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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
WASHINGTON, D.C. 20549

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**FORM 8-K**

**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Date of Report (Date of earliest event reported): **November 8, 2005** (November 7, 2005)

**Momenta Pharmaceuticals, Inc.**

(Exact Name of Company as Specified in Charter)

**Delaware**  
(State or Other Jurisdiction of Incorporation)

**000-50797**  
(Commission File Number)

**04-3561634**  
(IRS Employer Identification No.)

**675 West Kendall Street, Cambridge, MA**  
(Address of Principal Executive Offices)

**02142**  
(Zip Code)

Company's telephone number, including area code: **(617) 491-9700**

(Former Name or Former Address, if Changed Since Last Report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the Company under any of the following provisions (*see* General Instruction A.2. below):

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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**Item 1.01. Entry into a Material Definitive Agreement.**

Effective November 7, 2005, the Board of Directors (the "Board") of Momenta Pharmaceuticals, Inc. (the "Company") declared a dividend of one Right (each, a "Right") for each outstanding share of the Company's common stock, \$0.0001 par value per share ("Common Stock"), to stockholders of record at the close of business on November 18, 2005 (the "Record Date"). Each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series A Junior Participating Preferred Stock, \$0.01 par value per share ("Series A Junior Preferred Stock"), at a purchase price of \$125 (the "Purchase Price") in cash, subject to adjustment. The description and terms of the Rights are set forth in a Rights Agreement dated as of November 7, 2005 (the "Rights Agreement") between the Company and American Stock Transfer & Trust Company, as Rights Agent.

Initially, the Rights are not exercisable and will be attached to all certificates representing outstanding shares of Common Stock, and no separate Rights Certificates will be distributed. The Rights will separate from the Common Stock, and the distribution date (the "Distribution Date") will occur, upon the earlier of (i) 10 business days following the later of (a) the first date of a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired, or obtained the right to acquire, beneficial ownership of 20% or more of the outstanding shares of Common Stock or (b) the first date on which an executive officer of the Company has actual knowledge that an Acquiring Person has become such (the "Stock Acquisition Date") or (ii) 10 business days following the commencement of a tender offer or exchange offer that would result in a person or group beneficially owning 20% or more of the outstanding shares of Common Stock. The Distribution Date may be deferred in circumstances determined by the Board. In addition, certain inadvertent acquisitions will not trigger the occurrence of the Distribution Date. Until the Distribution Date (or earlier redemption or expiration of the Rights), (i) the Rights will be evidenced by the Common Stock certificates outstanding on the Record Date, together with a Summary of Rights to be mailed to record holders, or by new Common Stock certificates issued after the Record Date which contain a notation incorporating the Rights Agreement by reference, (ii) the Rights will be transferred with and only with such Common Stock certificates, and (iii) the surrender for transfer of any certificates for Common Stock outstanding (with or without a copy of the Summary of Rights or such notation) will also constitute the transfer of the Rights associated with the Common Stock represented by such certificate.

The Rights are not exercisable until the Distribution Date and will expire upon the close of business on November 6, 2008 (the "Final Expiration Date") unless earlier redeemed or exchanged as described below. As soon as practicable after the Distribution Date, separate Rights Certificates will be mailed to holders of record of the Common Stock as of the close of business on the Distribution Date and, thereafter, the separate Rights Certificates alone will represent the Rights. Except as otherwise determined by the Board, and except for shares of Common Stock issued upon exercise, conversion or exchange of then outstanding options, convertible or exchangeable securities or other contingent obligations to issue shares or pursuant to any employee benefit plan or arrangement, only shares of Common Stock issued prior to the Distribution Date will be issued with Rights.

In the event that any Person becomes an Acquiring Person, unless the event causing the 20% threshold to be crossed is a Permitted Offer (as defined in the Rights Agreement), then, promptly following the first occurrence of such event, each holder of a Right (except as provided below and in Section 7(e) of the Rights Agreement) shall thereafter have the right to receive, upon exercise, that number of shares of Common Stock of the Company (or, in certain circumstances, cash, property or other securities of the Company) which equals the exercise price of the Right divided by 50% of the current market price (as defined in the Rights Agreement) per share of Common Stock at the date of the occurrence of such event. However, Rights are not exercisable following such event until such time as the Rights are no longer redeemable by the Company as described below. Notwithstanding any of the foregoing, following the occurrence of such event, all Rights that are, or (under certain circumstances specified in the Rights Agreement) were, beneficially owned by any Acquiring Person will be null and void. The event summarized in this paragraph is referred to as a "Section 11(a)(ii) Event."

For example, at an exercise price of \$125 per Right, each Right not owned by an Acquiring Person (or by certain related parties) following a Section 11(a)(ii) Event would entitle its holder to purchase for \$125 such number of shares of Common Stock (or other consideration, as noted above) as equals \$125 divided by one-half of the current market price (as defined in the Rights Agreement) of the Common Stock. Assuming that the Common Stock had a market price of \$25 per share at such time, the holder of each valid Right would be entitled to purchase ten shares of Common Stock, having a market value of  $10 \times \$25$ , or \$250, for \$125.

In the event that, at any time after any Person becomes an Acquiring Person, (i) the Company is consolidated with, or merged with and into, another entity and the Company is not the surviving entity of such consolidation or merger (other than a consolidation or merger which follows a Permitted Offer) or if the Company is the surviving entity, but shares of its outstanding Common Stock are changed or exchanged for stock or securities (of any other person) or cash or any other property, or (ii) more than 50% of the Company's assets or earning power is sold or transferred, each holder of a Right (except Rights which previously have been voided as set forth above) shall thereafter have the right to receive, upon exercise, that number of shares of common stock of the acquiring company which equals the exercise price of the Right divided by 50% of the current market price (as defined in the Rights Agreement) of such common stock at the date of the occurrence of the event. The events summarized in this paragraph are referred to as "Section 13 Events." A Section 11(a)(ii) Event and Section 13 Events are collectively referred to as "Triggering Events."

For example, at an exercise price of \$125 per Right, each valid Right following a Section 13 Event would entitle its holder to purchase for \$125 such number of shares of common stock of the acquiring company as equals \$125 divided by one-half of the current market price (as defined in the Rights Agreement) of such common stock. Assuming that such common stock had a market price of \$25 per share at such time, the holder of each valid Right would be entitled to purchase ten shares of common stock of the acquiring company, having a market value of  $10 \times \$25$ , or \$250, for \$125.

At any time after the occurrence of a Section 11(a)(ii) Event, when no person owns a majority of the Common Stock, the Board may exchange the Rights (other than Rights owned by

such Acquiring Person which have become void), in whole or in part, at an exchange ratio of one share of Common Stock, or one one-thousandth of a share of Series A Junior Preferred Stock (or of a share of a class or series of the Company's preferred stock having equivalent rights, preferences and privileges), per Right (subject to adjustment).

The Purchase Price payable, and the number of units of Series A Junior Preferred Stock or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution (i) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Series A Junior Preferred Stock, (ii) if holders of the Series A Junior Preferred Stock are granted certain rights or warrants to subscribe for Series A Junior Preferred Stock or convertible securities at less than the then-current market price (as defined in the Rights Agreement) of the Series A Junior Preferred Stock, or (iii) upon the distribution to holders of the Series A Junior Preferred Stock of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings) or of subscription rights or warrants (other than those referred to above). The number of Rights associated with each share of Common Stock is also subject to adjustment in the event of a stock split of the Common Stock or a stock dividend on the Common Stock payable in Common Stock or subdivisions, consolidations or combinations of the Common Stock occurring, in any such case, prior to the Distribution Date.

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments amount to at least 1% of the Purchase Price. No fractional shares of Series A Junior Preferred Stock (other than fractions which are integral multiples of one one-thousandth of a share of Series A Junior Preferred Stock) will be issued and, in lieu thereof, an adjustment in cash will be made based on the market price of the Series A Junior Preferred Stock on the last trading date prior to the date of exercise.

Series A Junior Preferred Stock purchasable upon exercise of the Rights will not be redeemable. Each share of Series A Junior Preferred Stock will be entitled to receive, when, as and if declared by the Board, a minimum preferential quarterly dividend payment of \$10 per share or, if greater, an aggregate dividend of 1,000 times the dividend declared per share of Common Stock. In the event of liquidation, the holders of the Series A Junior Preferred Stock will be entitled to a minimum preferential liquidation payment of \$1,000 per share, plus an amount equal to accrued and unpaid dividends, and will be entitled to an aggregate payment of 1,000 times the payment made per share of Common Stock. Each share of Series A Junior Preferred Stock will have 1,000 votes, voting together with the Common Stock. In the event of any merger, consolidation or other transaction in which Common Stock is changed or exchanged, each share of Series A Junior Preferred Stock will be entitled to receive 1,000 times the amount received per share of Common Stock. These rights are protected by customary antidilution provisions. Because of the nature of the Series A Junior Preferred Stock's dividend, liquidation and voting rights, the value of one one-thousandth of a share of Series A Junior Preferred Stock purchasable upon exercise of each Right should approximate the value of one share of Common Stock.

