

EIGHTH AMENDED AND RESTATED CERTIFICATE OF INCORPORATION

ARCWAVE, INC.

Arcwave, Inc., a corporation organized and existing under the laws of the State of Delaware (the "Company") hereby certifies as follows:

- A. The original Certificate of Incorporation of the Company was filed with the Secretary of State of the State of Delaware on August 18, 2000 under its original name of CoWave Networks, Inc.; the First Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on October 5, 2000, the Second Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on April 24, 2001, the Third Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on December 11, 2002, the Fourth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on May 8, 2003, the Fifth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of Delaware on January 26, 2004; the Sixth Amended and Restated Certificate of Incorporation was filed with the Secretary of State of Delaware on June 18, 2004 and the Seventh Amended and Restated Certificate of Incorporation was filed with the Secretary of State of Delaware on May 23, 2006.
- B. Pursuant to Sections 242 and 245 of the General Corporation Law of the State of Delaware, this Eighth Amended and Restated Certificate of Incorporation restates and amends the provisions of the Seventh Amended and Restated Certificate of Incorporation of the Company.
- C. This Eighth Amended and Restated Certificate of Incorporation has been duly approved by the Board of Directors of the Company.
- D. This Eighth Amended and Restated Certificate of Incorporation has been duly approved by the written consent of the stockholders in accordance with Sections 228, 242 and 245 of the Delaware General Corporation Law.
- E. The Eighth Amended and Restated Certificate of Incorporation of the Company is hereby amended and restated to read as follows:

ARTICLE I

The name of the Company is Arcwave, Inc.

ARTICLE II

The purpose of the Company is to engage in any lawful act or activity for which a corporation may be organized under the Delaware General Corporation Law as the same exists or may hereafter be amended.

ARTICLE III

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

ARTICLE IV

1. **Reverse Stock Split.** Effective upon the filing of this Eighth Amended and Restated Certificate of Incorporation with the Delaware Secretary of State, without further action by the Company or any holders of its capital stock, (i) every one hundred (100) shares of Common Stock of the Company then outstanding shall be automatically consolidated into one (1) share of Common Stock of the Company, (ii) every one hundred (100) shares of Series AA Preferred Stock of the Company then outstanding shall be automatically consolidated into one (1) share of Series AA Preferred Stock of the Company, and (iii) every one hundred (100) shares of Series BB Preferred Stock of the Company then outstanding shall be automatically consolidated into one (1) share of Series BB Preferred Stock of the Company (the "**Reverse Stock Split**"). No fractional shares shall be issued pursuant to the Reverse Stock Split. The number of shares of Common Stock and Preferred Stock to be issued pursuant to the Reverse Stock Split shall be rounded down to the nearest whole share and the Company shall pay cash in lieu of any fractional shares to the holders of such shares in an amount equal to the fair market value of such fractional shares as determined by the Board of Directors of the Company.

2. **Authorized Stock.** The Company is authorized to issue two classes of stock to be designated "**Common Stock**" and "**Preferred Stock**." The aggregate number of shares that the Company shall have authority to issue is 31,000,000 divided into 20,000,000 shares of Common Stock, par value \$0.001 per share, and 11,000,000 shares of Preferred Stock, par value \$0.001 per share. The Preferred Stock shall be issued in two series, one of which shall be designated "**Series BB Preferred Stock**" which shall consist of 3,000,000 shares and one of which shall be designated "**Series AA Preferred Stock**" which shall consist of 8,000,000 shares.

The rights, preferences, privileges and restrictions granted to and imposed upon the series of Preferred Stock are as follows:

3. **Definitions.** For purposes of this Article, the following definitions shall apply:

(a) "**Equity Security Issuance**" shall mean the sale of shares of (i) any Common Stock, Preferred Stock or other equity security of the Company, (ii) any security convertible, with or without consideration, into any Common Stock, Preferred Stock or other equity security (including any option to purchase such a convertible security), (iii) any security carrying any warrant or right to subscribe to or purchase any Common Stock, Preferred Stock or other equity security or (iv) any such warrant or right.

(b) "**Liquidation Preference**" shall mean \$1.8571 per share for the Series BB Preferred Stock and \$1.2046 per share for the Series AA Preferred Stock (as appropriately adjusted for any Recapitalization).

(c) **"Original Issue Date"** shall mean, for the Series BB Preferred Stock, the date upon which the first share of Series BB Preferred Stock has been issued and, for the Series AA Preferred Stock, the date upon which the first share of Series AA Preferred Stock will be issued following the filing of this Restated Certificate.

(d) **"Original Issue Price"** shall mean \$1.2380 per share for the Series BB Preferred Stock and \$1.2046 per share for the Series AA Preferred Stock (in each case, as appropriately adjusted for any Recapitalization).

(e) **"Preferred Stock"** shall mean the Series BB Preferred Stock and the Series AA Preferred Stock.

