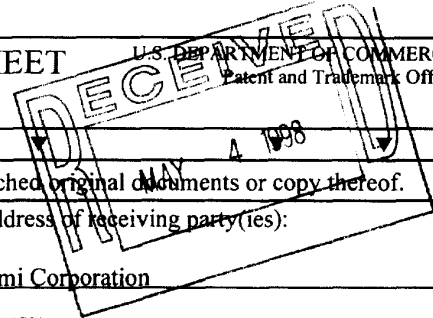


Tab settings ⇨⇨⇨ ▼ ▼



100714432

attached original documents or copy thereof.



1. Name of conveying party (ies):
Inktomi Corporation *5-4098*

Individual(s) Association
 General Partnership Limited Partnership
 Corporation-State California
 Other _____

Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies):

Name: Inktomi Corporation
Internal Address: _____
Street Address: 1900 S. Norfolk Street, Suite 310
City: San Mateo State: CA ZIP: 94403

Individual(s) citizenship: _____
 Association _____
 General Partnership _____
 Limited Partnership _____
 Corporation-State Delaware
 Other _____

If assignment is not domiciled in the United States, a domestic representative designation is attached: Yes No
(Designations must be a separate document from assignment)
Additional name(s) and addresses attached? Yes No

3. Nature of conveyance:

Assignment Merger
 Security Agreement Change of Name
 Other _____

Execution Date: February 11, 1998

4. Application number(s) or patent number(s):

A. Trademark Application No.(s)
75/140625
75/321943
75/325985

Additional numbers attached? Yes No

B. Trademark Registration No.(s)

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: Andrew P. Bridges
Internal Address: Wilson Sonsini Goodrich + Rosati

Street Address: 650 Page Mill Road

City: Palo Alto State: CA ZIP: 94304-1050

6. Total number of application and registrations involved: 3

7. Total fee (37 CFR 3.41) \$90.00
 Enclosed
 Authorized to be charged to deposit account

If insufficient funds charge to:

8. Deposit account number:
23-2415 Attn: 17595-900

(Attach duplicate copy of this page if paying by deposit account.)

05/15/1998 SSMITH 00000223 75140625

01 FC:481 40.00 DP
02 FC:492 50.00 DP

DO NOT USE THIS SPACE

Statement and signature. *To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.*

Andrew P. Bridges Andrew P. Bridges 27 April 1998
Name of Person Signing Signature Date

Total number of pages including cover sheet, attachments, and document: 27

Mail documents to be recorded with required cover sheet information to:
Commissioner of Patents & Trademarks, Box Assignments
Washington, D.C. 20231

Office of the Secretary of State

I, EDWARD J. FREEL, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF AGREEMENT OF MERGER, WHICH MERGES: "INKTOMI CORPORATION", A CALIFORNIA CORPORATION, WITH AND INTO "INKTOMI CORPORATION" UNDER THE NAME OF "INKTOMI CORPORATION", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE ELEVENTH DAY OF FEBRUARY, A.D. 1998, AT 3 O'CLOCK P.M.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



Handwritten signature of Edward J. Freel in black ink.

Edward J. Freel, Secretary of State

2682488 8100M

981055620

AUTHENTICATION:

DATE: 8919317

TRADEMARK ~~02-13-98~~

REEL: 1726 FRAME: 0088

**AGREEMENT AND PLAN OF MERGER OF
INKTOMI CORPORATION
(a Delaware corporation)
AND
INKTOMI CORPORATION
(a California corporation)**

THIS AGREEMENT AND PLAN OF MERGER dated as of January 30, 1998 (the "Agreement") is between Inktomi Corporation, a Delaware corporation ("Inktomi-Delaware"), and Inktomi Corporation, a California corporation ("Inktomi-California"). Inktomi-Delaware and Inktomi-California are sometimes referred to herein as the "Constituent Corporations".

RECITALS

A. Inktomi-Delaware is a corporation duly organized and existing under the laws of the State of Delaware and has an authorized capital of 1,000 shares, \$0.001 par value, designated as "Common Stock." As of January 30, 1998, 1,000 shares of Common Stock were issued and outstanding, all of which are held by Inktomi-California.

B. Inktomi-California is a corporation duly organized and existing under the laws of the State of California and has an authorized capital of 50,000,000 shares, no par value, designated as "Common Stock," and 17,080,000 shares, no par value, designated as "Preferred Stock" of which 6,000,000 shares are designated "Series A Preferred Stock," 3,480,000 shares are designated "Series B Preferred Stock," 1,000,000 shares are designated as "Series C Preferred Stock," 4,900,000 shares are designated "Series D Preferred Stock," and 1,700,000 shares are designated as "Series D1 Preferred Stock." As of January 30, 1998, 7,158,268 shares of Common Stock were issued and outstanding, and 6,000,000 shares of Series A Preferred Stock, 3,480,000 shares of Series B Preferred Stock, 689,502 shares of Series C Preferred Stock, 4,768,619 shares of Series D Preferred Stock, and no shares of Series D1 Preferred Stock were issued and outstanding.

C. The Board of Directors of Inktomi-California has determined that, for the purpose of effecting the reincorporation of Inktomi-California in the State of Delaware, it is advisable and in the best interests of Inktomi-California and its shareholders that Inktomi-California merge with and into Inktomi-Delaware upon the terms and conditions herein provided.

D. The respective Boards of Directors of Inktomi-Delaware and Inktomi-California, the shareholders of Inktomi-California and the sole stockholder of Inktomi-Delaware have approved this Agreement and have directed that this Agreement be executed by the undersigned officers.

NOW, THEREFORE, in consideration of the mutual agreements and covenants set forth herein, Inktomi-Delaware and Inktomi-California hereby agree, subject to the terms and conditions hereinafter set forth, as follows:

TRADEMARK

REEL: 1726 FRAME: 0089

1. MERGER

(a) Merger. In accordance with the provisions of this Agreement, the Delaware General Corporation Law and the California General Corporation Law, Inktomi-California shall be merged with and into Inktomi-Delaware (the "Merger"), the separate existence of Inktomi-California shall cease and Inktomi-Delaware shall be, and is herein sometimes referred to as, the "Surviving Corporation," and the name of the Surviving Corporation shall be Inktomi Corporation

(b) Filing and Effectiveness. The Merger shall become effective when the following actions shall have been completed:

(i) An executed Certificate of Merger or an executed counterpart of this Agreement meeting the requirements of the Delaware General Corporation Law shall have been filed with the Secretary of State of the State of Delaware; and

(ii) An executed Certificate of Merger or an executed counterpart of this Agreement meeting the requirements of the California General Corporation Law shall have been filed with the Secretary of State of the State of California.

The date and time when the Merger shall become effective is herein called the "Effective Date of the Merger."