At any time prior to the earlier of the tenth Business Day (or such later date as may be determined by the Board) after the Stock Acquisition Date, the Company may redeem the Rights in whole, but not in part, at a price of \$0.001 per Right (the "Redemption Price"), payable in cash

or stock. Immediately upon the redemption of the Rights or such earlier time as established by the Board in the resolution ordering the redemption of the Rights, the Rights will terminate and the only right of the holders of Rights will be to receive the Redemption Price.

Until a Right is exercised, the holder thereof, as such, will have no rights as a stockholder of the Company, including, without limitation, the right to vote or to receive dividends. Although the distribution of the Rights should not be taxable to stockholders or to the Company, stockholders may, depending upon the circumstances, recognize taxable income in the event that the Rights become exercisable for Common Stock (or other consideration) of the Company or for common stock of the acquiring company as set forth above.

Any provision of the Rights Agreement, other than the redemption price, may be amended by the Board prior to such time as the Rights are no longer redeemable. Once the Rights are no longer redeemable, the Board's authority to amend the Rights is limited to correcting ambiguities or defective or inconsistent provisions in a manner that does not adversely affect the interest of holders of Rights.

The Rights are intended to protect the stockholders of the Company in the event of an unfair or coercive offer to acquire the Company and to provide the Board with adequate time to evaluate unsolicited offers. The Rights may have anti-takeover effects. The Rights will cause substantial dilution to a person or group that attempts to acquire the Company without conditioning the offer on a substantial number of Rights being acquired. The Rights, however, should not affect any prospective offeror willing to make an offer at a fair price and otherwise in the best interests of the Company and its stockholders, as determined by the Board. The Rights should not interfere with any merger or other business combination approved by the Board. The following summary description of the Rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, which is attached as Exhibit 4.1 hereto and incorporated herein by reference.

**Item 3.03. Material Modification to Rights of Security Holders.**

See the description set forth under "Item 1.01. Entry into a Material Definitive Agreement," which is incorporated into this Item 3.03 by reference.

**Item 5.03. Amendments to Articles of Incorporation or Bylaws; Change in Fiscal Year.**

Effective November 8, 2005, the Company filed a Certificate of Designations of Series A Junior Participating Preferred Stock (the "Certificate of Designations") with the Secretary of State of the State of Delaware. The Board authorized the filing of the Certificate of Designations pursuant to resolutions adopted by the Board at a meeting duly called and held on October 31, 2005. Pursuant to the Certificate of Designations, the Board designated 100,000 shares of the Company's Preferred Stock, \$.01 par value per share, as Series A Junior Participating Preferred Stock in connection with the Rights Agreement. See the description set forth under "Item 1.01. Entry into a Material Definitive

Agreement” for a more complete description of the rights and preferences of the Series A Junior Participating Preferred Stock. The description of the Certificate of Designations is qualified in its entirety by reference to the Certificate of Designations, which is attached as Exhibit 3.1 hereto and incorporated into this Item 5.03 by reference.

**Item 9.01. Financial Statements and Exhibits.**

(d) Exhibits

See Exhibit Index attached hereto.

**SIGNATURE**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Company has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

MOMENTA PHARMACEUTICALS, INC.

Date: November 8, 2005

By: /s/ Richard P. Shea  
Richard P. Shea  
Chief Financial Officer

EXHIBIT INDEX

<b>Exhibit No.</b>	<b>Description</b>
Exhibit 3.1	Certificate of Designations of Series A Junior Participating Preferred Stock of the Company.
Exhibit 4.1	Rights Agreement dated as of November 7, 2005 between the Company and American Stock Transfer & Trust Company, as Rights Agent, which includes as Exhibit A the Form of Certificate of Designations of Series A Junior Participating Preferred Stock, as Exhibit B the Form of Rights Certificate and as Exhibit C the Summary of Rights to Purchase Preferred Stock.

CERTIFICATE OF DESIGNATIONS  
OF  
SERIES A JUNIOR PARTICIPATING PREFERRED STOCK  
OF  
MOMENTA PHARMACEUTICALS, INC.

Momenta Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware (hereinafter called the "Corporation"), hereby certifies that the following resolution was adopted by the Board of Directors of the Corporation at a meeting duly called and held on October 31, 2005:

RESOLVED: That pursuant to the authority granted to and vested in the Board of Directors of the Corporation (hereinafter called the "Board") in accordance with the provisions of the Certificate of Incorporation, as amended, the Board hereby creates a series of Preferred Stock, \$.01 par value per share, of the Corporation and hereby states the designation and number of shares, and fixes the relative rights, preferences and limitations thereof as follows:

**Series A Junior Participating Preferred Stock:**

Section 1. Designation and Amount. The shares of such series shall be designated as "Series A Junior Participating Preferred Stock" (the "Series A Preferred Stock") and the number of shares constituting the Series A Preferred Stock shall be one hundred thousand (100,000). Such number of shares may be increased or decreased by resolution of the Board prior to issuance; provided, that no decrease shall reduce the number of shares of Series A Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series A Preferred Stock.

Section 2. Dividends and Distributions.

(A) Subject to the rights of the holders of any shares of any series of Preferred Stock (or any similar stock) ranking prior and superior to the Series A Preferred Stock with respect to dividends, the holders of shares of Series A Preferred Stock, in preference to the holders of Common Stock, par value \$.0001 per share (the "Common Stock"), of the Corporation, and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board out of funds of the Corporation legally available for the payment of dividends, quarterly dividends

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payable in cash on the last day of each fiscal quarter of the Corporation in each year (each such date being referred to herein as a “Quarterly Dividend Payment Date”), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$10 or (b) subject to the provision for adjustment hereinafter set forth, 1,000 times the aggregate per share amount of all cash dividends, and 1,000 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the first sentence of this Section 2(A) shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

(B) The Corporation shall declare a dividend or distribution on the Series A Preferred Stock as provided in paragraph (A) of this Section immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock) and the Corporation shall pay such dividend or distribution on the Series A Preferred Stock before the dividend or distribution declared on the Common Stock is paid or set apart; provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$10 per share on the Series A Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of

issue of such shares, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board may fix a record date for the determination of holders of shares of Series A Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.

Section 3. Voting Rights. The holders of shares of Series A Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series A Preferred Stock shall entitle the holder thereof to 1,000 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the number of votes per share to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the number of votes per share to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

(B) Except as otherwise provided herein, in the Certificate of Incorporation or by law, the holders of shares of Series A Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) (i) If at any time dividends on any Series A Preferred Stock shall be in arrears in an amount equal to six quarterly dividends thereon, the holders of the Series A Preferred Stock, voting as a separate series from all other series of Preferred Stock and classes of capital stock, shall be entitled to elect two members of the Board in addition to any Directors elected by any other series, class or classes of securities and the authorized number of Directors will automatically be increased by two. Promptly thereafter, the Board of the Corporation shall, as soon as may be practicable, call a special meeting of holders of Series A Preferred Stock for the purpose of electing such members of the Board. Such special meeting shall in any event be held within 45 days of the occurrence of such arrearage.

(ii) During any period when the holders of Series A Preferred Stock, voting as a separate series, shall be entitled and shall have exercised their right to elect two Directors, then, and during such time as such right continues, (a) the then authorized number of Directors shall be increased by two, and the holders of Series A Preferred Stock, voting as a separate series, shall be entitled to elect the additional Directors so provided for, and (b) each such additional Director shall not be a member of any existing class of the Board, but shall serve until the next annual meeting of stockholders for the election of Directors, or until his successor shall be elected and shall qualify, or until his right to hold such office terminates pursuant to the provisions of this Section 3(C).

(iii) A Director elected pursuant to the terms hereof may be removed with or without cause by the holders of Series A Preferred Stock entitled to vote in an election of such Director.

(iv) If, during any interval between annual meetings of stockholders for the election of Directors and while the holders of Series A Preferred Stock shall be entitled to elect two Directors, there is no such Director in office by reason of resignation, death or removal, then, promptly thereafter, the Board shall call a special meeting of the holders of Series A Preferred Stock for the purpose of filling such vacancy and such vacancy shall be filled at such special meeting. Such special meeting shall in any event be held within 45 days of the occurrence of such vacancy.

(v) At such time as the arrearage is fully cured, and all dividends accumulated and unpaid on any shares of Series A Preferred Stock outstanding are paid, and, in addition thereto, at least one regular dividend has been paid subsequent to curing such arrearage, the term of office of any Director elected pursuant to this Section 3(C), or his successor, shall automatically terminate, and the authorized number of Directors shall automatically decrease by two, the rights of the holders of the shares of the Series A Preferred Stock to vote as provided in this Section 3(C) shall cease, subject to renewal from time to time upon the same terms and conditions, and the holders of shares of the Series A Preferred Stock shall have only the limited voting rights elsewhere herein set forth.

(D) Except as set forth herein, or as otherwise provided by law, holders of Series A Preferred Stock shall have no special voting rights and their consent shall not be required (except

to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

Section 4. Certain Restrictions.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock;

(ii) declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except dividends paid ratably on the Series A Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Preferred Stock; or

(iv) redeem or purchase or otherwise acquire for consideration any shares of Series A Preferred Stock, or any shares of stock ranking on a parity with the Series A Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board) to all holders of such shares upon such terms as the Board, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. Reacquired Shares. Any shares of Series A Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock subject to the conditions and restrictions on issuance set forth herein, in the

Certificate of Incorporation, or in any other Certificate of Designations creating a series of Preferred Stock or any similar stock or as otherwise required by law.