(f) **"Qualifying Public Offering"** shall mean a public offering of Common Stock registered under the Securities Act of 1933, as amended, which is (i) either the subject of a firm underwriting commitment or an on-line offering pursuant to the Dutch-auction process; provided that the aggregate gross proceeds to the Company are not less than \$50,000,000 (before deducting underwriting discounts, commissions or fees), (ii) at a per share price not less than three times the Original Issue Price of the Series BB Preferred Stock and (iii) which results in a listing of the Company's Common Stock on a nationally recognized securities exchange or the NASDAQ National Market System.

(g) **"Recapitalization"** shall mean any stock split, stock dividend, combination, reclassifications or similar event occurring after the Original Issue Date for such series of Preferred Stock.

(h) **"Restated Certificate"** shall mean this Eighth Amended and Restated Certificate of Incorporation.

4. Dividends.

(a) *Series BB Dividend Preference.* The holders of outstanding shares of Series BB Preferred Stock shall be entitled to receive dividends, out of any assets at the time legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock of this Company) on the Series AA Preferred Stock or Common Stock of the Company at the rate of six percent (6%) of the Original Issue Price per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum, when, as and if declared by the Board of Directors of the Company (the **"Board of Directors"**); *provided, however,* that the Board of Directors is under no obligation to pay dividends to such holders, and such dividends, if any, shall be noncumulative. No rights shall accrue to the holders of the Series BB Preferred Stock if dividends are not declared in any prior year. Such dividends may be payable quarterly or otherwise as the Board of Directors may from time to time determine.

(b) *Series AA Dividend Preference.* Subject to the rights of the Series BB Preferred Stock, the holders of outstanding shares of Series AA Preferred Stock shall be entitled to receive dividends, out of any assets at the time legally available therefor, prior and in preference to any declaration or payment of any dividend (payable other than in Common Stock of this Company) on the Common Stock of the Company at the rate of six percent (6%) of the

Original Issue Price per share (as adjusted for stock splits, stock dividends, reclassifications or the like) per annum on each outstanding share of Series AA Preferred Stock, when, as and if declared by the Board of Directors; *provided, however*, that the Board of Directors is under no obligation to pay dividends to such holders, and such dividends, if any, shall be noncumulative. No rights shall accrue to the holders of the Series AA Preferred Stock if dividends are not declared in any prior year. Such dividends may be payable quarterly or otherwise as the Board of Directors may from time to time determine.

(c) *Priority of Dividends.* The Company shall make no Distribution (as defined below) to the holders of shares of Series AA Preferred Stock or Common Stock in any fiscal year unless and until dividends at the rate set forth in **Subsection (a)** above shall have been paid upon all outstanding shares of Series BB Preferred Stock. Thereafter, the Company shall make no Distribution to the holders of shares of Common Stock in any fiscal year unless and until dividends at the rate set forth in **Subsection (b)** above shall have been paid upon all outstanding shares of Series AA Preferred Stock. Thereafter, any additional dividends shall be distributed among the holders of Preferred Stock and Common Stock pro rata based on the number of shares of Common Stock then held by each holder (assuming conversion of all such Preferred Stock into Common Stock).

(d) *Distribution.* As used in this Section, "**Distribution**" means the transfer of cash or property without consideration, whether by way of dividend or otherwise (except a dividend payable in Common Stock of this Company) or the repurchase of shares of the Company (other than (i) repurchases at cost of shares issued to or held by employees, consultants, officers and directors upon termination of their employment or services pursuant to agreements providing for the right of said repurchase or (ii) repurchases pursuant to contractual rights of first refusal that are approved by the Company's Board of Directors) for cash or property.

5. **Liquidation Rights.** In the event of any liquidation, dissolution, or winding up of the Company (or the deemed occurrence of such event pursuant to **Subsection 5(c)** below) (a "**Liquidation Event**"), either voluntary or involuntary, distributions to the stockholders of the Company shall be made in the following manner:

(a) *Amount of Liquidation Preference.*

(i) The holders of the Series BB Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets or surplus funds of the Company to the holders of the Series AA Preferred Stock or Common Stock by reason of their ownership of such stock, the Liquidation Preference specified for each share of Series BB Preferred Stock then held by them and, in addition, an amount equal to all accumulated but unpaid dividends on such Series BB Preferred Stock.

If the assets and funds thus available for distribution among the holders of the Series BB Preferred Stock shall be insufficient to permit the payment to such holders of their full aforesaid preferential amount, then the entire amount of the assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Series BB Preferred Stock in proportion to the aggregate Liquidation Preference, plus all accumulated and

unpaid dividends on the Series BB Preferred Stock, for the shares of such Preferred Stock owned by each such holder.

(ii) After payment has been made to the holders of Series BB Preferred Stock of the full preferential amount set forth in **Subsection 5(a)(i)** above, the holders of the Series AA Preferred Stock shall be entitled to receive, prior and in preference to any distribution of any of the assets or surplus funds of the Company to the holders of the Common Stock by reason of their ownership of such stock, the Liquidation Preference specified for each share of Series AA Preferred Stock then held by them and, in addition, an amount equal to all declared but unpaid dividends on such Series AA Preferred Stock.