(c) Effect of the Merger. Upon the Effective Date of the Merger, the separate existence of Inktomi-California shall cease and Inktomi-Delaware, as the Surviving Corporation, shall (i) continue to possess all of its assets, rights, powers and property as constituted immediately prior to the Effective Date of the Merger, (ii) be subject to all actions previously taken by its Board of Directors and the Board of Directors of Inktomi-California, (iii) succeed, without other transfer, to all of the assets, rights, powers and property of Inktomi-California in the manner as more fully set forth in Section 259 of the Delaware General Corporation Law, (iv) continue to be subject to all of its debts, liabilities and obligations as constituted immediately prior to the Effective Date of the Merger, and (v) succeed, without other transfer, to all of the debts, liabilities and obligations of Inktomi-California in the same manner as if Inktomi-Delaware had itself incurred them, all as more fully provided under the applicable provisions of the Delaware General Corporation Law and the California General Corporation Law.

2. CHARTER DOCUMENTS; DIRECTORS AND OFFICERS

(a) Certificate of Incorporation. The Amended and Restated Certificate of Incorporation of Inktomi-Delaware in the form attached hereto as Exhibit A (the "Certificate of Incorporation") shall be the Certificate of Incorporation of the Surviving Corporation until duly amended in accordance with the provisions thereof and applicable law.

(b) Bylaws. The Bylaws of Inktomi-Delaware as in effect immediately prior to the Effective Date of the Merger shall continue in full force and effect as the Bylaws of the Surviving Corporation until duly amended in accordance with the provisions thereof and applicable law.

(c) Directors and Officers. The directors and officers of Inktomi-Delaware immediately prior to the Effective Date of the Merger shall be the directors and officers of the Surviving Corporation until their successors shall have been duly elected and qualified or until as otherwise provided by law, the Certificate of Incorporation of the Surviving Corporation or the Bylaws of the Surviving Corporation.

3. MANNER OF CONVERSION OF STOCK

(a) Inktomi-California Common Stock. Upon the Effective Date of the Merger, each share of Inktomi-California Common Stock issued and outstanding immediately prior thereto shall, by virtue of the Merger and without any action by the Constituent Corporations, the holder of such shares or any other person, be converted into and exchanged for one share of fully paid and nonassessable Common Stock, \$.001 par value, of the Surviving Corporation.

(b) Inktomi-California Preferred Stock. Upon the Effective Date of the Merger, each share of each series of Inktomi-California Preferred Stock issued and outstanding immediately prior thereto shall, by virtue of the Merger and without any action by the Constituent Corporation, the holder of such shares or any other person, be converted into and exchanged for one fully paid and nonassessable share of the same series of Preferred Stock, \$.001 par value, of the Surviving Corporation with such rights, preferences, privileges and restrictions as are set forth in the Certificate of Incorporation.

(c) Inktomi-Delaware Common Stock. Upon the Effective Date of the Merger, each share of Common Stock, \$.001 par value, of Inktomi-Delaware issued and outstanding immediately prior thereto shall, by virtue of the Merger and without any action by Inktomi-Delaware, the holder of such shares or any other person, be canceled and returned to the status of authorized but unissued shares.

(d) Inktomi-California Stock Options. At the Effective Date of the Merger, the Inktomi-California 1996 Incentive Equity Plan and all other incentive stock plans of Inktomi-California (collectively the "Stock Plans") and all options and stock purchase rights relating to Common Stock (each an "Inktomi Option") then outstanding under any such plan, or otherwise granted outside of such plan, shall be assumed by Inktomi-Delaware. Each Inktomi Option so assumed by Inktomi-Delaware shall continue to have, and be subject to, the same terms and conditions set forth in the applicable Stock Plan and/or as provided in the respective option agreements governing such Inktomi Option immediately prior to the Effective Date of the Merger, including the number of shares of Common Stock subject to such Inktomi Option and the per share price for the shares of Common Stock, except that the shares issuable upon exercise of any such Inktomi Option shall be Inktomi-Delaware Common Stock. It is the intention of the parties that the Inktomi Options

assumed by Inktomi-Delaware qualify following the Effective Date of the Merger as incentive stock options as defined in Section 422 of the Internal Revenue Code of 1986, as amended (the "Code"), to the extent the Inktomi Options qualified as incentive stock options immediately prior to the Effective Date of the Merger. At the Effective Date of the Merger, Inktomi-California shall assign to Inktomi-Delaware any and all rights of repurchase pertaining to shares of Inktomi-California Common Stock issued upon exercise of stock options, pursuant to stock purchase agreements, or otherwise.

(e) Inktomi-California Warrants. At the Effective Date of the Merger, all outstanding warrants and other rights to purchase capital stock of Inktomi-California (each an "Inktomi Warrant") shall be assumed by Inktomi-Delaware. Each Inktomi Warrant so assumed by Inktomi-Delaware shall continue to have, and be subject to, the same terms and conditions set forth in the written agreements governing the Inktomi Warrant immediately prior to the Effective Date, including the number and type of shares subject to such Inktomi Warrant and the per share price for the shares of capital stock, except that the shares issuable upon exercise of any such Inktomi Warrant shall be the comparable class and series of Inktomi-Delaware Common Stock or Preferred Stock.

(f) Exchange of Certificates. After the Effective Date of the Merger, each holder of an outstanding certificate representing shares of Inktomi-California Common Stock or Preferred Stock may, at such stockholder's option, surrender the same for cancellation to such institution as Inktomi-Delaware shall appoint at the time to act as exchange agent (the "Exchange Agent"), and each such holder shall be entitled to receive in exchange therefor a certificate or certificates representing the number of shares of the Surviving Corporation's Common Stock or Preferred Stock, as applicable, into which the surrendered shares were converted as herein provided. Until so surrendered, each outstanding certificate theretofore representing shares of Inktomi-California Common Stock or Preferred Stock shall be deemed for all purposes to represent the number of whole shares of the Surviving Corporation's Common Stock or Preferred Stock, as applicable, into which such shares of Inktomi-California Common Stock or Preferred Stock were converted in the Merger.

The registered owner on the books and records of the Surviving Corporation or the Exchange Agent of any such outstanding certificate shall, until such certificate shall have been surrendered for transfer or conversion or otherwise accounted for to the Surviving Corporation or the Exchange Agent, have and be entitled to exercise any voting and other rights with respect to and to receive dividends and other distributions upon the shares of Common Stock or Preferred Stock, as applicable, of the Surviving Corporation represented by such outstanding certificate as provided above.

Each certificate representing Common Stock or Preferred Stock of the Surviving Corporation so issued in the Merger shall bear the same legends, if any, with respect to the restrictions on transferability as the certificates of Inktomi-California so converted and given in exchange therefor, unless otherwise determined by the Board of Directors of the Surviving Corporation in compliance with applicable laws.