Section 6. Liquidation, Dissolution or Winding Up.

(A) Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock unless, prior thereto, the holders of shares of Series A Preferred Stock shall have received \$1,000 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, provided that the holders of shares of Series A Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1,000 times the aggregate amount to be distributed per share to holders of shares of Common Stock, or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except distributions made ratably on the Series A Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up.

(B) Neither the consolidation, merger or other business combination of the Corporation with or into any other corporation nor the sale, lease, exchange or conveyance of all or any part of the property, assets or business of the Corporation shall be deemed to be a liquidation, dissolution or winding up of the Corporation for purposes of this Section 6.

(C) In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of paragraph (A) of this Section 6 shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of paragraph (A) of this Section 6 shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

Section 7. Consolidation, Merger, etc. Notwithstanding anything to the contrary contained herein, in case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series A Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1,000 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the amount set forth in the first sentence of this Section 7 with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

Section 8. No Redemption. The shares of Series A Preferred Stock shall not be redeemable.

Section 9. Rank. The Series A Preferred Stock shall rank, with respect to the payment of dividends and the distribution of assets, junior to all series of any other class of the Preferred Stock issued either before or after the issuance of the Series A Preferred Stock, unless the terms of any such series shall provide otherwise.

Section 10. Amendment. At such time as any shares of Series A Preferred Stock are outstanding, the Certificate of Incorporation, as amended, of the Corporation shall not be amended in any manner which would materially alter or change the powers, preferences or special rights of the Series A Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series A Preferred Stock, voting together as a single class.

Section 11. Fractional Shares. Series A Preferred Stock may be issued in fractions of a share which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and have the benefit of all other rights of holders of Series A Preferred Stock.

IN WITNESS WHEREOF, this Certificate of Designations is executed on behalf of the Corporation by its Chief Executive Officer this 8<sup>th</sup> day of November, 2005.

MOMENTA PHARMACEUTICALS, INC.

By: /s/ Alan L. Crane  
Name: Alan L. Crane  
Title: President and Chief Executive Officer

**RIGHTS AGREEMENT**

between

**MOMENTA PHARMACEUTICALS, INC.**

and

**AMERICAN STOCK TRANSFER & TRUST COMPANY**

**as Rights Agent**

**Dated as of November 7, 2005**

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## RIGHTS AGREEMENT

RIGHTS AGREEMENT, dated as of November 7, 2005 (the "Agreement"), between Momenta Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and American Stock Transfer & Trust Company, as Rights Agent (the "Rights Agent").

### WITNESSETH

WHEREAS, on November 7, 2005 the Board of Directors of the Company (the "Board") authorized and declared a dividend distribution of one Right for each share of Common Stock (as hereinafter defined) of the Company outstanding at the close of business on November 18, 2005 (the "Record Date"), and authorized the issuance of one Right (as such number may hereinafter be adjusted pursuant to the provisions of Section 11(i) or Section 11(p) hereof) for each share of Common Stock of the Company issued between the Record Date (whether originally issued or delivered from the Company's treasury) and the earlier of the Distribution Date or the Expiration Date, each Right initially representing the right to purchase one one-thousandth of a share of Series A Junior Participating Preferred Stock of the Company having the rights, powers and preferences set forth in the form of Certificate of Designations attached hereto as Exhibit A, upon the terms and subject to the conditions hereinafter set forth (the "Rights");

NOW, THEREFORE, in consideration of the premises and the mutual agreements herein set forth, the parties hereby agree as follows:

Section 1. Certain Definitions. For purposes of this Agreement, the following terms have the meanings indicated:

(a) "Acquiring Person" shall mean any Person who or which, together with all Affiliates and Associates of such Person, shall be the Beneficial Owner of 20% or more of the shares of Common Stock then outstanding, but shall not include (i) the Company, (ii) any Subsidiary of the Company, (iii) any employee benefit plan of the Company or of any Subsidiary of the Company or (iv) any Person organized, appointed or established by the Company for or pursuant to the terms of any such plan. Notwithstanding the foregoing, (x) no Person shall become an "Acquiring Person" as the result of an acquisition of Common Stock by the Company which, by reducing the number of shares outstanding, increases the proportionate number of shares beneficially owned by such Person to 20% or more of the shares of Common Stock of the Company then outstanding; provided, however that if a Person shall become the Beneficial Owner of 20% or more of the shares of Common Stock of the Company then outstanding as the result of an acquisition of Common Stock by the Company and shall, following written notice from, or public disclosure by the Company of such share purchases by the Company become the Beneficial Owner of any additional Common Stock of the Company and shall then beneficially own 20% or more of the shares of Common Stock then outstanding, then such Person shall be deemed to be an "Acquiring Person" and (y) if the Board determines in good faith that a Person who would otherwise be an "Acquiring Person," as defined pursuant to the foregoing provisions

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of this paragraph (a), has become such inadvertently, and such Person divests as promptly as practicable (as determined in good faith by the Board of Directors), but in any event within 15 Business Days, following receipt of written notice from the Company of such event, of Beneficial Ownership of a sufficient number of shares of Common Stock so that such Person would no longer be an “Acquiring Person,” as defined pursuant to the foregoing provisions of this paragraph (a), then such Person shall not be deemed to be an “Acquiring Person” for any purposes of this Agreement unless and until such Person shall again become an “Acquiring Person.”

(b) “Act” shall mean the Securities Act of 1933, as amended.

(c) “Affiliate” and “Associate” shall have the respective meanings ascribed to such terms in Rule 12b-2 of the General Rules and Regulations under the Securities Exchange Act of 1934, as amended (the “Exchange Act”) as in effect on the date of this Agreement.

(d) “Adjustment Shares” shall have the meaning set forth in Section 11(a)(ii).

(e) A Person shall be deemed the “Beneficial Owner” of, and shall be deemed to “beneficially own,” any securities:

(i) which such Person or any of such Person’s Affiliates or Associates, directly or indirectly, owns or has the right to acquire (whether such right is exercisable immediately or only after the passage of time) pursuant to any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities or agreements with or between Persons and the Company with respect to any other bona fide issuance of securities by the Company to such Persons for resale within 40 days, including without limitation pursuant to Section 4(2) of the Act or Rule 144A or Regulation S promulgated under the Act), whether or not in writing, or upon the exercise of conversion rights, exchange rights, other rights, warrants or options, or otherwise; provided, however, that a Person shall not be deemed the “Beneficial Owner” of, or to “beneficially own,” (A) securities tendered pursuant to a tender or exchange offer made by or on behalf of such Person or any of such Person’s Affiliates or Associates until such tendered securities are accepted for purchase or exchange, or (B) securities issuable upon exercise of Rights at any time prior to the occurrence of a Triggering Event, or (C) securities issuable upon exercise of Rights from and after the occurrence of a Triggering Event which Rights were acquired by such Person or any of such Person’s Affiliates or Associates prior to the Distribution Date or pursuant to Section 3(a) or Section 22 hereof (the “Original Rights”) or pursuant to Section 11(i) hereof in connection with an adjustment made with respect to any Original Rights;

(ii) which such Person or any of such Person’s Affiliates or Associates, directly or indirectly, has the right to vote or dispose of or has “beneficial ownership” of (as determined pursuant to Rule 13d-3 of the General Rules and Regulations under the Exchange Act, or any comparable or successor rule), including pursuant to any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities or agreements with or between Persons and the Company with respect to any other bona fide issuance of securities by

the Company to such Persons for resale within 40 days, including without limitation pursuant to Section 4(2) of the Act or Rule 144A or Regulation S promulgated under the Act), whether or not in writing; provided, however, that a Person shall not be deemed the "Beneficial Owner" of, or to "beneficially own," any security under this subparagraph (ii) as a result of an agreement, arrangement or understanding to vote such security if such agreement, arrangement or understanding: (A) arises solely from a revocable proxy or consent given in response to a public proxy or consent solicitation made pursuant to, and in accordance with, the applicable provisions of the General Rules and Regulations under the Exchange Act, and (B) is not then reportable by such Person on Schedule 13D under the Exchange Act (or any comparable or successor report); or

(iii) which are beneficially owned, directly or indirectly, by any other Person (or any Affiliate or Associate thereof) with which such Person (or any of such Person's Affiliates or Associates) has any agreement, arrangement or understanding (other than customary agreements with and between underwriters and selling group members with respect to a bona fide public offering of securities or agreements with or between Persons and the Company with respect to any other bona fide issuance of securities by the Company to such Persons for resale within 40 days, including without limitation pursuant to Section 4(2) of the Act or Rule 144A or Regulation S promulgated under the Act) whether or not in writing, for the purpose of acquiring, holding, voting (except pursuant to a revocable proxy or consent as described in the proviso to subparagraph (ii) of this paragraph (e)) or disposing of any voting securities of the Company.

For all purposes of this Agreement, any calculation of the number of shares of Common Stock outstanding at any particular time, including for purposes of determining the particular percentage of such outstanding shares of Common Stock of which any Person is the Beneficial Owner, shall be made in accordance with the last sentence of Rule 13d-3(d)(1)(i) of the General Rules and Regulations under the Exchange Act.