If the assets and funds thus available for distribution among the holders of the Series AA Preferred Stock shall be insufficient to permit the payment to such holders of their full aforesaid preferential amount, then the entire amount of the assets and funds of the Company legally available for distribution shall be distributed ratably among the holders of the Series AA Preferred Stock in proportion to the aggregate Liquidation Preference, plus all declared and unpaid dividends on the Series AA Preferred Stock, for the shares of such Preferred Stock owned by each such holder.

(b) *Distribution after Payment of Liquidation Preference.* After payment has been made to the holders of the Preferred Stock of the full preferential amount set forth in **Subsection 5(a)** above, the entire remaining assets and funds of the Company legally available for distribution, if any, shall be distributed ratably among the holders of Preferred Stock and the holders of Common Stock, subject to the limitations set forth below, in a manner such that the amount distributed to each holder of Common Stock and Preferred Stock shall equal the amount obtained by multiplying the entire assets and funds of the Company legally available for distribution pursuant to this **Subsection 5(b)** by a fraction, the numerator of which shall be the sum of the number of shares of Common Stock then held by the holder and the number of shares of Common Stock issuable upon conversion of the shares of Preferred Stock then held by the holder, and the denominator of which shall be the sum of the total number of shares of Common Stock then outstanding and the total number of shares of Common Stock issuable upon conversion of the total number of shares of Preferred Stock then outstanding.

(c) *Deemed Liquidation.* For purposes of this **Section 5**, unless the holders of at least eighty percent (80%) of the Series BB Preferred Stock then outstanding shall determine otherwise, a liquidation, dissolution or winding up of the Company shall be deemed to be occasioned by, or to include, (A) the acquisition of the Company by another entity by means of any transaction or series of related transactions (including, without limitation, any reorganization, merger or consolidation) that results in the transfer of more than fifty percent (50%) of the outstanding voting power of the Company; or (B) a sale, lease, license, transfer or other disposition of all or substantially all of the assets of the Company (each of (A) and (B), an "Acquisition or Asset Transfer").

(d) *Non-Cash Distribution.* Whenever the distribution provided for in this **Section 5** shall be payable in securities or property other than cash, the value of such distribution shall be the fair market value of such securities or other property as determined in good faith by the Board of Directors.

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

(a) *Right to Convert.* Each share of Preferred Stock shall be convertible, at the option of the holder thereof, at any time at the office of the Company or any transfer agent for the Preferred Stock, into that number of fully-paid and nonassessable shares of Common Stock that is equal to the Original Issue Price divided by the appropriate "Conversion Price." The Conversion Price per share of the Series AA Preferred Stock shall be \$1.2046 and shall be subject to adjustment as provided herein. The initial Conversion Price per share of the Series BB Preferred Stock shall be \$1.2380 and shall be subject to adjustment as provided herein. The number of shares of Common Stock into which each share of a series of Preferred Stock may be converted is hereinafter referred to as the "Conversion Rate" for each such series. Upon any decrease or increase in the Conversion Price or the Conversion Rate for a series, as described in this Section 4, the corresponding Conversion Rate or Conversion Price for such series, as the case may be, shall be appropriately increased or decreased.

(b) *Automatic Conversion.* Each share of Preferred Stock shall automatically be converted into shares of Common Stock at the then effective Conversion Rate for such share immediately upon the earlier of (i) the consummation of a Qualifying Public Offering and (ii) with respect to all shares of Preferred Stock of a particular series, the date of written consent of agreement of the holders of at least eighty percent (80%) of the outstanding shares of such series of Preferred Stock, voting together on an as-converted basis.

(c) *Mechanics of Conversion.* No fractional shares of Common Stock shall be issued upon conversion of Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Company shall pay cash equal to such fraction multiplied by the then fair market value of such fractional shares as determined by the Board of Directors of the Company. Before any holder of Preferred Stock shall be entitled to convert the same into full shares of Common Stock, and to receive certificates therefor, he shall surrender the certificate or certificates therefor, duly endorsed, at the office of the Company or of any transfer agent for the Preferred Stock, and shall give written notice to the Company at such office that he elects to convert the same; *provided, however,* that in the event of an automatic conversion pursuant to Subsection 6(b) above, the outstanding shares of Preferred Stock shall be converted automatically without any further action by the holders of such shares and whether or not the certificates representing such shares are surrendered to the Company or its transfer agent; *provided, further,* that the Company shall not be obligated to issue certificates evidencing the shares of Common Stock issuable upon such automatic conversion unless either the certificates evidencing such shares of Preferred Stock are delivered to the Company or its transfer agent as provided above, 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.

The Company shall, as soon as practicable after such delivery, or after such agreement and indemnification, issue and deliver at such office to such holder of Preferred Stock, a certificate or certificates for the number of shares of Common Stock to which he shall be entitled as aforesaid and a check payable to the holder in the amount of any cash amounts payable as the result of a conversion into fractional shares of Common Stock, plus any declared and unpaid

dividends on the converted Preferred Stock. Such conversion shall be deemed to have been made immediately prior to the close of business on the date of such surrender of the shares of Preferred Stock to be converted, and the person or persons entitled to receive the shares of Common Stock issuable upon such conversion shall be treated for all purposes as the record holder or holders of such shares of Common Stock on such date; *provided, however*, that if the conversion is in connection with a public offering or a Liquidation Event, the conversion may, at the option of any holder tendering Preferred Stock for conversion, be conditioned upon the closing of the sale of securities pursuant to such public offering or Liquidation Event, in which event the person(s) entitled to receive the Common Stock issuable upon such conversion of the Preferred Stock shall not be deemed to have converted such Preferred Stock until immediately prior to the closing or consummation of the public offering or Liquidation Event.