If any certificate for shares of Common Stock or Preferred Stock of the Surviving Corporation is to be issued in a name other than that in which the certificate surrendered in exchange therefor is registered, it shall be a condition of issuance thereof that the certificate so surrendered shall be properly endorsed and otherwise in proper form for transfer, that such transfer otherwise be proper and that the person requesting such transfer pay to the Exchange Agent any transfer or other taxes payable by reason of the issuance of such new certificate in a name other than that of the registered holder of the certificate surrendered or establish to the satisfaction of the Surviving Corporation that such tax has been paid or is not payable.

4. GENERAL

(a) Covenants of Inktomi-Delaware. Inktomi-Delaware covenants and agrees that it will, on or before the Effective Date of the Merger:

(i) Qualify to do business as a foreign corporation in the State of California and in connection therewith irrevocably appoint an agent for service of process as required under the provisions of Section 2105 of the California General Corporation Law:

(ii) File any and all documents with the appropriate tax authority of the State of California necessary for the assumption by Inktomi-Delaware of all of the corporate and/or franchise tax liabilities of Inktomi-California; and

(iii) Take such other actions as may be required by the California General Corporation Law.

(b) Further Assurances. From time to time, as and when required by Inktomi-Delaware or by its successors or assigns, there shall be executed and delivered on behalf of Inktomi-California such deeds and other instruments, and there shall be taken or caused to be taken by Inktomi-Delaware and Inktomi-California such further and other actions, as shall be appropriate or necessary in order to vest or perfect in or conform of record or otherwise by Inktomi-Delaware the title to and possession of all the property, interests, assets, rights, privileges, immunities, powers, franchises and authority of Inktomi-California and otherwise to carry out the purposes of this Agreement, and the officers and directors of Inktomi-Delaware are fully authorized in the name and on behalf of Inktomi-California or otherwise to take any and all such action and to execute and deliver any and all such deeds and other instruments.

(c) Abandonment. At any time before the Effective Date of the Merger, this Agreement may be terminated and the Merger may be abandoned for any reason whatsoever by the Board of Directors of either Inktomi-California or Inktomi-Delaware, or both, notwithstanding the approval of this Agreement by the shareholders of Inktomi-California or by the sole stockholder of Inktomi-Delaware, or by both.

(d) **Amendment.** The Boards of Directors of the Constituent Corporations may amend this Agreement any time prior to the filing of this Agreement (or certificate in lieu thereof) with the Secretaries of State of the States of California and Delaware, provided that subsequent to the adoption of this Agreement by the shareholders of either Constituent Corporation, this Agreement shall not be amended except in compliance with the requirements of the California General Corporation Law and the Delaware General Corporation Law.

(e) **Registered Office.** The registered office of the Surviving Corporation in the State of Delaware is located at 1209 Orange Street, in the city of Wilmington, County of New Castle, and The Corporation Trust Company is the registered agent of the Surviving Corporation at such address.

(f) **Agreement.** Executed copies of this Agreement will be on file at the principal place of business of the Surviving Corporation at 1900 S. Norfolk Street, Suite 110, San Mateo, California 94403 and copies thereof will be furnished to any shareholder of either Constituent Corporation, upon request and without cost.

(g) **Governing Law.** This Agreement shall in all respects be construed, interpreted and enforced in accordance with and governed by the laws of the State of Delaware and the provisions of the California General Corporation Law.

(h) **Counterparts.** In order to facilitate the filing and recording of this Agreement, the same may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, this Agreement, having first been approved by resolutions of the Boards of Directors of Inktomi-Delaware and Inktomi-California, is hereby executed on behalf of each of such two corporations and attested by their respective officers thereunto duly authorized.

INKTOMI CORPORATION
a Delaware corporation

By



David C. Peterschmidt,
President and Chief Executive Officer

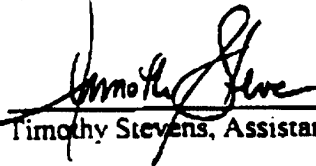
INKTOMI CORPORATION
a California corporation

By



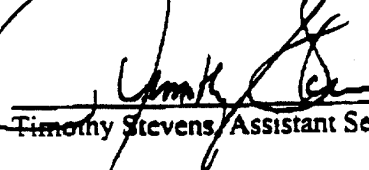
David C. Peterschmidt,
President and Chief Executive Officer

ATTEST:



Timothy Stevens, Assistant Secretary

ATTEST:



Timothy Stevens, Assistant Secretary

INKTOMI CORPORATION
(California Corporation)

OFFICERS' CERTIFICATE

David C. Peterschmidt and Timothy Stevens certify that:

1. They are the President and Assistant Secretary, respectively, of Inktomi Corporation, a corporation organized under the laws of the State of California.

2. The corporation has an authorized capital of 50,000,000 shares, no par value, designated as "Common Stock," and 17,080,000 shares, no par value, designated as "Preferred Stock," of which 6,000,000 shares are designated "Series A Preferred Stock," 3,480,000 shares are designated "Series B Preferred Stock," 1,000,000 shares are designated as "Series C Preferred Stock," 4,900,000 shares are designated "Series D Preferred Stock," and 1,700,000 shares are designated "Series D1 Preferred Stock."

3. As of the record date of the shareholders' approval of the Agreement and Plan of Merger attached hereto (the "Merger Agreement"), 7,158,268 shares of Common Stock, 6,000,000 shares of Series A Preferred Stock, 3,480,000 shares of Series B Preferred, 689,502 shares of Series C Preferred Stock, 4,768,619 shares of Series D Preferred Stock, and no shares of Series D1 Preferred Stock were issued and outstanding.

4. The principal terms of the Merger Agreement were approved by the Board of Directors and by the vote of a number of shares of each class of stock which equaled or exceeded the vote required.

5. The percentage vote required was (i) more than 50% of the votes entitled to be cast by holders of outstanding shares of the Common Stock and (ii) more than 50% of the votes entitled to be cast by holders of outstanding shares of the Preferred Stock, acting together as a single class.

David C. Peterschmidt and Timothy Stevens further declare under penalty of perjury under the laws of the State of California that each has read the foregoing certificate and knows the contents thereof and that the same is true of their own knowledge.

Executed in San Mateo, California on February 4, 1998.



David C. Peterschmidt, President and Chief
Executive Officer



Timothy Stevens, Assistant Secretary

TRADEMARK

REEL: 1726 FRAME: 0095

INKTOMI CORPORATION
(Surviving Corporation)

OFFICERS' CERTIFICATE

David C. Peterschmidt and Timothy Stevens certify that:

1. They are the President and Assistant Secretary, respectively, of Inktomi Corporation, a corporation organized under the laws of the State of Delaware.

2. The corporation has authorized one class of stock, designated "Common Stock," of which 1,000 shares are authorized for issuance.