(f) "Board" shall have the meaning set forth in the WHEREAS clause at the beginning of this Agreement.

(g) "Business Day" shall mean any day other than a Saturday, Sunday or a day on which banking institutions in the state of New York are authorized or obligated by law or executive order to close.

(h) "Close of business" on any given date shall mean 5:00 p.m., Boston time, on such date; provided, however, that if such date is not a Business Day it shall mean 5:00 p.m., Boston time, on the next succeeding Business Day.

(i) "Common Stock" shall mean the common stock, \$.0001 par value, of the Company, except that "Common Stock" when used with reference to any Person other than the Company shall mean the capital stock of such Person with the greatest voting power, or the equity securities or other equity interest having power to control or direct the management, of such Person.

(j) "Common stock equivalents" shall have the meaning set forth in Section 11(a)(iii) hereof.

- (k) "Company" shall have the meaning set forth in the introductory paragraph hereof.
- (l) "Current market price" shall have the meaning set forth in Section 11(d)(i) hereof.
- (m) "Current Value" shall have the meaning set forth in Section 11(a)(iii) hereof.
- (n) "Distribution Date" shall have the meaning set forth in Section 3(a) hereof.
- (o) "Equivalent Preferred Stock" shall have the meaning set forth in Section 11(b) hereof.
- (p) "Exchange Act" shall have the meaning set forth in Section 1(c) hereof.
- (q) "Exchange Ratio" shall have the meaning set forth in Section 24(a) hereof.
- (r) "Expiration Date" shall have the meaning set forth in Section 7(a) hereof.
- (s) "Final Expiration Date" shall mean the close of business on November 6, 2008.

(t) "Permitted Offer" shall mean a tender offer or an exchange offer for all outstanding shares of Common Stock at a price and on terms determined, prior to the consummation of such tender offer or exchange offer, by directors constituting at least 75% of all of the members of the Board, after receiving advice from a nationally recognized investment banking firm selected by the Board, to be (a) at a price that is fair to stockholders (taking into account all factors which such members of the Board deem relevant including, without limitation, prices which could reasonably be achieved if the Company or its assets were sold on an orderly basis designed to realize maximum value) and (b) otherwise in the best interests of the Company and its stockholders.

(u) "Person" shall mean any individual, firm, corporation, partnership, trust, association, limited liability company or other entity.

(v) "Preferred Stock" shall mean shares of Series A Junior Participating Preferred Stock, \$.01 par value, of the Company having the rights and preferences set forth in the form of Certificate of Designations attached to this Agreement as Exhibit A and, to the extent that there is not a sufficient number of shares of Series A Junior Participating Preferred Stock authorized to permit the full exercise of the Rights, any other series of Preferred Stock, \$.01 par value, of the Company designated for such purpose containing terms substantially similar to the terms of the Series A Junior Participating Preferred Stock.

- (w) "Principal Party" shall have the meaning set forth in Section 13(b) hereof.
- (x) "Purchase Price" shall have the meaning set forth in Section 4(a) hereof.
- (y) "Record Date" shall have the meaning set forth in the WHEREAS clause at the beginning of this Agreement.
- (z) "Redemption Date" shall have the meaning set forth in Section 7(a) hereof.

- (aa) “Redemption Price” shall have the meaning set forth in Section 23(a) hereof.
- (bb) “Rights” shall have the meaning set forth in the WHEREAS clause at the beginning of this Agreement.
- (cc) “Rights Agent” shall have the meaning set forth in the introductory paragraph hereof.
- (dd) “Rights Certificates” shall have the meaning set forth in Section 3(a) hereof.
- (ee) “Section 11(a)(ii) Event” shall mean an acquisition of Common Stock described in the first sentence of Section 11(a)(ii) hereof.
- (ff) “Section 11(a)(ii) Trigger Date” shall have the meaning set forth in Section 11(a)(iii) hereof.
- (gg) “Section 13 Event” shall mean any event described in clauses (x), (y) or (z) of Section 13(a) hereof.
- (hh) “Spread” shall have the meaning set forth in Section 11(a)(iii) hereof.

(ii) “Stock Acquisition Date” shall mean the later of (i) the first date of public announcement (which, for purposes of this definition, shall include, without limitation, a report filed pursuant to Section 13(d) under the Exchange Act) by the Company or an Acquiring Person that an Acquiring Person has become such or (ii) the first date on which an executive officer of the Company has actual knowledge that an Acquiring Person has become such; provided, however that, if such Person is deemed not to be an Acquiring Person pursuant to clause (y) of Section 1(a) hereof, no Stock Acquisition Date shall be deemed to have occurred.

(jj) “Subsidiary” shall mean, with reference to any Person, any corporation or other entity of which an amount of voting securities sufficient to elect at least a majority of the directors (or comparable body) of such corporation or other entity is beneficially owned, directly or indirectly, by such Person, or otherwise controlled by such Person.

- (kk) “Substitution Period” shall have the meaning set forth in Section 11(a)(iii) hereof.
- (ll) “Trading Day” shall have the meaning set forth in Section 11(d)(i) hereof.
- (mm) “Triggering Event” shall mean any Section 11(a)(ii) Event or any Section 13 Event.

Section 2. Appointment of Rights Agent. The Company hereby appoints the Rights Agent to act as agent for the Company and the holders of the Rights (who, in accordance with Section 3 hereof, shall prior to the Distribution Date also be the holders of the Common Stock) in accordance with the terms and conditions hereof, and the Rights Agent hereby accepts such appointment. The Company may from time to time appoint such Co-Rights Agents as it may deem necessary or desirable upon ten (10) days’ prior written notice to the Rights Agent. The

Rights Agent shall have no duty to supervise, and shall in no event be liable for, the acts or omissions of any such Co-Rights Agent.

Section 3. Issuance of Rights.

(a) Until the earlier of (i) the close of business on the tenth Business Day (or such later date as may be determined by the Board) after the Stock Acquisition Date (or, if the tenth Business Day after the Stock Acquisition Date occurs before the Record Date, the close of business on the Record Date), or (ii) the close of business on the tenth Business Day (or such later date as may be determined by action of the Board) after the date that a tender or exchange offer (other than a Permitted Offer) by any Person (other than the Company, any Subsidiary of the Company, any employee benefit plan of the Company or of any Subsidiary of the Company, or any Person organized, appointed or established by the Company for or pursuant to the terms of any such plan) is first published or sent or given within the meaning of Rule 14d-2 of the General Rules and Regulations under the Exchange Act, if upon consummation thereof, such Person would be the Beneficial Owner of 20% or more of the shares of Common Stock then outstanding, (the earlier of (i) and (ii) being herein referred to as the "Distribution Date"), (x) the Rights will be evidenced by the certificates for the Common Stock registered in the names of the holders of the Common Stock (which certificates for Common Stock shall be deemed also to be certificates for Rights) and not by separate certificates, and (y) the Rights will be transferable only in connection with the transfer of the underlying shares of Common Stock (including a transfer to the Company). As soon as practicable after the Distribution Date, the Rights Agent will send by first-class, insured, postage prepaid mail, to each record holder of the Common Stock as of the close of business on the Distribution Date, at the address of such holder shown on the records of the Company, one or more rights certificates, in substantially the form of Exhibit B hereto (the "Rights Certificates"), evidencing one Right for each share of Common Stock so held, subject to adjustment as provided herein. With respect to certificates for the Common Stock outstanding as of the close of business on the Record Date, until the Distribution Date, the Rights will be evidenced by such certificates for the Common Stock and the registered holders of the Common Stock shall also be the registered holders of the associated Rights. In addition, in connection with the issuance or sale of shares of Common Stock following the Distribution Date and prior to the redemption or expiration of the Rights, the Company (i) shall, with respect to shares of Common Stock so issued or sold pursuant to the exercise of stock options or under any employee benefit plan or arrangement, or upon the exercise, conversion or exchange of securities granted or issued by the Company prior to the Distribution Date, and (ii) may, in any other case, if deemed necessary or appropriate by the Board, issue Rights Certificates representing the appropriate number of Rights in connection with such issuance or sale; provided, however, that (x) no such Rights Certificate shall be issued if, and to the extent that, the Company shall be advised by counsel that such issuance would create a significant risk of material adverse tax consequences to the Company or the Person to whom such Rights Certificate would be issued, and (y) no such Rights Certificate shall be issued if, and to the extent that, appropriate adjustment shall otherwise have been made in lieu of the issuance thereof. In the event that an adjustment in the number of Rights per share of Common Stock has been made pursuant to Sections 11(i) or 11(p) hereof, at the time of distribution of the Rights Certificates, the Company shall make the necessary and appropriate rounding adjustments (in accordance with Section 14(a) hereof) so that Rights Certificates representing only whole

numbers of Rights are distributed and cash is paid in lieu of any fractional Rights. As of and after the Distribution Date, the Rights will be evidenced solely by such Rights Certificates.

(b) As promptly as practicable following the Record Date, the Company will send a copy of a Summary of Rights to Purchase Preferred Stock, in substantially the form attached hereto as Exhibit C, by first-class, postage prepaid mail, to each record holder of the Common Stock as of the close of business on the Record Date, at the address of such holder shown on the records of the Company. The failure to send a copy of the Summary of Rights shall not affect the enforceability of any part of this Rights Agreement or the rights of any holder of the Rights.