(d) *Conversion Price Adjustments for Sales of Shares Below Conversion Prices.* The Conversion Prices of the Preferred Stock shall be subject to adjustment from time to time as follows:

(i) (A) If the Company shall issue, after the Original Issue Date of any series of Preferred Stock, any Additional Stock (as defined below) without consideration or for a consideration per share less than the Conversion Price for any series of Preferred Stock in effect immediately prior to the issuance of such Additional Stock, the Conversion Price in effect immediately prior to each such issuance for such series of Preferred Stock shall automatically (except as otherwise provided in this Subsection 6(d)(i)) be adjusted to a price determined by multiplying such Conversion Price by a fraction, (x) the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to such issuance (the "**Outstanding Common**") plus the number of shares of Common Stock that the aggregate consideration received by the Company for such issuance would purchase at such Conversion Price; and (y) the denominator of which shall be the number of shares of Outstanding Common plus the number of shares of such Additional Stock. For purposes of the foregoing calculation, the term "**Outstanding Common**" shall include shares of Common Stock deemed issued pursuant to Subsection 6(d)(i)(E).

(B) No adjustment of the Conversion Price for any series of Preferred Stock shall be made in an amount less than one cent per share; *provided that* any adjustments which are not required to be made by reason of this sentence shall be carried forward and shall be either taken into account in any subsequent adjustment made prior to three years from the date of the event giving rise to the adjustment being carried forward, or shall be made at the end of three years from the date of the event giving rise to the adjustment being carried forward. Except to the limited extent provided for in Subsections 6(d)(i)(E)(3) and 6(d)(i)(E)(4), no adjustment of such Conversion Price pursuant to this Subsection 6(d)(i) shall have the effect of increasing the Conversion Price above the Conversion Price for such series of Preferred Stock in effect immediately prior to such adjustment.

(C) In the case of the issuance of Additional Stock for cash, the consideration shall be deemed to be the amount of cash paid therefor before deducting any reasonable discounts, commissions or other expenses allowed, paid or incurred by the Company for any underwriting or otherwise in connection with the issuance and sale thereof.

(D) In the case of the issuance of the Additional Stock for a consideration in whole or in part other than cash, the consideration other than cash shall be deemed to be the fair value thereof as determined by the Board of Directors irrespective of any accounting treatment.

(E) In the case of the issuance (whether before, on or after the applicable Original Issue Date) of options to purchase or rights to subscribe for Common Stock, securities by their terms convertible into or exchangeable for Common Stock or options to purchase or rights to subscribe for such convertible or exchangeable securities, the following provisions shall apply for all purposes of Subsections 6(d)(i) and 6(d)(ii):

(1) The aggregate maximum number of shares of Common Stock deliverable upon exercise (assuming the satisfaction of any conditions to exercisability, including without limitation, the passage of time, but without taking into account potential antidilution adjustments) of such options to purchase or rights to subscribe for Common Stock shall be deemed to have been issued at the time such options or rights were issued and for a consideration equal to the consideration (determined in the manner provided in Subsections 6(d)(i)(C) and 6(d)(i)(D) hereof), if any, received by the Company upon the issuance of such options or rights plus the minimum exercise price provided in such options or rights (without taking into account potential antidilution adjustments) for the Common Stock covered thereby.

(2) The aggregate maximum number of shares of Common Stock deliverable upon conversion of or in exchange (assuming the satisfaction of any conditions to convertibility or exchangeability, including, without limitation, the passage of time, but without taking into account potential antidilution adjustments) for any such convertible or exchangeable securities or upon the exercise of options to purchase or rights to subscribe for such convertible or exchangeable securities and subsequent conversion or exchange thereof shall be deemed to have been issued at the time such securities were issued or such options or rights were issued and for a consideration equal to the consideration, if any, received by the Company for any such securities and related options or rights (excluding any cash received on account of accrued interest or accrued dividends), plus the minimum additional consideration, if any, to be received by the Company (without taking into account potential antidilution adjustments) upon the conversion or exchange of such securities or the exercise of any related options or rights (the consideration in each case to be determined in the manner provided in Subsections 6(d)(i)(C) and 6(d)(i)(D) hereof).

(3) In the event of any change in the number of shares of Common Stock deliverable or in the consideration payable to the Company upon exercise of such options or rights or upon conversion of or in exchange for such convertible or exchangeable securities (excluding a change resulting from any antidilution provisions contained in such options, rights or securities), the Conversion Price of any series of Preferred Stock, to the extent in any way affected by or computed using such options, rights or securities, shall be recomputed to reflect such change, but no further adjustment shall be made for the actual issuance of Common Stock or any payment of such consideration upon the exercise of any such options or rights or the conversion or exchange of such securities.