3. As of the record date of the stockholders' approval of the Agreement and Plan of Merger attached hereto (the "Merger Agreement"), 1,000 shares of Common Stock were issued and outstanding.

4. The principal terms of the Merger Agreement were approved by the Board of Directors and by the vote of a number of shares of each class of stock which equaled or exceeded the vote required.

5. The percentage vote required was more than 50% of the votes entitled to be cast by the holders of outstanding shares of Common Stock.

David C. Peterschmidt and Timothy Stevens further declare under penalty of perjury under the laws of the State of California that each has read the foregoing certificate and knows the contents thereof and that the same is true of their own knowledge.

Executed in San Mateo, California on February 4, 1998.


David C. Peterschmidt, President and Chief
Executive Officer


Timothy Stevens, Assistant Secretary

TRADEMARK

REEL: 1726 FRAME: 0096

EXHIBIT A

**AMENDED AND RESTATED CERTIFICATE OF INCORPORATION
OF
INKTOMI CORPORATION**

Inktomi Corporation, a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

A. The name of the corporation is Inktomi Corporation. The corporation was originally incorporated under the same name and the original Certificate of Incorporation of the corporation was filed with the Secretary of State of the State of Delaware on November 12, 1996.

B. This Certificate of Incorporation has been duly adopted in accordance with the provisions of the General Corporation Law of the State of Delaware by the Board of Directors and the Stockholders of the corporation.

C. Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware, this Certificate of Incorporation restates and integrates and further amends the provisions of the Certificate of Incorporation of this corporation.

D. The text of the Certificate of Incorporation is hereby amended and restated in its entirety to read as follows:

ARTICLE I

The name of the corporation is Inktomi Corporation (the "Company").

ARTICLE II

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

ARTICLE III

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

TRADEMARK

REEL: 1726 FRAME: 0097

ARTICLE IV

The Company is authorized to issue two classes of shares, designated "Common Stock" and "Preferred Stock," respectively. The number of shares of Common Stock authorized to be issued is 50,000,000 shares, \$0.001 par value. The number of shares of Preferred Stock authorized to be issued is 17,080,000 shares, \$0.001 par value. Of the authorized shares of Preferred Stock, 6,000,000 shares are designated as "Series A Preferred Stock," 3,480,000 shares are designated as "Series B Preferred Stock," 1,000,000 shares are designated as "Series C Preferred Stock," 4,900,000 shares are designated "Series D Preferred Stock" and 1,700,000 shares are designated as "Series D1 Preferred Stock."

ARTICLE V

The rights, preferences, privileges and restrictions granted to and imposed on the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock, the Series D1 Preferred Stock and the Common Stock are as follows:

1. **Definitions.** For purposes of this Article V, the following definitions shall apply:
 - 1.1 **"Board"** shall mean the Board of Directors of the Company.
 - 1.2 **"Company"** shall mean this corporation.
 - 1.3 **"Common Stock"** shall mean the Common Stock, \$0.001 par value, of the Company.
 - 1.4 **"Filing Date"** shall mean April 15, 1997.
 - 1.5 **"Original Issue Price"** shall mean \$0.0005 per share for the Series A Preferred Stock, \$0.0005 per share for the Series B Preferred Stock, \$5.00 per share for the Series C Preferred Stock, \$2.217 per share for the Series D Preferred Stock and \$3.3255 for the Series D1 Preferred Stock.
 - 1.6 **"Permitted Repurchases"** shall mean the repurchase by the Company of shares of Common Stock held by employees, officers, directors, consultants, independent contractors, advisors, or other persons performing services for the Company or a subsidiary that are subject to restricted stock purchase agreements or stock option exercise agreements under which the Company has the option to repurchase such shares: (i) at cost, upon the occurrence of certain events, such as the termination of employment or services; or (ii) at any price pursuant to the Company's exercise of a right of first refusal to repurchase such shares.
 - 1.7 **"Preferred Stock"** shall mean the Series A Preferred Stock, the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock and the Series D1 Preferred Stock, collectively.

1.8 "Series A Preferred Stock" shall mean the Series A Preferred Stock, \$0.001 par value, of the Company.

1.9 "Series B Preferred Stock" shall mean the Series B Preferred Stock, \$0.001 par value, of the Company.

1.10 "Series C Preferred Stock" shall mean the Series C Preferred Stock, \$0.001 par value, of the Company.

1.11 "Series D Preferred Stock" shall mean the Series D Preferred Stock, \$0.001 par value, of the Company.

1.12 "Series D1 Preferred Stock" shall mean the Series D1 Preferred Stock, \$0.001 par value, of the Company.

1.13 "Subsidiary" shall mean any corporation of which at least fifty percent (50%) of the outstanding voting stock is at the time owned directly or indirectly by the Company or by one or more of such subsidiary corporations.

2. Dividend Rights. The holders of the Preferred Stock and Common Stock shall be entitled to receive dividends, when, as and if declared by the Board, out of any funds and assets of the Company legally available therefor, or as otherwise required by law; provided that no dividend shall be paid unless such dividend is paid at the same time and at the same rate per share on both the Preferred Stock and Common Stock.

3. Liquidation Rights. In the event of any liquidation, dissolution or winding up of the Company, whether voluntary or involuntary, the funds and assets of the Company that may be legally distributed to the Company's shareholders (the "Available Funds and Assets") shall be distributed to shareholders in the following manner:

3.1 Liquidation Preferences.

(a) The holder of each share of Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock then outstanding shall be entitled to be paid, out of the Available Funds and Assets, and prior and in preference to any payment or distribution (or any setting apart of any payment or distribution) of any Available Funds and Assets on shares of Series A Preferred Stock, Series B Preferred Stock or Common Stock, an amount equal to the Original Issue Price per share of Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock then held, respectively, plus all declared but unpaid dividends thereon. If upon any liquidation, dissolution or winding up of the Company, the Available Funds and Assets to be distributed to the holders of the Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock shall be insufficient to permit the payment to such shareholders of their full preferential amount described in this subsection, then all of the Available Funds and Assets shall be distributed among the holders of the then outstanding Series C Preferred Stock,

Series D Preferred Stock and Series D1 Preferred Stock pro rata, on an equal priority, pari passu basis, according to their respective liquidation preferences as set forth herein.

(b) Subject to payment in full of the liquidation preference of the Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock as provided in subsection 3.1(a) above, the holders of each share of Series A Preferred Stock and Series B Preferred Stock then outstanding shall be entitled to be paid, out of the Available Funds and Assets, and prior and in preference to any payment or distribution (or any setting apart of any payment or distribution) of any Available Funds and Assets on any shares of Common Stock, an amount equal to the Original Issue Price per share of Series A Preferred Stock and Series B Preferred Stock then held, respectively, plus all declared but unpaid dividends thereon. If upon any liquidation, dissolution or winding up of the Company and after payment in full of the preferential amount specified for the Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock in subsection 3.1(a), the Available Funds and Assets shall be insufficient to permit the payment to holders of the Series A Preferred Stock and Series B Preferred Stock of their full preferential amount described in this subsection, then all of the remaining Available Funds and Assets shall be distributed among the holders of the then outstanding Series A Preferred Stock and Series B Preferred Stock pro rata, on an equal priority, pari passu basis, according to their respective liquidation preferences as set forth herein.

