B Preferred Stock (as the case may be) that shall have been called for redemption, then, notwithstanding that any certificates for shares that shall have been called for redemption shall not have been surrendered for cancellation, the shares represented thereby shall no longer be deemed outstanding from and after the applicable Redemption Date, and all rights of holders of such shares so called for redemption shall forthwith, after the applicable Redemption Date, cease and terminate with respect to such shares, excepting only the right to receive the redemption funds therefor to which they are entitled, but without interest. Any interest accrued on funds so deposited and unclaimed by stockholders entitled thereto shall be paid to such stockholders at the time their shares are redeemed or to the Corporation at the time unclaimed amounts are paid to it. In case the holders of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (as the case may be) that shall have been called for redemption shall not, within six years after the applicable Redemption Date, claim the amounts so deposited with respect to the redemption thereof, any such bank or trust company shall, upon demand, pay over to the Corporation such unclaimed amounts and thereupon such bank or trust company shall be relieved of all responsibility in respect thereof to such holder and such holder shall look only to the Corporation for the payment thereof. Any funds so deposited with a bank or trust company that shall not be required for such redemption by reason of the exercise subsequent to the date of such deposit of the right of conversion of any shares or otherwise shall be returned to the Corporation forthwith.

(f) If the Corporation for any reason (including if funds are not legally available for redemption) fails to redeem any of the shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (as the case may be) in accordance with Section 5(a) or Section 5(b) on or prior to the applicable Redemption Date determined in accordance with this Section 5, then, notwithstanding anything to the contrary contained in this Certificate of Incorporation, the Corporation may not incur any indebtedness for money borrowed (unless the proceeds of such incurrence of indebtedness are used to make all overdue redemptions) or borrow or reborrow any amounts under any lines of credit that it may then have outstanding without the prior written consent of (i) the holders of not less than two-thirds of the then outstanding shares of the Preferred Stock, voting together as a class, and (ii) the holders of at least a majority in voting power of the Series C Preferred Stock, voting separately as a class. Furthermore, in such event, the Series C Dividend shall become payable in cash on the first day of each month following such failure by the Corporation to redeem the Series C Preferred Stock, as applicable, and shall be senior to all other dividend payments to be made by the Corporation hereunder. The Corporation shall not redeem any shares of Series A Preferred Stock or Series B Preferred Stock that have been called for redemption until all shares of Series C Preferred Stock that have been called for redemption have been redeemed and the redemption price has been paid in full.

(g) If the funds of the Corporation legally available for redemption of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock on the applicable Redemption Date are insufficient to redeem the total number of shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock submitted for redemption, those funds that are legally available will be used to redeem the maximum possible number of (i) first, the whole number of shares of Series C Preferred Stock that have been called for redemption, ratably among the holders of the Series C Preferred Stock, and (ii) second, the whole shares of Series A Preferred Stock and Series B Preferred Stock which have been called for redemption, ratably among the holders of such shares. The shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock not redeemed shall remain outstanding and entitled to all rights and preferences provided herein. At any time thereafter when additional funds of the Corporation are legally available for the redemption of such shares of Series A Preferred Stock, Series B Preferred Stock or Series C Preferred Stock (as the case may be), such funds will be used, at the end of the next succeeding fiscal quarter, to redeem the balance of such shares, or such portion thereof for which funds are then legally available.

6. Series A Preferred Stock Covenants.

(a) As long as any shares of Series A Preferred Stock shall be outstanding, the Corporation shall not, without first having provided the written notice of such proposed action to each holder of outstanding shares of Series A Preferred Stock required by Section 6(b) and having obtained the affirmative vote or written consent of the holders of not less than two-thirds in voting power of the then outstanding shares of Series A Preferred Stock, with each share of Series A Preferred Stock entitling the holder thereof to that number of votes per share as is equal to the number of shares of Common Stock into which each such share of Series A Preferred Stock held by such holder could then be converted:

(i) amend, alter or repeal any provision of, or add any provision to, the Corporation's Certificate of Incorporation or By-laws or take any other action if any such action would alter or change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series A Preferred Stock (other than the creation of a class or series of capital stock senior to or in parity with the Series A Preferred Stock in any respect);

(ii) reclassify any Common Stock into shares having any preference or priority as to assets superior to or on a parity with any such preference or priority of the Series A Preferred Stock; or

(iii) pay or declare any dividend or distribution on any shares of Common Stock or any capital stock that ranks pari passu or junior to the Series A Preferred Stock as to dividends, or apply any of its assets to the redemption, retirement, purchase or other acquisition, directly or indirectly, through subsidiaries or otherwise, of any shares of Common Stock (except for the repurchase of shares of Common Stock from employees, directors of or consultants to the Corporation upon termination of their status as such pursuant to an agreement containing vesting and/or repurchase provisions approved by at least two Series A Directors).