(c) Rights shall be issued (i) in respect of all shares of Common Stock that are issued (either as an original issuance or from the Company's treasury) after the Record Date but prior to the earlier of the Distribution Date or the Expiration Date and (ii) in connection with the issuance or sale of shares of Common Stock following the Distribution Date and prior to the redemption or expiration of the Rights (x) with respect to shares of Common Stock so issued or sold pursuant to the exercise of stock options or under any employee benefit plan or arrangement, or upon the exercise, conversion or exchange of securities, granted or issued by the Company prior to the Distribution Date and (y) with respect to shares of Common Stock so issued or sold in any other case, if deemed necessary or appropriate by the Board. Certificates representing such shares of Common Stock (including, without limitation, certificates issued upon transfer or exchange of Common Stock) shall also be deemed to be certificates for Rights, and shall bear the following legend:

This certificate also evidences and entitles the holder hereof to certain Rights as set forth in the Rights Agreement between Momenta Pharmaceuticals, Inc. (the "Company") and American Stock Transfer & Trust Company (the "Rights Agent") dated as of November 7, 2005, as the same may be amended, restated or renewed from time to time (the "Rights Agreement"), the terms of which are hereby incorporated herein by reference and a copy of which is on file at the principal offices of the Company. Under certain circumstances, as set forth in the Rights Agreement, such Rights will be evidenced by separate certificates and will no longer be evidenced by this certificate. The Company will mail to the holder of this certificate a copy of the Rights Agreement, as in effect on the date of mailing, without charge promptly after receipt of a written request therefor. Under certain circumstances set forth in the Rights Agreement, Rights issued to, or held by, any Person who is, was or becomes an Acquiring Person or any Affiliate or Associate thereof (as such terms are defined in the Rights Agreement), whether currently held by or on behalf of such Person or by any subsequent holder, may become null and void.

With respect to such certificates containing the foregoing legend, until the earlier of (i) the Distribution Date and (ii) the Expiration Date, the Rights associated with the Common Stock represented by such certificates shall be evidenced by such certificates alone and registered

holders of Common Stock shall also be the registered holders of the associated Rights. Notwithstanding this Section 3(c), the omission of a legend shall not affect the enforceability of any part of this Rights Agreement or the rights of any holder of the Rights.

(d) Until the earlier of the Distribution Date and the Expiration Date, the transfer of any certificates representing shares of Common Stock in respect of which Rights have been issued shall also constitute the transfer of the Rights associated with such shares of Common Stock. In the event that the Company purchases or acquires any shares of Common Stock after the Record Date but prior to the Distribution Date, any Rights associated with such shares of Common Stock shall be deemed cancelled and retired so that the Company shall not be entitled to exercise any Rights associated with the shares of Common Stock which are no longer outstanding.

Section 4. Form of Rights Certificates.

(a) The Rights Certificates (and the forms of election to purchase, certification and assignment to be printed on the reverse thereof) shall each be substantially in the form set forth in Exhibit B hereto and may have such marks of identification or designation and such legends, summaries or endorsements printed thereon as the Company may deem appropriate and as are not inconsistent with the provisions of this Agreement, or as may be required to comply with any applicable law or with any rule or regulation made pursuant thereto or with any rule or regulation of any stock exchange or over-the-counter market on which the Rights may from time to time be listed, or to conform to usage. Subject to the provisions of Sections 7, 11 and 22 hereof, the Rights Certificates, whenever distributed, shall entitle the holders thereof to purchase such number of one one-thousandths of a share of Preferred Stock as shall be set forth therein at the price set forth therein (such exercise price per one one-thousandth of a share, the "Purchase Price"), but the amount and type of securities purchasable upon the exercise of each Right and the Purchase Price thereof shall be subject to adjustment as provided herein.

(b) Any Rights Certificate issued pursuant to Section 3, Section 11(i) or Section 22 hereof that represents Rights beneficially owned by persons known to be: (i) an Acquiring Person or an Associate or Affiliate of an Acquiring Person, (ii) a transferee of an Acquiring Person (or of any such Associate or Affiliate) who becomes a transferee after the Acquiring Person becomes such, or (iii) a transferee of an Acquiring Person (or of any such Associate or Affiliate) who becomes a transferee prior to or concurrently with the Acquiring Person becoming such and receives such Rights pursuant to either (A) a transfer (whether or not for consideration) from the Acquiring Person to holders of equity interests in such Acquiring Person or to any Person with whom such Acquiring Person has any continuing agreement, arrangement or understanding (whether or not in writing) regarding the transferred Rights or (B) a transfer which the Board has determined is part of a plan, arrangement or understanding (whether or not in writing) that has as a primary purpose or effect avoidance of Section 7(e) hereof, and any Rights Certificate issued pursuant to Section 6 or Section 11 hereof upon transfer, exchange, replacement or adjustment of any other Rights Certificate referred to in this sentence, shall contain (to the extent feasible) the following legend:

The Rights represented by this Rights Certificate are or were beneficially owned by a Person who was or became an Acquiring Person or an Affiliate or Associate of an Acquiring Person (as such terms are defined in the Rights Agreement). Accordingly, this Rights Certificate and the Rights represented hereby may become null and void in the circumstances specified in Section 7(e) of such Agreement.

The provisions of Section 7(e) hereof shall be operative whether or not the foregoing legend is contained on any such Rights Certificate.

Section 5. Countersignature and Registration.

(a) The Rights Certificates shall be executed on behalf of the Company by its Chairman of the Board, President or any Vice President, either manually or by facsimile signature, and shall have affixed thereto the Company's seal or a facsimile thereof, which shall be attested by the Secretary or an Assistant Secretary of the Company, either manually or by facsimile signature. The Rights Certificates shall be manually countersigned by the Rights Agent and shall not be valid for any purpose unless so countersigned. In case any officer of the Company who shall have signed any of the Rights Certificates shall cease to be such officer of the Company before countersignature by the Rights Agent and issuance and delivery by the Company, such Rights Certificates, nevertheless, may be countersigned by the Rights Agent and issued and delivered by the Company with the same force and effect as though the person who signed such Rights Certificates had not ceased to be such officer of the Company; and any Rights Certificates may be signed on behalf of the Company by any person who, at the actual date of the execution of such Rights Certificate, shall be a proper officer of the Company to sign such Rights Certificate, although at the date of the execution of this Rights Agreement any such person was not such an officer.

(b) Following the Distribution Date, the Rights Agent shall keep or cause to be kept, at its office designated as the appropriate place for surrender of Rights Certificates upon exercise or transfer, books for registration and transfer of the Rights Certificates issued hereunder. Such books shall show the names and addresses of the respective holders of the Rights Certificates, the number of Rights evidenced on its face by each of the Rights Certificates, the Rights Certificate number and the date of each of the Rights Certificates.

Section 6. Transfer, Split Up, Combination and Exchange of Rights Certificates; Mutilated, Destroyed, Lost or Stolen Rights Certificates.

(a) Subject to the provisions of Section 4(b), Section 7(e) and Section 14 hereof, at any time after the close of business on the Distribution Date, and at or prior to the close of business on the Expiration Date, any Rights Certificate or Certificates (other than Rights Certificates representing Rights that have become void pursuant to Section 7(e) hereof or that have been exchanged pursuant to Section 24 hereof) may be transferred, split up, combined or exchanged for another Rights Certificate or Certificates, entitling the registered holder to purchase a like number of one one-thousandths of a share of Preferred Stock (or, following a Triggering Event, Common Stock, other securities, cash or other assets, as the case may be) as

the Rights Certificate or Certificates surrendered then entitled such holder (or former holder in the case of a transfer) to purchase. Any registered holder desiring to transfer, split up, combine or exchange any Rights Certificate or Certificates shall make such request in writing delivered to the Rights Agent, and shall surrender the Rights Certificate or Certificates to be transferred, split up, combined or exchanged, with the form of assignment and certificate appropriately executed, at the office of the Rights Agent designated for such purpose. Neither the Rights Agent nor the Company shall be obligated to take any action whatsoever with respect to the transfer of any such surrendered Rights Certificate until the registered holder shall have completed and signed the certificate contained in the form of assignment on the reverse side of such Rights Certificate and shall have provided such additional evidence of the identity of the Beneficial Owner (or former Beneficial Owner) or Affiliates or Associates thereof as the Company shall reasonably request. Thereupon the Rights Agent shall, subject to Section 4(b), Section 7(e) and Section 14 hereof, countersign and deliver to the Person entitled thereto a Rights Certificate or Rights Certificates, as the case may be, as so requested. The Company may require payment of a sum sufficient to cover any tax or governmental charge that may be imposed in connection with any transfer, split up, combination or exchange of Rights Certificates.

(b) Upon receipt by the Company and the Rights Agent of evidence reasonably satisfactory to them of the loss, theft, destruction or mutilation of a Rights Certificate, and, in case of loss, theft or destruction, of indemnity or security reasonably satisfactory to them, and reimbursement to the Company and the Rights Agent of all reasonable expenses incidental thereto, and upon surrender to the Rights Agent and cancellation of the Rights Certificate if mutilated, the Company will execute and deliver a new Rights Certificate of like tenor to the Rights Agent for countersignature and delivery to the registered owner in lieu of the Rights Certificate so lost, stolen, destroyed or mutilated.