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

(5) The number of shares of Common Stock deemed issued and the consideration deemed paid therefor pursuant to **Subsections 6(d)(i)(E)(1) and (2)** shall be appropriately adjusted to reflect any change, termination or expiration of the type described in either **Subsection 6(d)(i)(E)(3) or (4)**.

(ii) **"Additional Stock"** shall mean any shares of Common Stock issued (or deemed to have been issued pursuant to **Section 6(d)(i)(E)**) by the Company after the Original Issue Date of a series of Preferred Stock) other than:

(A) shares issued pursuant to a transaction described in **Subsection 6(e)** hereof;

(B) shares of Common Stock issued or authorized to be issued to employees, officers or directors of, or consultants or advisors to the Company or any subsidiary, pursuant to the Company's stock option plan in effect as of the date of the filing of this Restated Certificate or such greater number of shares as are approved by the Series BB Preferred Directors elected pursuant to **Subsection 7(b)** hereof;

(C) shares issued for consideration other than cash pursuant to a merger, consolidation, acquisition or similar business combination that are approved by the Series BB Preferred Directors elected pursuant to **Subsection 7(b)** hereof;

(D) shares issued or issuable pursuant to any equipment leasing arrangement, commercial credit arrangement or real property leasing transaction from a bank or similar financial institution; *provided that* any such issuances are approved by the Company's Board of Directors;

(E) shares of Common Stock issued or issuable upon (i) conversion of Preferred Stock; (ii) declaration and payment of any dividend on the Preferred Stock; (iii) distribution to the holders of the Preferred Stock or (iv) exercise of warrants for the purchase of Common Stock issued to holders of the Company's Series BB Preferred Stock;

(F) shares of the Company's Series BB Preferred Stock; and

(G) shares that are issued by the Company in a Qualifying Public Offering.

(e) *Adjustments to Conversion Prices for Certain Combinations, Distributions, Reclassifications and Reorganizations.* The Conversion Prices of the Preferred Stock shall be subject to adjustment from time to time as follows:

(i) *Adjustments for Subdivisions, Combinations or Consolidations of Common Stock.* If the outstanding shares of Common Stock shall be subdivided (by stock split, stock dividend, or otherwise) into a greater number of shares of Common Stock, the Conversion Prices in effect immediately prior to such subdivision shall, concurrently with the effectiveness of such subdivision, be proportionately decreased. If the outstanding shares of Common Stock shall be combined or consolidated (by reclassification, reverse stock split or otherwise) into a lesser number of shares of Common Stock, the Conversion Prices in effect immediately prior to such combination or consolidation shall, concurrently with the effectiveness of such combination or consolidation, be proportionately increased.

(ii) *Adjustments for Other Distributions.* If the Company at any time or from time to time makes or fixes a record date for the determination of holders of Common Stock entitled to receive any distribution payable in securities of the Company other than shares of Common Stock and other than as otherwise adjusted in this Section 6, then and in each such event provision shall be made so that the holders of Preferred Stock shall receive upon such distribution the amount of securities of the Company which they would have received had their Preferred Stock 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 date of conversion, retained such securities receivable by them as aforesaid during such period, subject to all other adjustments called for during such period under this Section 6 with respect to the rights of the holders of the Preferred Stock.

(iii) *Adjustments for Reclassification, Exchange and Substitution.* If the Common Stock issuable upon conversion of the Preferred Stock shall be changed into the same or a different number of shares of any other class or classes of stock, whether by capital reorganization, reclassification or otherwise (other than a subdivision or combination of shares provided for above), the Conversion Prices then in effect shall, concurrently with the effectiveness of such reorganization or reclassification, be proportionately adjusted such that the Preferred Stock shall be convertible into, in lieu of the number of shares of Common Stock which the holders would otherwise have been entitled to receive, a number of shares of such other class or classes of stock equivalent to the number of shares of Common Stock that would have been subject to receipt by the holders upon conversion of the Preferred Stock immediately before that change.

(iv) *Reorganizations, Mergers or Consolidations.* If at any time or from time to time, there is a capital reorganization of the Common Stock or the merger or consolidation of the Company with or into another corporation or another entity or person (other than an Acquisition or Asset Transfer as defined in Subsection 5(c) or a recapitalization, subdivision, combination, reclassification, exchange or substitution of shares provided for elsewhere in this Section 6), as a part of such capital reorganization, merger or consolidation, provision shall be made so that the holders of the Preferred Stock shall thereafter be entitled to receive upon conversion of the Preferred Stock held by them the number of shares of stock or other securities or property of the Company to which a holder of the number of shares of

Common Stock deliverable upon conversion would have been entitled on such capital reorganization, merger or consolidation. In any such case, appropriate adjustment shall be made in the application of the provisions of this Section 6 with respect to the rights of the holders of Preferred Stock after the capital reorganization, merger or consolidation to the end that the provisions of this Section 6 (including adjustment of the Conversion Price then in effect and the number of shares issuable upon conversion of the Preferred Stock) shall be applicable after that event and be as nearly equivalent as practicable.