(b) Any other provision of the Corporation's Certificate of Incorporation or By-laws to the contrary notwithstanding, notice of any action specified in Section 6(a) shall be given by the Corporation to each holder of outstanding shares of Series A Preferred Stock by overnight delivery or first class mail, postage prepaid, addressed to such holder at the last address of such holder as shown by the records of the Corporation, at least ten (10) days before the date on which the books of the Corporation shall close or a record shall be taken with respect to such proposed action, or, if there shall be no such date, at least ten (10) days before the date when such proposed action is scheduled to occur. Any holder of outstanding shares of Series A Preferred Stock may waive any notice required by this Section 6(b) by a written document indicating such waiver.

7. Series B Preferred Stock Covenants.

(a) As long as any shares of Series B Preferred Stock shall be outstanding, the Corporation shall not, without first having provided the written notice of such proposed action to each holder of outstanding shares of Series B Preferred Stock required by Section 7(b) and having obtained the affirmative vote or written consent of the holders of not less than a majority in voting power of the then outstanding shares of Series B Preferred Stock, voting together as a single class, with each share of Series B Preferred Stock entitling the holder thereof to that number of votes per share as is equal to the number of shares of Common Stock into which each such share of Series B Preferred Stock held by such holder could then be converted:

(i) amend, alter or repeal any provision of, or add any provision to, the Corporation's Certificate of Incorporation or By-laws or take any other action if any such action would alter or change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series B Preferred Stock (other than the creation of a class or series of capital stock senior to or in parity with the Series B Preferred Stock in any respect);

(ii) reclassify any Common Stock into shares having any preference or priority as to assets superior to or on a parity with any such preference or priority of the Series B Preferred Stock; or

(iii) pay or declare any dividend or distribution on any shares of Common Stock or any capital stock that ranks pari passu or junior to the Series B Preferred Stock as to dividends, or apply any of its assets to the redemption, retirement, purchase or other acquisition, directly or indirectly, through subsidiaries or otherwise, of any shares of Common Stock (except for the repurchase of shares of Common Stock from employees, directors or consultants to the Corporation upon termination of their status as such pursuant to an agreement containing vesting and/or repurchase provisions).

(b) Any other provision of the Corporation's Certificate of Incorporation or By-laws to the contrary notwithstanding, notice of any action specified in Section 7(a) shall be given by the Corporation to each holder of outstanding shares of Series B Preferred Stock by overnight delivery or first class mail, postage prepaid, addressed to such holder at the last address of such holder as shown by the records of the Corporation, at least ten (10) days before the date on which the books of the Corporation shall close or a record shall be taken with respect to such proposed action, or, if there shall be no such date, at least ten (10) days before the date when such proposed action is scheduled to occur. Any holder of outstanding shares of Series B Preferred Stock may waive any notice required by this Section 7(b) by a written document indicating such waiver.

8. Series C Preferred Stock Covenants.

(a) As long as any shares of Series C Preferred Stock shall be outstanding, the Corporation shall not, without first having provided the written notice of such proposed action to each holder of outstanding shares of Series C Preferred Stock required by Section 8(b) and having obtained the affirmative vote or written consent of the holders of not less than a majority in voting power of the then outstanding shares of Series C Preferred Stock, voting together as a single class, with each share of Series C Preferred Stock entitling the holder thereof to that number of votes per share as is equal to the number of shares of Common Stock into which each such share of Series C Preferred Stock held by such holder could then be converted:

(i) amend, alter or repeal any provision of, or add any provision to, the Corporation's Certificate of Incorporation or By-laws or take any other action if any such action would alter or change the preferences, rights, privileges or powers of, or the restrictions provided for the benefit of, the Series C Preferred Stock:

(ii) reclassify any Common Stock into shares having any preference or priority as to assets superior to or on a parity with any such preference or priority of the Series C Preferred Stock;

(iii) create, authorize or issue (A) any class or classes of stock or series of Common Stock or Preferred Stock or any security convertible into or evidencing the right to purchase shares of any class or series of Common Stock or Preferred Stock, or (B) any other

capital stock of the Corporation, in each case senior to or in parity with the Series C Preferred Stock in any respect;

(iv) pay or declare any dividend or distribution on any shares of Common Stock or any capital stock that ranks *pari passu* or junior to the Series C Preferred Stock as to dividends, or apply any of its assets to the redemption, retirement, purchase or other acquisition, directly or indirectly, through subsidiaries or otherwise, of any shares of Common Stock (except for the repurchase of shares of Common Stock from employees, directors or consultants to the Corporation upon termination of their status as such pursuant to an agreement containing vesting and/or repurchase provisions).