Section 7. Exercise of Rights: Purchase Price: Expiration Date of Rights.

(a) Subject to Section 7(e) hereof, the registered holder of any Rights Certificate may exercise the Rights evidenced thereby (except as otherwise provided herein including, without limitation, the restrictions on exercisability set forth in Section 9(c), Section 11(a)(iii) and Section 23 hereof) in whole or in part at any time after the Distribution Date upon surrender of the Rights Certificate, with the form of election to purchase and the certificate on the reverse side thereof duly executed, to the Rights Agent at the office of the Rights Agent designated for such purpose, together with payment of the aggregate Purchase Price with respect to the total number of one one-thousandths of a share of Preferred Stock (or other shares, securities, cash or other assets, as the case may be) as to which such surrendered Rights are then exercisable, at or prior to the earliest of (i) the Final Expiration Date, (ii) the time at which the Rights expire as provided in Section 13(d) hereof, (iii) the time at which the Rights are redeemed as provided in Section 23 hereof (the "Redemption Date") and (iv) the time at which such Rights are exchanged as provided in Section 24 hereof (the earliest of (i), (ii), (iii) and (iv) being herein referred to as the "Expiration Date").

(b) The Purchase Price for each one one-thousandth of a share of Preferred Stock pursuant to the exercise of a Right shall initially be \$125 and shall be subject to adjustment from

time to time as provided in Sections 11 and 13(a) hereof and shall be payable in lawful money of the United States of America in accordance with paragraph (c) below.

(c) Upon receipt of a Rights Certificate representing exercisable Rights, with the form of election to purchase and the certificate duly executed, accompanied by payment, with respect to each Right so exercised, of the Purchase Price per one one-thousandth of a share of Preferred Stock (or other shares, securities, cash or other assets, as the case may be) to be purchased and an amount equal to any applicable transfer tax, the Rights Agent shall, subject to Section 20(k) hereof, thereupon promptly (i) (A) requisition from any transfer agent of the shares of Preferred Stock (or make available, if the Rights Agent is the transfer agent for such shares) certificates for the total number of one one-thousandths of a share of Preferred Stock to be purchased and the Company hereby authorizes its transfer agent to comply with such requests, or (B) if the Company shall have elected to deposit the total number of shares of Preferred Stock issuable upon exercise of the Rights hereunder with a depository agent, requisition from the depository agent depository receipts representing such number of one one-thousandths of a share of Preferred Stock as are to be purchased (in which case certificates for the shares of Preferred Stock represented by such receipts shall be deposited by the transfer agent with the depository agent) and the Company hereby directs the depository agent to comply with such requests, (ii) requisition from the Company the amount of cash, if any, to be paid in lieu of fractional shares in accordance with Section 14 hereof, (iii) after receipt of such certificates or depository receipts, cause the same to be delivered to or upon the order of the registered holder of such Rights Certificate, registered in such name or names as may be designated by such holder, and (iv) after receipt thereof, deliver such cash, if any, to or upon the order of the registered holder of such Rights Certificate. The payment of the Purchase Price (as such amount may be reduced pursuant to Section 11(a)(iii) hereof) may be made in cash or by certified bank check or money order payable to the order of the Company. In the event that the Company is obligated to issue other securities (including Common Stock) of the Company, pay cash and/or distribute other property pursuant to Section 11(a) hereof, the Company shall make all arrangements necessary so that such other securities, cash and/or other property are available for distribution by the Rights Agent, if and when appropriate.

(d) In case the registered holder of any Rights Certificate shall exercise less than all the Rights evidenced thereby, a new Rights Certificate evidencing Rights equivalent to the Rights remaining unexercised shall be issued by the Rights Agent and delivered to, or upon the order of, the registered holder of such Rights Certificate, registered in such name or names as may be designated by such holder, subject to the provisions of Section 14 hereof.

(e) Notwithstanding anything in this Agreement to the contrary, from and after the first occurrence of a Section 11(a)(ii) Event, any Rights beneficially owned by (i) an Acquiring Person or an Associate or Affiliate of an Acquiring Person, (ii) a transferee of an Acquiring Person (or of any such Associate or Affiliate) who becomes a transferee after the Acquiring Person becomes such, or (iii) a transferee of an Acquiring Person (or of any such Associate or Affiliate) who becomes a transferee prior to or concurrently with the Acquiring Person becoming such and receives such Rights pursuant to either (A) a transfer (whether or not for consideration) from the Acquiring Person to holders of equity interests in such Acquiring Person or to any Person with whom the Acquiring Person has any continuing agreement, arrangement or

understanding (whether or not in writing) regarding the transferred Rights or (B) a transfer which the Board has determined is part of a plan, arrangement or understanding (whether or not in writing) that has as a primary purpose or effect avoidance of this Section 7(e), shall become null and void without any further action and no holder of such Rights shall have any rights whatsoever with respect to such Rights, whether under any provision of this Agreement or otherwise. No Rights Certificate shall be issued at any time upon the transfer of any Rights to an Acquiring Person whose Rights would be void pursuant to the preceding sentence or any Associate or Affiliate thereof or to any nominee of such Acquiring Person, Associate or Affiliate; and any Rights Certificate delivered to the Rights Agent for transfer to an Acquiring Person whose Rights would be void pursuant to the preceding sentence shall be cancelled. The Company shall use all reasonable efforts to insure that the provisions of this Section 7(e) and Section 4(b) hereof are complied with, but shall have no liability to any holder of Rights Certificates or other Person as a result of its failure to make any determinations with respect to an Acquiring Person or its Affiliates, Associates or transferees hereunder.

(f) Notwithstanding anything in this Agreement to the contrary, neither the Rights Agent nor the Company shall be obligated to undertake any action with respect to a registered holder upon the occurrence of any purported transfer or exercise as set forth in this Section 7 unless such registered holder shall have (i) completed and signed the certificate following the form of assignment or election to purchase set forth on the reverse side of the Rights Certificate surrendered for such assignment or exercise, and (ii) provided such additional evidence of the identity of the Beneficial Owner (or former Beneficial Owner) or any Affiliates or Associates thereof as the Company shall reasonably request.

Section 8. Cancellation and Destruction of Rights Certificates. All Rights Certificates surrendered for the purpose of exercise, transfer, split up, combination or exchange shall, if surrendered to the Company or any of its agents, be delivered to the Rights Agent for cancellation or in cancelled form, or, if surrendered to the Rights Agent, shall be cancelled by it, and no Rights Certificates shall be issued in lieu thereof except as expressly permitted by any of the provisions of this Agreement. The Company shall deliver to the Rights Agent for cancellation and retirement, and the Rights Agent shall so cancel and retire, any other Rights Certificate purchased or acquired by the Company otherwise than upon the exercise thereof. The Rights Agent shall deliver all cancelled Rights Certificates to the Company, or shall, at the written request of the Company, destroy such cancelled Rights Certificates, and in such case shall deliver a certificate of destruction thereof to the Company.

Section 9. Reservation and Availability of Capital Stock.

(a) The Company covenants and agrees that it will cause to be reserved and kept available out of its authorized and unissued shares of Preferred Stock (and, following the occurrence of a Triggering Event, out of its authorized and unissued shares of Common Stock and/or other securities or out of its authorized and issued shares held in its treasury), the number of shares of Preferred Stock (and, following the occurrence of a Triggering Event, Common Stock and/or other securities) that, as provided in this Agreement including Section 11(a)(iii) hereof, will be sufficient to permit the exercise in full of all outstanding Rights.

(b) So long as the shares of Preferred Stock (and, following the occurrence of a Section 11(a)(ii) Event, Common Stock and/or other securities) issuable and deliverable upon the exercise of the Rights may be listed on any national securities exchange or automated quotation system, the Company shall use its best efforts to cause, from and after such time as the Rights become exercisable, all shares reserved for such issuance to be so listed upon official notice of issuance upon such exercise.

(c) The Company shall use its best efforts to (i) file, as soon as practicable following the earliest date after the first occurrence of a Section 11(a)(ii) Event on which the consideration to be delivered by the Company upon exercise of the Rights has been determined in accordance with Section 11(a)(iii) hereof, or as soon as is required by law following the Distribution Date, as the case may be, a registration statement under the Act, with respect to the securities purchasable upon exercise of the Rights on an appropriate form, (ii) cause such registration statement to become effective as soon as practicable after such filing, (iii) cause such registration statement to remain effective (with a prospectus at all times meeting the requirements of the Act) until the earlier of (A) the date as of which the Rights are no longer exercisable for such securities, and (B) the Expiration Date, and (iv) obtain such other regulatory approvals as may be necessary for it to issue securities purchasable upon the exercise of the Rights. The Company will also take such action as may be appropriate under, or to ensure compliance with, the securities or "blue sky" laws of the various states in connection with the exercisability of the Rights. The Company may temporarily suspend, for a period of time not to exceed ninety (90) days after the date set forth in clause (i) of the first sentence of this Section 9(c), the exercisability of the Rights in order to prepare and file such registration statement and permit it to become effective or to obtain any other required regulatory approval in connection with the exercisability of the Rights. Upon any such suspension, the Company shall issue a public announcement stating that the exercisability of the Rights has been temporarily suspended, as well as a public announcement at such time as the suspension is no longer in effect. Notwithstanding any provision of this Agreement to the contrary, the Rights shall not be exercisable in any jurisdiction unless the requisite registration or qualification in such jurisdiction shall have been effected or obtained.