(f) *No Impairment.* The Company will not, by amendment of its Certificate of Incorporation or through any reorganization, recapitalization, transfer of assets, merger, consolidation, 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 Company but will at all times in good faith assist in the carrying out of all the provisions of this Section 6 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.

(g) *Certificate as to Adjustments.* Upon the occurrence of each adjustment or readjustment of any Conversion Price pursuant to this Section 6, the Company at its expense shall promptly compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of Preferred Stock a certificate setting forth such adjustment or readjustment and showing in detail the facts upon which such adjustment or readjustment is based. The Company shall, upon the written request at any time of any holder of Preferred Stock, furnish or cause to be furnished to such holder a like certificate setting forth (i) such adjustments and readjustments, (ii) the Conversion Prices at the time in effect, and (iii) the number of shares of Common Stock and the amount, if any, of other property which at the time would be received upon the conversion of Preferred Stock.

(h) *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 then outstanding shares of the Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the 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, including without limitation using its best efforts to obtain the requisite stockholder approval for any necessary amendment to this Certificate of Incorporation.

7. Voting.

(a) *Generally.* Except as otherwise required by law, each holder of any shares of Common Stock issued and outstanding shall have one vote for each outstanding share of Common Stock held. Except as set forth in Subsection 7(d) hereof, and otherwise as required by law, each holder of any shares of Preferred Stock issued and outstanding shall be entitled to the number of votes equal to the number of shares of Common Stock into which such respective

shares of Preferred Stock could be converted, as adjusted from time to time in accordance with Section 6 hereof, at the record date for determination of the stockholders entitled to vote on such matters, or, if no such record date is established, at the date such vote is taken or any written consent of stockholders is solicited, such votes to be counted together with all other shares of stock of this Company having general voting power and not separately as a class. Fractional votes shall not however, be permitted and any fractional voting rights resulting from the above formula (after aggregating all shares into which shares of Preferred Stock held by each holder could be converted) shall be rounded to the nearest whole number (one-half and greater being rounded upward). Holders of Common Stock and Preferred Stock shall be entitled to notice of any stockholders' meeting in accordance with the Bylaws of this Company. Subject to the requirements of Section 8(b)(vi), the number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares of Common Stock then outstanding) by an affirmative vote of the holders of a majority of the outstanding stock of the Corporation, voting as a single class. All holders of Preferred Stock shall be entitled to vote with the holders of Common Stock on all matters submitted to a vote of the stockholders, except those required hereunder or by law to be submitted to a class vote.

(b) *Election of Series BB Preferred Director by Series BB Preferred Stockholders.* For so long as at least 100,000 shares of Series BB Preferred Stock (as adjusted for any stock splits, stock dividends, recapitalizations, reverse stock splits, combinations or the like) remain outstanding, the holders of Series BB Preferred Stock (voting together as a separate series, and on an as-converted basis) shall be entitled to elect three (3) directors of the Company (the "Series BB Preferred Director") at each annual or special election of directors.

(c) *Election of Common Director by Common Stockholders.* The holders of the outstanding Common Stock (voting separately as a class) shall be entitled to elect one (1) director of the Company (the "Common Director") at each annual or special meeting of the stockholders for the purpose of electing directors or pursuant to each consent of this Company's stockholders for the election of directors; *provided that* such Common Director shall be whomever is elected by the Board of Directors from time to time to the office of Chief Executive Officer of the Company, duly elected in accordance with the Bylaws of the Company.

(d) *Election of Joint Director by Stockholders.* The holders of the outstanding Common Stock and Preferred Stock (voting together as a single class on an as converted to Common Stock basis) shall be entitled to elect one (1) director of the Company (the "Joint Director") at each annual or special meeting of the stockholders for the purpose of electing directors or pursuant to each consent of this Company's stockholders for the election of directors; *provided that* such director is independent and is mutually acceptable to a majority of the members of the Board of Directors.

(e) *Vacancy.* In the case of any vacancy in the office of a director occurring among the directors so elected by the holders of a class of stock pursuant to Subsection 7(b), (c), (d) or (e) hereof, the remaining directors so elected by that class may, by affirmative vote (or the remaining director so elected if there be but one, or if there are no such directors remaining, by vote of the holders of a majority of the shares of that class or series), elect a successor or successors to hold office for the unexpired term of the director or directors whose place or places shall be vacant.

(f) *Removal.* Any director who was elected by a specified class or classes of stock or series thereof may be removed during his or her term of office, either for or without cause, by, and only by, the affirmative vote of a majority of the holders of the shares of the class or classes of stock or series thereof that initially elected such director. Such vote may be given at a special meeting of such stockholders duly called or by an action by written consent for that purpose.

8. Protective Provisions.

(a) *No Series Voting.* Other than as provided herein or by law, there shall be no voting by a series of the Preferred Stock as a separate class.