3.2 Remaining Assets. If there are any Available Funds and Assets remaining after the payments or distribution (or the setting aside for payment or distribution) to the holders of the Preferred Stock of their full preferential amounts described above in this section 3.1, then all such remaining Available Funds and Assets shall be distributed pro rata among the holders of the then outstanding Common Stock, Series D Preferred Stock and Series D1 Preferred Stock until (i) with respect to the holders of Series D Preferred Stock, such holders have received an aggregate amount under subsection 3.1(a) and this section 3.2 equal to \$6.651 per share, and (ii) with respect to the holders of Series D1 Preferred Stock, such holders have received an aggregate amount under subsection 3.1(a) and this section 3.2 equal to \$9.9765 per share, after which all remaining Available Funds and Assets shall be distributed pro rata among the holders of Common Stock.

3.3 Non-Cash Consideration. If any assets of the Company distributed to shareholders in connection with any liquidation, dissolution, or winding up of the Company are other than cash, then the value of such assets shall be their fair market value as determined by the Board, except that any securities to be distributed to shareholders in a liquidation, dissolution, or winding up of the Company shall be valued as follows:

(a) The method of valuation of securities not subject to investment letter or other similar restrictions on free marketability shall be as follows:

(i) if the securities are then traded on a national securities exchange or the Nasdaq National Market (or a similar national quotation system), then the value shall be deemed to be the average of the closing prices of the securities on such exchange or system over the 30-day period ending three (3) days prior to the distribution; and

(ii) if actively traded over-the-counter, then the value shall be deemed to be the average of the closing bid prices or sale prices (whichever is applicable) over the 30-day period ending three (3) days prior to the distribution; and

(iii) if there is no active public market, then the value shall be the fair market value thereof, as mutually determined by the corporation and the holders of at least a majority of the voting power of all then outstanding shares of Preferred Stock.

(b) The method of valuation of securities subject to investment letter or other restrictions on free marketability shall be to make an appropriate discount from the market value determined as above in subparagraphs (a)(i),(ii) or (iii) of this subsection to reflect the approximate fair market value thereof, as mutually determined by the corporation and the holders of at least a majority of the voting power of all then outstanding shares of Preferred Stock.

3.4 Reorganization or Merger. A reorganization or merger of the corporation with or into any other corporation or entity, or a sale of all or substantially all of the assets of the corporation, in which transaction the corporation's shareholders immediately prior to such transaction own immediately after such transaction less than 50% of the equity securities of the surviving corporation or its parent, shall be deemed to be a liquidation, dissolution or winding up within the meaning of this section 3.

4. Voting Rights.

4.1 Common Stock. Each holder of shares of Common Stock shall be entitled to one (1) vote for each share thereof held.

4.2 Preferred Stock. Each holder of shares of Series A Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock shall be entitled to the number of votes equal to the number of whole shares of Common Stock into which such shares of Preferred Stock could be converted pursuant to the provisions of Section 5 below at the record date for the determination of the shareholders entitled to vote on such matters or, if no such record date is established, the date such vote is taken or any written consent of shareholders is solicited. Each holder of shares of Series B Preferred Stock and each holder of shares of Series C Preferred Stock shall have no voting rights, except as provided by law.

4.3 General. Subject to the foregoing provisions of this Section 4, each holder of Series A Preferred Stock; Series D Preferred Stock and Series D1 Preferred Stock shall have full voting rights and powers equal to the voting rights and powers of the holders of Common Stock, and shall be entitled to notice of any shareholders' meeting in accordance with the bylaws of the Company (as in effect at the time in question) and applicable law, and shall be entitled to vote, together with the holders of Common Stock, with respect to any question upon which holders of Common Stock have the right to vote, except as may be otherwise provided by applicable law. Except as otherwise expressly provided herein or as required by law, the holders

of Series A Preferred Stock, Series D Preferred Stock, Series D1 Preferred Stock and Common Stock shall vote together and not as separate classes.

4.4 Board of Directors. Notwithstanding the foregoing, so long as there are at least 1,000,000 shares of Series D Preferred Stock and/or Series D1 Preferred Stock issued and outstanding (as adjusted for subsequent stock splits, combinations, recapitalizations and the like), the holders of Series D Preferred Stock and Series D1 Preferred Stock, voting together as a separate class, shall be entitled to elect one (1) director of the corporation. All other directors shall be elected by the holders of Common Stock and Series A Preferred Stock voting together as a separate class. Notwithstanding any bylaw provision to the contrary, the shareholders entitled to elect a particular director shall be entitled to remove such director or to fill a vacancy in the seat formerly held by such director, all in accordance with the applicable provisions of the California Corporations Code.

5. Conversion Rights. The outstanding shares of Preferred Stock shall be convertible into Common Stock as follows:

5.1 Optional Conversion.

(a) At the option of the holder thereof, each share of Series D Preferred Stock and Series D1 Preferred Stock shall be convertible, at any time, into fully paid and nonassessable shares of Common Stock as provided herein.

(b) On or after February 2, 1998, at the option of the holder thereof, each share of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall be convertible, at any time, into fully paid and nonassessable shares of Common Stock as provided herein.

(c) Each holder of Preferred Stock who elects to convert the same into shares of Common Stock shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Company or any transfer agent for the Preferred Stock or Common Stock, and shall give written notice to the Company at such office that such holder elects to convert the same and shall state therein the number of shares of Preferred Stock being converted. Thereupon the Company shall promptly issue and deliver at such office to such holder a certificate or certificates for the number of shares of Common Stock to which such holder is entitled upon such conversion. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the certificate or certificates representing the shares of Preferred Stock to be converted, and the person entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder of such shares of Common Stock on such date. If the conversion is in connection with an underwritten offering of securities registered pursuant to the Securities Act of 1933, as amended, the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing with the underwriters of the sale of securities pursuant to such offering, in which event the person(s) entitled to receive the Common Stock upon conversion of

the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing of such sale of securities.