(d) The Company covenants and agrees that it will take all such action as may be necessary to ensure that all one one-thousandths of a share of Preferred Stock (and, following the occurrence of a Triggering Event, Common Stock and/or other securities) delivered upon exercise of Rights shall, at the time of delivery of the certificates for such shares (subject to payment of the Purchase Price), be duly and validly authorized and issued and fully paid and nonassessable.

(e) The Company further covenants and agrees that it will pay when due and payable any and all federal and state transfer taxes and charges that may be payable in respect of the issuance or delivery of the Rights Certificates and of any certificates for a number of one one-thousandths of a share of Preferred Stock (or Common Stock and/or other securities, as the case may be) upon the exercise of Rights. The Company shall not, however, be required (i) to pay any transfer tax that may be payable in respect of any transfer or delivery of Rights Certificates to a Person other than, or the issuance or delivery of a number of one one-thousandths of a share of Preferred Stock (or Common Stock and/or other securities, as the case may be) in respect of a name other than that of, the registered holder of the Rights Certificate evidencing Rights

surrendered for exercise or (ii) to issue or deliver any certificates for a number of one one-thousandths of a share of Preferred Stock (or Common Stock and/or other securities, as the case may be) in a name other than that of the registered holder upon the exercise of any Rights until such tax shall have been paid (any such tax being payable by the holder of such Rights Certificate at the time of surrender) or until it has been established to the Company's satisfaction that no such tax is due.

Section 10. Preferred Stock Record Date. Each Person in whose name any certificate for a number of one one-thousandths of a share of Preferred Stock (or Common Stock and/or other securities, as the case may be) is issued upon the exercise of Rights shall for all purposes be deemed to have become the holder of record of such fractional shares of Preferred Stock (or Common Stock and/or other securities, as the case may be) represented thereby on, and such certificate shall be dated, the date upon which the Rights Certificate evidencing such Rights was duly surrendered with the forms of election and certification duly executed and payment of the Purchase Price (and all applicable transfer taxes) was made; provided, however, that if the date of such surrender and payment is a date upon which the Preferred Stock (or Common Stock and/or other securities, as the case may be) transfer books of the Company are closed, such Person shall be deemed to have become the record holder of such shares (fractional or otherwise) on, and such certificate shall be dated, the next succeeding Business Day on which the Preferred Stock (or Common Stock and/or other securities, as the case may be) transfer books of the Company are open. Prior to the exercise of the Rights evidenced thereby, the holder of a Rights Certificate, as such, shall not be entitled to any rights of a stockholder of the Company with respect to securities for which the Rights shall be exercisable, including, without limitation, the right to vote, to receive dividends or other distributions or to exercise any preemptive rights, and shall not be entitled to receive any notice of any proceedings of the Company, except as provided herein.

Section 11. Adjustment of Purchase Price, Number and Kind of Shares or Number of Rights. The Purchase Price, the number and kind of shares covered by each Right and the number of Rights outstanding are subject to adjustment from time to time as provided in this Section 11.

(a) (i) In the event the Company shall at any time after the date of this Agreement (A) declare a dividend on the Preferred Stock payable in shares of Preferred Stock, (B) subdivide the outstanding Preferred Stock, (C) combine the outstanding Preferred Stock into a smaller number of shares, or (D) issue any shares of its capital stock in a reclassification of the Preferred Stock (including any such reclassification in connection with a consolidation or merger in which the Company is the continuing or surviving corporation), except as otherwise provided in this Section 11(a) and Section 7(e) hereof, the Purchase Price in effect at the time of the record date for such dividend or of the effective date of such subdivision, combination or reclassification, and the number and kind of shares of Preferred Stock or capital stock, as the case may be, issuable on such date, shall be proportionately adjusted so that the holder of any Right exercised after such time shall be entitled to receive, upon payment of the Purchase Price then in effect, the aggregate number and kind of shares of Preferred Stock or capital stock, as the case may be, which, if such Right had been exercised immediately prior to such date and at a time when the Preferred Stock transfer books of the Company were open, he would have owned

upon such exercise and been entitled to receive by virtue of such dividend, subdivision, combination or reclassification. If an event occurs that would require an adjustment under both this Section 11(a)(i) and Section 11(a)(ii) hereof, the adjustment provided for in this Section 11(a)(i) shall be in addition to, and shall be made prior to, any adjustment required pursuant to Section 11(a)(ii) hereof.

(ii) Subject to Section 24 of this Agreement, in the event that any Person, alone or together with its Affiliates or Associates, becomes an Acquiring Person (other than pursuant to a Permitted Offer), then, promptly following the first occurrence of such event, proper provision shall be made so that each holder of a Right (except as provided below and in Section 7(e) hereof) shall thereafter have the right to receive (subject to the last sentence of Section 23(a)), upon exercise thereof at the then current Purchase Price in accordance with the terms of this Agreement, in lieu of a number of one one-thousandths of a share of Preferred Stock, such number of shares of Common Stock of the Company that equals the result obtained by (x) multiplying the then current Purchase Price by the then number of one one-thousandths of a share of Preferred Stock for which a Right was exercisable immediately prior to the first occurrence of a Section 11(a)(ii) Event, and (y) dividing that product (which, following such first occurrence, shall thereafter be referred to as the "Purchase Price" for each Right and for all purposes of this Agreement) by 50% of the current market price (determined pursuant to Section 11(d) hereof) per share of Common Stock on the date of such first occurrence (such number of shares, the "Adjustment Shares").

(iii) In the event that the number of shares of Common Stock that are authorized by the Company's Certificate of Incorporation but not outstanding or reserved for issuance for purposes other than upon exercise of the Rights are not sufficient to permit the exercise in full of the Rights in accordance with the foregoing subparagraph (ii) of this Section 11(a), the Company shall: (A) determine the excess of (1) the value of the Adjustment Shares issuable upon the exercise of a Right (the "Current Value") over (2) the Purchase Price (such excess, the "Spread"), and (B) with respect to each Right, make adequate provision to substitute for the Adjustment Shares, upon payment of the applicable Purchase Price, (1) cash, (2) a reduction in the Purchase Price, (3) Common Stock or other equity securities of the Company (including, without limitation, shares, or units of shares, of preferred stock which the Board has deemed to have the same value as shares of Common Stock (such shares of preferred stock, "common stock equivalents")), (4) debt securities of the Company, (5) other assets, or (6) any combination of the foregoing, having an aggregate value equal to the Current Value, where such aggregate value has been determined by the Board based upon the advice of a nationally recognized investment banking firm selected by the Board; provided, however, if the Company shall not have made adequate provision to deliver value pursuant to clause (B) above within thirty (30) days following the later of (x) the first occurrence of a Section 11(a)(ii) Event and (y) the date on which the Company's right of redemption pursuant to Section 23(a) expires (the later of (x) and (y) being referred to herein as the "Section 11(a)(ii) Trigger Date"), then the Company shall be obligated to deliver, upon the surrender for exercise of a Right and without requiring payment of the Purchase Price, shares of Common Stock (to the extent available) and then, if necessary, cash, which shares and/or cash have an aggregate value equal to the Spread. If the Board shall determine in good faith that it is likely that sufficient additional shares of Common Stock could be authorized for issuance upon exercise in full of the Rights, the thirty

(30) day period set forth above may be extended to the extent necessary, but not more than ninety (90) days after the Section 11(a)(ii) Trigger Date, in order that the Company may seek shareholder approval for the authorization of such additional shares (such period, as it may be extended, the "Substitution Period"). To the extent that the Company determines that some action need be taken pursuant to the first and/or second sentences of this Section 11(a)(iii), the Company (x) shall provide, subject to Section 7(e) hereof, that such action shall apply uniformly to all outstanding Rights, and (y) may suspend the exercisability of the Rights until the expiration of the Substitution Period in order to seek any authorization of additional shares and/or to decide the appropriate form of distribution to be made pursuant to such first sentence and to determine the value thereof. In the event of any such suspension, the Company shall issue a public announcement stating that the exercisability of the Rights has been temporarily suspended, as well as a public announcement at such time as the suspension is no longer in effect. For purposes of this Section 11(a)(iii), the value of the Common Stock shall be the current market price (as determined pursuant to Section 11(d) hereof) per share of the Common Stock on the Section 11(a)(ii) Trigger Date and the value of any "common stock equivalent" shall be deemed to have the same value as the Common Stock on such date.