(b) *Approval by Series BB Preferred Stock.* For so long as 100,000 shares (subject to appropriate adjustment for any Recapitalization) of the Series BB Preferred Stock shall be issued and outstanding, the Company shall not, either directly or by amendment, merger, consolidation, or otherwise, without first obtaining the approval (by vote or written consent as provided by law) of the holders of not less than 66 2/3% of the voting power of the shares of the Series BB Preferred Stock then outstanding:

(i) waive, alter, amend or repeal any provision of, or add any provision to, the Company's Restated Certificate or Bylaws if such action would adversely alter or affect the preferences, rights, privileges, or powers of, or the restrictions provided for the benefit of, the Series BB Preferred Stock;

(ii) sell, license, convey, or otherwise dispose of all or substantially all of the assets, intellectual property or business of the Company or any subsidiary of the Company; or merge itself or any subsidiary of the Company into or consolidate itself or any subsidiary of the Company with any other corporation (other than a wholly-owned subsidiary corporation); or effect a reorganization or conversion of the Company or any subsidiary of the Company; or effect any transaction or series of related transactions in which more than fifty percent (50%) of the voting power of the Company is disposed of; or cause any subsidiary of the Company to be less than wholly-owned by the Company;

(iii) liquidate, dissolve or wind-up the Company;

(iv) declare or pay any dividend with respect to Common Stock or Preferred Stock ranking junior to the Series BB Preferred Stock in right of redemption, liquidation preference, voting or dividends;

(v) redeem, repurchase or otherwise reacquire any shares of Common Stock or Preferred Stock ranking junior to the Series BB Preferred Stock in right of redemption, liquidation preference, voting or dividends, other than in connection with agreements with service providers providing for such repurchase upon the termination of services rendered thereunder approved by the Board of Directors;

(vi) increase or decrease (other than by redemption or conversion) the authorized number of shares of Common Stock or Preferred Stock of the Company;

(vii) sell shares of Series BB Preferred Stock (other than pursuant to the terms and conditions of the Series BB Preferred Stock Purchase Agreement, as it may hereafter be amended from time to time);

(viii) authorize or designate, whether by reclassification or otherwise, any new class or series of stock or any other securities convertible into equity securities of the Company ranking senior to or *pari passu* with the Series BB Preferred Stock in right of redemption, liquidation preference, voting, dividends or otherwise;

(ix) create any subsidiary or sell or issue equity interests in, or permit any subsidiary of the Company to sell or issue any equity interests in, any subsidiary of the Company to any party other than the Company;

(x) change the number of directors that will constitute the whole Board of Directors of the Company to a number other than five (5);

(xi) effect a reclassification or recapitalization of the outstanding capital stock of the Company

(xii) materially change the Company's principal line of business or business model;

(xiii) permit the Company to assume more than \$500,000 in indebtedness on an individual or cumulative basis;

(xiv) authorize the Company to seek bankruptcy protection, make an assignment for the benefit of creditors, or otherwise attempt a similar restructuring of the Company's obligations;

(xv) authorize the Company to enter into or amend any material contract with any officer, director, stockholder or other affiliate of the Company;

(xvi) take any action that results in any acquisition of the stock or all, or substantially all, of the assets of any other entity for a purchase price of \$1,000,000 or more;

(xvii) pledge all or substantially all of the assets of the Company; or

(xviii) amend this Subsection 8(b).

9. **Notices.** Any notice, demand, offer, request or other communication required or permitted to be given by the Company to the holders of Preferred Stock pursuant to this Article IV shall be in writing and shall be deemed effectively given the earlier of (i) when received, (ii) when delivered personally, (iii) one (1) business day after being delivered by facsimile or electronic mail (with receipt of appropriate confirmation), (iv) one (1) business day after being deposited with an overnight courier service or (v) four (4) days after being deposited in the U.S. mail, First Class with postage prepaid, and addressed to each holder of record at such holder's address appearing on the books of the Company.

10. **Status of Converted Stock.** In case any shares of Preferred Stock shall be converted pursuant to **Section 6** hereof, the shares so converted shall be cancelled and shall not be issuable by the Company. This Restated Certificate shall be appropriately amended to effect the corresponding reduction in the Company's authorized capital stock.

11. **Redemption.**

(a) **Reserved.**

(b) ***Preferred Stock***

(i) **Redemption Date and Price.** At any time after the fifth anniversary of the effective date of this Restated Certificate, but after receipt by the Company of a written request (a "**Redemption Election**") from the holders of not less than eighty percent (80%) of the then outstanding Preferred Stock that all of the shares of such series be redeemed, the Company shall, to the extent it may lawfully do so, redeem, in accordance with the procedures set forth in this **Section 11(b)**, the number of shares specified in the Redemption Election in three equal annual installments, commencing on a date within 30 days of the date of the Redemption Election and continuing thereafter on each of the two following anniversaries of such date (each, a "**Redemption Date**"), by paying in cash therefor, a sum per share equal to the applicable Original Issue Price per share of such Preferred Stock (as adjusted for stock splits, stock dividends, reclassifications or the like) plus all declared but unpaid dividends on such shares (the "**Redemption Price**").