5.2 Automatic Conversion.

(a) Each share of Series A Preferred Stock, Series B Preferred Stock and Series C Preferred Stock shall automatically be converted into fully paid and nonassessable shares of Common Stock, as provided herein: (i) immediately prior to the closing of a firm commitment underwritten public offering pursuant to an effective registration statement filed under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Company in which the aggregate public offering price (before deduction of underwriters' discounts and commissions) equals or exceeds \$7,500,000 and the public offering price per share of which equals or exceeds \$2.50 per share before deduction of underwriters' discounts and commissions (such price per share of Common Stock to be appropriately adjusted to reflect Common Stock Events (as defined in subsection 5.4); (ii) upon a consolidation or merger of the Company with or into any other corporation or corporations in which the holders of the Company's outstanding shares immediately before such consolidation or merger do not, immediately after such consolidation or merger, retain stock representing a majority of the voting power of the surviving corporation of such consolidation or merger; or (iii) upon a sale of all or substantially all of the assets of the Company.

(b) Each share of Series D Preferred Stock and Series D1 Preferred Stock shall automatically be converted into fully paid and nonassessable shares of Common Stock, as provided herein, immediately prior to the closing of a firm commitment underwritten public offering pursuant to an effective registration statement filed under the Securities Act of 1933, as amended, covering the offer and sale of Common Stock for the account of the Company in which the aggregate public offering price (before deduction of underwriters' discounts and commissions) equals or exceeds \$10,000,000 and the public offering price per share of which equals or exceeds \$4.434 per share before deduction of underwriters' discounts and commissions (such price per share of Common Stock to be appropriately adjusted to reflect Common Stock Events (as defined in subsection 5.4).

(c) Upon the occurrence of any event specified in subsection 5.2(a) and/or 5.2(b) above, the outstanding shares of the affected series of Preferred Stock shall be converted into Common Stock automatically without the need for any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Company or its transfer agent; provided, however, that the Company shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such conversion unless the certificates evidencing such shares of Preferred Stock are either delivered to the Company or its transfer agent as provided below, or the holder notifies the Company or its transfer agent that such certificates have been lost, stolen or destroyed and executes an agreement satisfactory to the Company to indemnify the Company from any loss incurred by it in connection with such certificates. Upon the occurrence of such automatic conversion of the Preferred Stock, the holders of Preferred Stock shall surrender the certificates representing such shares at the office of the Company or any transfer agent for the Preferred Stock or Common

Stock. Thereupon, there shall be issued and delivered to such holder promptly at such office and in its 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 Preferred Stock surrendered were convertible on the date on which such automatic conversion occurred.

5.3 Conversion Price. Each share of Preferred Stock shall be convertible in accordance with subsection 5.1 or subsection 5.2 above into the number of shares of Common Stock which results from dividing the Original Issue Price for such series of Preferred Stock by the conversion price for such series of Preferred Stock that is in effect at the time of conversion (the "Conversion Price"). The initial Conversion Price for the Series A Preferred Stock shall be the Original Issue Price for the Series A Preferred Stock; the initial conversion price for the Series B Preferred Stock shall be the Original Issue Price of the Series B Preferred Stock; the initial conversion price for the Series C Preferred Stock shall be the Original Issue Price for the Series C Preferred Stock; the initial conversion price for the Series D Preferred Stock shall be the Original Issue Price for the Series D Preferred Stock; and the initial conversion price for the Series D1 Preferred Stock shall be the Original Issue Price for the Series D1 Preferred Stock. The Conversion Price of each series of Preferred Stock shall be subject to adjustment from time to time as provided below.

5.4 Adjustment Upon Common Stock Event. Upon the happening of a Common Stock Event (as hereinafter defined), the Conversion Price of the Series A Preferred Stock, the Conversion Price of the Series B Preferred Stock, the Conversion Price of the Series C Preferred Stock, the Conversion Price of the Series D Preferred Stock and the Conversion Price of the Series D1 Preferred Stock shall, simultaneously with the happening of such Common Stock Event, be adjusted by multiplying the Conversion Price of each such series of Preferred Stock in effect immediately prior to such Common Stock Event by a fraction, (i) the numerator of which shall be the number of shares of Common Stock issued and outstanding immediately prior to such Common Stock Event, and (ii) the denominator of which shall be the number of shares of Common Stock issued and outstanding immediately after such Common Stock Event, and the product so obtained shall thereafter be the Conversion Price for such series of Preferred Stock. The Conversion Price for a series of Preferred Stock shall be readjusted in the same manner upon the happening of each subsequent Common Stock Event. As used herein, the term "Common Stock Event" shall mean (i) the issue by the Company of additional shares of Common Stock as a dividend or other distribution on outstanding Common Stock, (ii) a subdivision of the outstanding shares of Common Stock into a greater number of shares of Common Stock, or (iii) a combination of the outstanding shares of Common Stock into a smaller number of shares of Common Stock.

5.5 Adjustments for Other Dividends and Distributions. If at any time or from time to time after the Filing Date the Company pays a dividend or makes another distribution to the holders of the Common Stock payable in securities of the Company other than shares of Common Stock, then in each such event provision shall be made so that the holders of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock shall receive upon conversion thereof, in addition to the number of shares of Common Stock receivable upon conversion thereof, the amount of securities

of the Company which they would have received had their Preferred Stock been converted into Common Stock on the date of such event (or such record date, as applicable) and had they thereafter, during the period from the date of such event (or such record date, as applicable) to and including the conversion date, retained such securities receivable by them as aforesaid during such period, subject to all other adjustments called for during such period under this section 5 with respect to the rights of the holders of the Preferred Stock or with respect to such other securities by their terms.

5.6 Adjustment for Reclassification, Exchange and Substitution. If at any time or from time to time after the Filing Date the Common Stock issuable upon the conversion of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock is changed into the same or a different number of shares of any class or classes of stock, whether by recapitalization, reclassification or otherwise (other than by a Common Stock Event or a stock dividend, reorganization, merger, consolidation or sale of assets provided for elsewhere in this section 5), then in any such event each holder of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock shall have the right thereafter to convert such stock into the kind and amount of stock and other securities and property receivable upon such recapitalization, reclassification or other change by holders of the number of shares of Common Stock into which such shares of Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series D1 Preferred Stock could have been converted immediately prior to such recapitalization, reclassification or change, all subject to further adjustment as provided herein or with respect to such other securities or property by the terms thereof.

5.7 Sale of Shares Below Conversion Price.

(a) **Adjustment Formula.** If at any time or from time to time after the Filing Date the Company issues or sells, or is deemed by the provisions of this subsection 5.7 to have issued or sold, Additional Shares of Common Stock (as hereinafter defined), otherwise than in connection with a Common Stock Event as provided in subsection 5.4, a dividend or distribution as provided in subsection 5.5 or a recapitalization, reclassification or other change as provided in subsection 5.6, for an Effective Price (as hereinafter defined) that is less than the Conversion Price for a series of Preferred Stock in effect immediately prior to such issue or sale, then, and in each such case, the Conversion Price for such series of Preferred Stock shall be reduced, as of the close of business on the date of such issue or sale, to the price obtained by multiplying such Conversion Price by a fraction:

(i) The numerator of which shall be the sum of (A) the number of Common Stock Equivalents Outstanding (as hereinafter defined) immediately prior to such issue or sale of Additional Shares of Common Stock plus (B) the quotient obtained by dividing the Aggregate Consideration Received (as hereinafter defined) by the Company for the total number of Additional Shares of Common Stock so issued or sold (or deemed so issued and sold) by the Conversion Price for such series of Preferred Stock in effect immediately prior to such issue or sale; and

(ii) The denominator of which shall be the sum of (A) the number of Common Stock Equivalents Outstanding immediately prior to such issue or sale plus (B) the number of Additional Shares of Common Stock so issued or sold (or deemed so issued and sold).