(v) consummate any initial public offering that is not a Qualifying Public Offering;

(vi) issue any debt, whether secured or unsecured, which exceeds \$12,000,000.00 in the aggregate;

(vii) materially change the Corporation's business activity defined on the date hereof as point of care diagnostics.

(b) Any other provision of the Corporation's Certificate of Incorporation or By-laws to the contrary notwithstanding, notice of any action specified in Section 8(a) shall be given by the Corporation to each holder of outstanding shares of Series C Preferred Stock by overnight delivery or first class mail, postage prepaid, addressed to such holder at the last address of such holder as shown by the records of the Corporation, at least ten (10) days before the date on which the books of the Corporation shall close or a record shall be taken with respect to such proposed action, or, if there shall be no such date, at least ten (10) days before the date when such proposed action is scheduled to occur. Any holder of outstanding shares of Series C Preferred Stock may waive any notice required by this Section 8(b) by a written document indicating such waiver.

9. No Reissuance of Preferred Stock. No share or shares of Preferred Stock acquired by the Corporation by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be cancelled, retired and eliminated from the shares that the Corporation shall be authorized to issue.

FIFTH: In furtherance of and not in limitation of powers conferred by statute, it is further provided that:

(a) Subject to the limitations and exceptions, if any, contained in the by-laws of the Corporation, such by-laws may be adopted, amended or repealed by the Board of Directors of the Corporation; and

(b) Elections of directors need not be by written ballot unless, and only to the extent, otherwise provided in the by-laws of the Corporation; and

(c) Subject to any applicable requirements of law, the books of the Corporation may be kept inside or outside the State of Delaware at such location or locations as may be designated by the Board of Directors of the Corporation or in the by-laws of the Corporation; and

(d) Except as provided to the contrary in the provisions establishing a class of stock, the number of authorized shares of such class may be increased or decreased (but not below the number of shares thereof then outstanding) by the affirmative vote of the holders of a majority of the stock of the Corporation entitled to vote, voting as a single class.

SIXTH: The Corporation shall indemnify each person who at any time is, or shall have been, a director or officer of the Corporation and was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he or she is or was a director or officer of the Corporation, or is or was serving at the request of the Corporation as a director, officer, employee, or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement incurred in connection with any such action, suit or proceeding, to the maximum extent permitted by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended. The foregoing right of indemnification shall in no way be exclusive of any other rights of indemnification to which any such director or officer may be entitled, under any by-law, agreement, vote of directors or stockholders or otherwise. No amendment to or repeal of the provisions of this Article SIXTH shall deprive a director or officer of the benefit hereof with respect to any act or failure to act occurring prior to such amendment or repeal.

SEVENTH: Whenever a compromise or arrangement is proposed between this Corporation and its creditors or any class of them or between this Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of this Corporation or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Corporation under Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or class of stockholders of the Corporation, as the case may be, to be summoned in such manner as said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of this Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of this Corporation. as the case may be, and also on this Corporation.

EIGHTH: No director of the Corporation shall be personally liable to the Corporation or to any of its stockholders for monetary damages arising out of such director's breach of fiduciary duty as a director of the Corporation, except to the extent that the elimination or limitation of such liability is not permitted by the General Corporation Law of the State of Delaware, as the same exists or may hereafter be amended. No amendment to or repeal of the provisions of this Article EIGHTH shall deprive any director of the Corporation of the benefit hereof with respect to any act or failure to act of such director occurring prior to such amendment or repeal.

NINTH: The Corporation reserves the right, subject to the provisions of Article EIGHTH hereof, to amend, alter, change or repeal any provision contained in this Certificate of Incorporation in the manner now or hereafter prescribed by the General Corporation Law of the State of Delaware and this Amended and Restated Certificate of Incorporation, and all rights conferred upon stockholders herein are granted subject to this reservation.

IN WITNESS WHEREOF, the Corporation has caused this Amended and Restated Certificate of Incorporation to be signed by John Alberico, its President, this 7th day of November 2007.

AgaMatrix, Inc.

By: /s/ John Alberico
John Alberico, President