(ii) **Number of Shares.** The number of shares of Preferred Stock that the Company shall be required under this **Section 11(b)** to redeem on any one Redemption Date shall be equal to the amount determined by dividing (i) the aggregate number of shares of such series outstanding immediately prior to such Redemption Date by (ii) the number of remaining Redemption Dates (including the Redemption Date to which such calculation applies). Any redemption effected pursuant to this **Section 11(b)** shall be made on a pro rata basis among the holders of the applicable series of Preferred Stock based upon the total Redemption Price applicable to each holder's shares of the applicable series of Preferred Stock.

(iii) **Procedure.** At least 15 but no more than 30 days prior to each Redemption Date, written notice shall be mailed, first class postage prepaid, to each holder of record (at the close of business on the business day next preceding the day on which notice is given) of the applicable series of Preferred Stock to be redeemed, at the address last shown on the records of the Company for such holder, notifying such holder of the redemption to be effected, specifying the number of shares to be redeemed from such holder, the Redemption Date, the applicable Redemption Price, the place at which payment may be obtained and calling upon such holder to surrender to the Company, in the manner and at the place designated, such holder's certificate or certificates representing the shares to be redeemed (the "**Redemption Notice**"). Except as provided in **Section 11(b)(iv)**, on or after the Redemption Date, each holder of Preferred Stock to be redeemed shall surrender to the Company the certificate or certificates representing such shares, in the manner and at the place designated in the Redemption Notice, and thereupon the applicable Redemption Price of such shares shall be payable to the order of the person whose name appears on such certificate or certificates as the owner thereof and each

surrendered certificate shall be cancelled. In the event less than all the shares represented by any such certificate are redeemed, a new certificate shall be issued representing the unredeemed shares.

(iv) Effect of Redemption: Insufficient Funds. From and after a Redemption Date, unless there shall have been a default in payment of the Redemption Price, all rights of the holders of shares of Preferred Stock designated for redemption in the Redemption Notice relating to such Redemption Date (except the right to receive the applicable Redemption Price without interest upon surrender of their certificate or certificates) shall cease with respect to such shares, and such shares shall not thereafter be transferred on the books of the Company or be deemed to be outstanding for any purpose whatsoever. If the funds of the Company legally available for redemption of shares of Preferred Stock on any Redemption Date are insufficient to redeem the total number of shares of Preferred Stock to be redeemed on such date, those funds which are legally available will be used to redeem the maximum possible number of such shares ratably among the holders of such shares to be redeemed based upon the total Redemption Price applicable to each such holder's shares of Preferred Stock which are subject to redemption on such Redemption Date. The shares of Preferred Stock not redeemed shall remain outstanding and entitled to all the rights and preferences provided herein. At any time thereafter when additional funds of the Company are legally available for the redemption of shares of Preferred Stock, such funds will immediately be used to redeem the balance of the shares which the Company has become obliged to redeem on any Redemption Date but which it has not redeemed.

10. **Residual Rights.** All rights accruing to the outstanding shares of this Company not expressly provided for to the contrary herein shall be vested in the Common Stock.

ARTICLE V

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors of the Company is expressly authorized to make, alter, amend or repeal the Bylaws of the Company, but the stockholders may make additional Bylaws and may alter or repeal any Bylaw whether adopted by them or otherwise.

ARTICLE VI

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

ARTICLE VII

The number of directors that will constitute the whole Board of Directors of the Company shall be determined in the manner and set forth in the Bylaws of the Company, subject, however to the provisions of Article IV, Section 7 above.

ARTICLE VIII

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 provisions

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

ARTICLE IX

To the fullest extent permitted by the Delaware General Corporation Law or any other applicable law as now in effect or as it may hereafter be amended, a director of the Company shall not be personally liable to the Company or its stockholders for monetary damages for any action taken, or any failure to take any action, as a director.

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 or she or his or her testator or intestate is or was a director or officer of the Company or any predecessor of the Company or serves or served any other enterprise as a director, officer, employee or agent at the request of the Company or any predecessor to the Company.

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

ARTICLE X

Except as provided in Article IX above, the Company reserves the right to amend, alter, change or repeal any provision contained in this Restated Certificate, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

ARTICLE XI

The Company is to have perpetual existence.

ARTICLE XII

Whenever a compromise or arrangement is proposed between this Company and its creditors or any class of them and/or between this Company 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 Company or of any creditor or stockholder thereof or on the application of any receiver or receivers appointed for this Company under the provisions of Section 291 of Title 8 of the Delaware Code or on the application of trustees in dissolution or of any receiver or receivers appointed for this Company under the provisions of Section 279 of Title 8 of the Delaware Code, order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Company, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths (3/4) in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of this Company, as the case may be, agree to any compromise or arrangement and to any

reorganization of this Company as 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 Company, as the case may be, and also on this Company.

IN WITNESS WHEREOF, Arcwave, Inc. has caused this Restated Certificate to be signed by the Chief Executive Officer of the Company as of June 16, 2006.

ARCWAVE, INC.

By: /s/ WILLIAM SICKLER

William Sickler

Chief Executive Officer