(b) Certain Definitions. For the purpose of making any adjustment required under this subsection 5.7:

(i) "Additional Shares of Common Stock" shall mean all shares of Common Stock issued by the Company after the date of filing of these Restated Articles of Incorporation, other than: (A) all shares of Common Stock issued or issuable upon conversion of the Series A Preferred Stock, Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock or Series D1 Preferred Stock; (B) up to a total of 7,802,791 shares of Common Stock (or options, warrants or rights therefor) now or hereafter issued to employees, officers, or directors of, or contractors, consultants or advisers to, or any entity affiliated with any of the foregoing, the Company or any Subsidiary pursuant to stock purchase or stock option plans, stock bonuses or awards, warrants, contracts, note conversions or other arrangements that are approved by the Board (such number of shares to be calculated net of any repurchases of such shares by the Company and net of any such expired or terminated options, warrants or rights and to be proportionally adjusted to reflect any subsequent Common Stock Event); (C) all shares of Common Stock or other securities now or hereinafter issued to parties providing the Company with equipment leases, real property leases, loans, credit lines, guaranties of indebtedness, cash price reductions or similar financing, provided the transaction is approved by a majority of the members of the Board, and provided further that in the case the proposed transaction is with an affiliate of the Company, the transaction is unanimously approved by all disinterested members of the Board; (D) all shares of Common Stock now or hereinafter issued upon exercise of the Antidilution Warrants originally issued by the corporation on April 24, 1996; and (E) up to 50,000 shares of Common Stock or other securities now or hereinafter issued to academic institutions with which the officers and/or key employees have a relationship pursuant to any plan or arrangement approved by the Board (including the one director elected by the holders of Series D Preferred Stock and Series D1 Preferred Stock).

(ii) The "Aggregate Consideration Received" by the Company for any issue or sale (or deemed issue or sale) of securities shall (A) to the extent it consists, of cash, be computed at the gross amount of cash received by the Company before deduction of any underwriting or similar commissions, compensation or concessions paid or allowed by the Company in connection with such issue or sale and without deduction of any expenses payable by the Company; (B) to the extent it consists of property other than cash, be computed at the fair value of that property as determined in good faith by the Board; and (C) if Additional Shares of Common Stock, Convertible Securities or Rights or Options to purchase either Additional Shares of Common Stock or Convertible Securities are issued or sold together with other stock or securities or other assets of the Company for a consideration which covers both, be computed as the portion of the consideration so received that may be reasonably determined in good faith by the Board to be allocable to such Additional shares of Common Stock, Convertible Securities or Rights or Options.

(iii) "Common Stock Equivalents Outstanding" shall mean the number of shares of Common Stock that is equal to the sum of (A) all shares of Common Stock of the Company that are outstanding at the time in question, plus (B) all shares of Common Stock of the Company issuable upon conversion of all shares of Preferred Stock or other Convertible Securities that are outstanding at the time in question, plus (C) all shares of Common Stock of the Company that are issuable upon the exercise of Rights or Options that are outstanding at the time in question assuming the full conversion or exchange into Common Stock of all such Rights or Options that are Rights or Options to purchase or acquire Convertible Securities into or for Common Stock.

(iv) "Convertible Securities" shall mean stock or other securities convertible into or exchangeable for shares of Common Stock.

(v) The "Effective Price" of Additional Shares of Common Stock shall mean the quotient determined by dividing the total number of Additional Shares of Common Stock issued or sold, or deemed to have been issued or sold, by the Company under this subsection 5.7, into the Aggregate Consideration Received, or deemed to have been received, by the Company under this subsection 5.7, for the issue of such Additional Shares of Common Stock; and

(vi) "Rights or Options" shall mean warrants, options or other rights to purchase or acquire shares of Common Stock or Convertible Securities.

(c) Deemed Issuances. For the purpose of making any adjustment to the Conversion Price of a series of Preferred Stock required under this subsection 5.7, if the Company issues or sells any Rights or Options or Convertible Securities and if the Effective Price of the shares of Common Stock issuable upon exercise of such Rights or Options and/or the conversion or exchange of Convertible Securities (computed without reference to any additional or similar protective or antidilution clauses) is less than the Conversion Price then in effect for a series of Preferred Stock, then the Company shall be deemed to have issued, at the time of the issuance of such Rights, Options or Convertible Securities, that number of Additional Shares of Common Stock that is equal to the maximum number of shares of Common Stock issuable upon exercise or conversion of such Rights, Options or Convertible Securities upon their issuance and to have received, as the Aggregate Consideration Received for the issuance of such shares, an amount equal to the total amount of the consideration, if any, received by the Company for the issuance of such Rights or Options or Convertible Securities, plus, in the case of such Rights or Options, the minimum amounts of consideration, if any, payable to the Company upon the exercise in full of such Rights or Options, plus, in the case of Convertible Securities, the minimum amounts of consideration, if any, payable to the Company (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) upon the conversion or exchange thereof; provided that:

(i) if the minimum amounts of such consideration cannot be ascertained, but are a function of antidilution or similar protective clauses, then the Company

shall be deemed to have received the minimum amounts of consideration without reference to such clauses;

(ii) if the minimum amount of consideration payable to the Company upon the exercise of Rights or Options or the conversion or exchange of Convertible Securities is reduced over time or upon the occurrence or non-occurrence of specified events other than by reason of antidilution or similar protective adjustments, then the Effective Price shall be recalculated using the figure to which such minimum amount of consideration is reduced; and

(iii) if the minimum amount of consideration payable to the Company upon the exercise of such Rights or Options or the conversion or exchange of Convertible Securities is subsequently increased, then the Effective Price shall again be recalculated using the increased minimum amount of consideration payable to the Company upon the exercise of such Rights or Options or the conversion or exchange of such Convertible Securities.

No further adjustment of the Conversion Price, adjusted upon the issuance of such Rights or Options or Convertible Securities shall be made as a result of the actual issuance of shares of Common Stock on the exercise of any such Rights or Options or the conversion or exchange of any such Convertible Securities. If any such Rights or Options or the conversion rights represented by any such Convertible Securities shall expire without having been fully exercised, then the Conversion Price as adjusted upon the issuance of such Rights or Options or Convertible Securities shall be readjusted to the Conversion Price which would have been in effect had an adjustment been made on the basis that the only shares of Common Stock so issued were the shares of Common Stock, if any, that were actually issued or sold on the exercise of such Rights or Options or rights of conversion or exchange of such Convertible Securities, and such shares of Common Stock, if any, were issued or sold for the consideration actually received by the Company upon such exercise, plus the consideration, if any, actually received by the Company for the granting of all such Rights or Options, whether or not exercised, plus the consideration received for issuing or selling all such Convertible Securities actually converted or exchanged, plus the consideration, if any, actually received by the Company (other than by cancellation of liabilities or obligations evidenced by such Convertible Securities) on the conversion or exchange of such Convertible Securities, provided that such readjustment shall not apply to prior conversions of Preferred Stock.

5.8 Special Series D Conversion Price Adjustment. The Conversion Price of the Series D Preferred Stock shall be reduced by .004616986, and the Conversion Price of the Series D1 Preferred Stock shall be reduced by .00625479, for every \$100,000 or fraction thereof expended by the Company (whether in legal fees, costs, expenses, amounts paid in settlement, amounts paid in judgment or otherwise, and, in the case of transferred property, assets and/or securities, the amount expended shall include the fair market value of such transferred property, assets and/or securities as mutually determined by the corporation and the holders of at least a majority of all shares of Series D Preferred Stock and Series D1 Preferred Stock outstanding on the date of transfer voting together) after the date of the first issuance of Series D Preferred Stock

in connection with the lawsuit for breach of contract initially filed on October 31, 1996 in Alameda County by Pareto Partners Ltd. against the Company (or any other lawsuit, claim or cause of action that Pareto Partners Ltd., any affiliate thereof or John Nafeh may allege or assert against the Company on the basis of substantially the same facts and circumstances set forth in the breach of contract lawsuit), provided however that no such adjustment shall be made for the first \$100,000 or portion thereof so expended by the Company.

5.9 Certificate of Adjustment. In each case of an adjustment or readjustment of the Conversion Price for a series of Preferred Stock, the Company, at its expense, shall cause its Chief Financial Officer to compute such adjustment or readjustment in accordance with the provisions hereof and prepare a certificate showing such adjustment or readjustment, and shall mail such certificate, by first class mail, postage prepaid, to each registered holder of such series of Preferred Stock at the holder's address as shown in the Company's books.

5.10 Fractional Shares. No fractional shares of Common Stock shall be issued upon any conversion of Preferred Stock. In lieu of any fractional share to which the holder would otherwise be entitled, the Company shall pay the holder cash equal to the product of such fraction multiplied by the Common Stock's fair market value as determined in good faith by the Board as of the date of conversion.

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

5.12 Notices. Any notice required by the provisions of this Section 5 to be given to the holders of shares of the Preferred Stock shall be deemed given upon the earlier of actual receipt or deposit in the United States mail, by certified or registered mail, return receipt requested, postage prepaid, addressed to each holder of record at the address of such holder appearing on the books of the Company.

5.13 No Impairment. The Company shall not avoid or seek to avoid the observance or performance of any of the terms to be observed or performed hereunder by the Company, but shall at all times in good faith assist in carrying out all such action as may be reasonably necessary or appropriate in order to protect the conversion rights of the holders of the Preferred Stock against impairment.

6. Protective Provisions. In addition to any other class vote that may be required by law, so long as at least 900,000 shares of Series D Preferred Stock and/or Series D1 Preferred Stock are outstanding (as adjusted for any stock splits, combinations, recapitalizations and the

like), the corporation shall not without first obtaining the approval (by vote or written consent, as provided by law) of the holders of a majority of the then outstanding shares of Series D Preferred Stock and Series D1 Preferred Stock voting together:

(a) sell, convey or otherwise dispose of all or substantially all of its property or business or merge into or consolidate with any other corporation (other than a wholly-owned subsidiary corporation) or effect any transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the corporation is disposed of;

(b) amend or repeal any provision of, or add any provision to, these Restated Articles of Incorporation if such action would materially and adversely alter or change the rights, preferences or privileges of the shares of Series D Preferred Stock or Series D1 Preferred Stock;

(c) increase or decrease (other than by redemption or conversion) the total number of authorized shares of Series D Preferred Stock or Series D1 Preferred Stock;

(d) authorize or issue, or obligate itself to issue, any other equity security, including any security convertible into or exercisable for any equity security, having a preference over, or being on parity with, the Series D Preferred Stock or Series D1 Preferred Stock with respect to voting, dividends or upon liquidation; or

(e) increase the authorized size of the board of directors to a number greater than five (5).

(f) liquidate, dissolve or wind up the Company, or take any action for the purpose of liquidating, dissolving or winding up the Company.

(g) materially change the nature of the business of the Company as described in the Company's business plan in effect immediately prior to the filing of this Amended and Restated Certificate of Incorporation.

7. Miscellaneous. No share or shares of Preferred Stock acquired by the Company by reason of redemption, purchase, conversion or otherwise shall be reissued, and all such shares shall be canceled, retired and eliminated from the shares which the Company shall be authorized to issue.

ARTICLE VI

The Company is to have perpetual existence.

ARTICLE VII

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

At a stockholders' meeting at which directors are to be elected, or at elections held under special circumstances, a stockholder shall be entitled to cumulate votes (i.e., cast for any candidate a number of votes greater than the number of votes which such stockholder normally is entitled to cast). Each holder of stock, or of any class or classes or of a series or series thereof, who elects to cumulate votes shall be entitled to as many votes as equals the number of votes which (absent this provision as to cumulative voting) he would be entitled to cast for the election of directors with respect to his shares of stock multiplied by the number of directors to be elected by him, and he may cast all of such votes for a single director or may distribute them among the number to be voted for, or for any two or more of them, as he may see fit.

ARTICLE VIII

The number of directors which constitute the whole Board of Directors of the Company shall be designated in the Bylaws of the Company.

ARTICLE IX

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

ARTICLE X

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

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

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

ARTICLE XI

Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws may provide. The books of the Company may be kept (subject to any provision

contained in the statutes) outside of the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Company.

ARTICLE XII

Vacancies created by the resignation of one or more members of the Board of Directors and newly created directorships, created in accordance with the Bylaws of this Company, may be filled by the vote of a majority, although less than a quorum, of the directors then in office, or by a sole remaining director.

ARTICLE XIII

Advance notice of new business and stockholder nominations for the election of directors shall be given in the manner and to the extent provided in the Bylaws of the Company.

IN WITNESS WHEREOF, the Company has caused this Amended and Restated Certificate of Incorporation to be signed by David C. Peterschmidt, its President and Chief Executive Officer, effective as of January 30, 1998.

INKTOMI CORPORATION

By: 

David C. Peterschmidt,
President and Chief Executive Officer