(b) In case the Company shall fix a record date for the issuance of rights, options or warrants to all holders of Preferred Stock entitling them to subscribe for or purchase (for a period expiring within forty-five (45) calendar days after such record date) Preferred Stock (or shares having the same rights, privileges and preferences as the shares of Preferred Stock ("equivalent preferred stock")) or securities convertible into Preferred Stock or equivalent preferred stock at a price per share of Preferred Stock or per share of equivalent preferred stock (or having a conversion price per share, if a security convertible into Preferred Stock or equivalent preferred stock) less than the current market price (as determined pursuant to Section 11(d) hereof) per share of Preferred Stock on such record date, the Purchase Price to be in effect after such record date shall be determined by multiplying the Purchase Price in effect immediately prior to such record date by a fraction, the numerator of which shall be the number of shares of Preferred Stock outstanding on such record date, plus the number of shares of Preferred Stock which the aggregate offering price of the total number of shares of Preferred Stock and/or equivalent preferred stock so to be offered (and/or the aggregate initial conversion price of the convertible securities so to be offered) would purchase at such current market price, and the denominator of which shall be the number of shares of Preferred Stock outstanding on such record date, plus the number of additional shares of Preferred Stock and/or equivalent preferred stock to be offered for subscription or purchase (or into which the convertible securities so to be offered are initially convertible). In case such subscription price may be paid by delivery of consideration part or all of which may be in a form other than cash, the value of such consideration shall be as determined in good faith by the Board, whose determination shall be described in a statement filed with the Rights Agent and shall be conclusive for all purposes. Shares of Preferred Stock owned by or held for the account of the Company shall not be deemed outstanding for the purpose of any such computation. Such adjustment shall be made successively whenever such a record date is fixed, and in the event that such rights, options or warrants are not so issued, the Purchase Price shall be adjusted to be the Purchase Price which would then be in effect if such record date had not been fixed.

(c) In case the Company shall fix a record date for a distribution to all holders of Preferred Stock (including any such distribution made in connection with a consolidation or merger in which the Company is the continuing corporation) of evidences of indebtedness, cash (other than a regular quarterly cash dividend out of the earnings or retained earnings of the Company), assets (other than a dividend payable in Preferred Stock, but including any dividend payable in stock other than Preferred Stock) or subscription rights or warrants (excluding those referred to in Section 11(b) hereof), the Purchase Price to be in effect after such record date shall be determined by multiplying the Purchase Price in effect immediately prior to such record date by a fraction, the numerator of which shall be the current market price (as determined pursuant to Section 11(d) hereof) per share of Preferred Stock on such record date, less the fair market value (as determined in good faith by the Board, whose determination shall be described in a statement filed with the Rights Agent and shall be conclusive for all purposes) of the portion of the cash, assets or evidences of indebtedness so to be distributed or of such subscription rights or warrants applicable to a share of Preferred Stock and the denominator of which shall be such current market price (as determined pursuant to Section 11(d) hereof) per share of Preferred Stock on such record date. Such adjustments shall be made successively whenever such a record date is fixed, and in the event that such distribution is not so made, the Purchase Price shall be adjusted to be the Purchase Price which would have been in effect if such record date had not been fixed.

(d) (i) For the purpose of any computation hereunder, other than computations made pursuant to Section 11(a)(iii) hereof, the “current market price” per share of Common Stock on any date shall be deemed to be the average of the daily closing prices per share of such Common Stock for the thirty (30) consecutive Trading Days (as such term is hereinafter defined) immediately prior to such date, and for purposes of computations made pursuant to Section 11(a)(iii) hereof, the “current market price” per share of Common Stock on any date shall be deemed to be the average of the daily closing prices per share of such Common Stock for the ten (10) consecutive Trading Days immediately following such date; provided, however, that in the event that the current market price per share of the Common Stock is determined during a period following the announcement by the issuer of such Common Stock of (A) a dividend or distribution on such Common Stock payable in shares of such Common Stock or securities convertible into shares of such Common Stock (other than the Rights), or (B) any subdivision, combination or reclassification of such Common Stock, and prior to the expiration of the requisite thirty (30) Trading Day or ten (10) Trading Day period, as set forth above, after the ex-dividend date for such dividend or distribution, or the record date for such subdivision, combination or reclassification occurs, then, and in each such case, the “current market price” shall be properly adjusted to take into account ex-dividend or post record date trading. The closing price for each day shall be the last sale price, regular way, or, in case no such sale takes place on such day, the average of the closing bid and asked prices, regular way, in either case as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the principal national securities exchange on which the shares of Common Stock are listed or admitted to trading or, if the shares of Common Stock are not listed or admitted to trading on any national securities exchange, the last quoted price or, if not so quoted, the average of the high bid and the low asked prices in the over-the-counter market, as reported by The Nasdaq Stock Market, Inc. (“Nasdaq”) or such other system then in use, or, if on any such date the shares of Common Stock are not quoted by any such organization, the average of the closing bid and asked prices as furnished by a professional market maker making a market

in the Common Stock selected by the Board. All references in this Section to closing prices, last quoted prices or other stock prices mean prices during regular trading hours, without giving effect to any after-hours or extended hours trading. If on any such date no market maker is making a market in the Common Stock, the fair value of such shares on such date shall be as determined in good faith by the Board, whose determination shall be described in a statement filed with the Rights Agent and shall be conclusive for all purposes. The term "Trading Day" shall mean a day on which Nasdaq or any national securities exchange on which the shares of Common Stock are listed or admitted to trading is open for the transaction of business or, if the shares of Common Stock are not listed or admitted to trading on Nasdaq or any national securities exchange, a Business Day. If the Common Stock is not publicly held or not so listed or traded, "current market price" per share shall mean the fair value per share as determined in good faith by the Board, whose determination shall be described in a statement filed with the Rights Agent and shall be conclusive for all purposes.

(ii) For the purpose of any computation hereunder, the "current market price" per share of Preferred Stock shall be determined in the same manner as set forth above for the Common Stock in clause (i) of this Section 11(d) (other than the last sentence thereof). If the current market price per share of Preferred Stock cannot be determined in the manner provided above or if the Preferred Stock is not publicly held or listed or traded in a manner described in clause (i) of this Section 11(d), the "current market price" per share of Preferred Stock shall be conclusively deemed to be an amount equal to 1,000 (as such number may be appropriately adjusted for such events as stock splits, stock dividends and recapitalizations with respect to the Common Stock occurring after the date of this Agreement) multiplied by the current market price per share of the Common Stock. If neither the Common Stock nor the Preferred Stock is publicly held or so listed or traded, "current market price" per share of the Preferred Stock shall mean the fair value per share as determined in good faith by the Board, which determination shall be described in a statement filed with the Rights Agent and shall be conclusive for all purposes. For all purposes of this Agreement, the "current market price" of one one-thousandth of a share of Preferred Stock shall be equal to the "current market price" of one share of Preferred Stock divided by 1,000.

(e) Anything herein to the contrary notwithstanding, no adjustment in the Purchase Price shall be required unless such adjustment would require an increase or decrease of at least one percent (1%) in the Purchase Price; provided, however, that any adjustments which by reason of this Section 11(e) are not required to be made shall be carried forward and taken into account in any subsequent adjustment. All calculations under this Section 11 shall be made to the nearest cent or to the nearest ten-millionth of a share of Preferred Stock, or hundred-thousandth of a share of Common Stock or other security, as the case may be. Notwithstanding the first sentence of this Section 11(e), any adjustment required by this Section 11 shall be made no later than the earlier of (i) three years from the date of the transaction which mandates such adjustment, or (ii) the Expiration Date.

(f) If as a result of an adjustment made pursuant to Section 11(a)(ii) or Section 13(a) hereof, the holder of any Right thereafter exercised shall become entitled to receive any securities other than Preferred Stock, thereafter the number of such other securities so receivable upon exercise of any Right and the Purchase Price thereof shall be subject to adjustment from

time to time in a manner and on terms as nearly equivalent as practicable to the provisions with respect to the Preferred Stock contained in Sections 11(a), (b), (c), (e), (g), (h), (i), (j), (k) and (m), and the provisions of Sections 7, 9, 10, 13 and 14 hereof with respect to the Preferred Stock shall apply on like terms to any such other securities; provided, however, that the Company shall not be liable for its inability to reserve and keep available for issuance upon exercise of the Rights pursuant to Section 11(a)(ii) a number of shares of Common Stock greater than the number then authorized by the Company's Certificate of Incorporation but not outstanding or reserved for other purposes.

(g) All Rights originally issued by the Company subsequent to any adjustment made to the Purchase Price hereunder shall evidence the right to purchase, at the adjusted Purchase Price, the number of one one-thousandths of a share of Preferred Stock purchasable from time to time hereunder upon exercise of the Rights, all subject to further adjustment as provided herein.

(h) Unless the Company shall have exercised its election as provided in Section 11(i), upon each adjustment of the Purchase Price as a result of the calculations made in Sections 11(b) and (c), each Right outstanding immediately prior to the making of such adjustment shall thereafter evidence the right to purchase, at the adjusted Purchase Price, that number of one one-thousandths of a share of Preferred Stock (calculated to the nearest ten-millionth) obtained by (i) multiplying (x) the number of one one-thousandths of a share covered by a Right immediately prior to this adjustment, by (y) the Purchase Price in effect immediately prior to such adjustment of the Purchase Price, and (ii) dividing the product so obtained by the Purchase Price in effect immediately after such adjustment of the Purchase Price.

(i) The Company may elect on or after the date of any adjustment of the Purchase Price to adjust the number of Rights, in lieu of any adjustment in the number of one one-thousandths of a share of Preferred Stock purchasable upon the exercise of a Right. Each of the Rights outstanding after the adjustment in the number of Rights shall be exercisable for the number of one one-thousandths of a share of Preferred Stock for which a Right was exercisable immediately prior to such adjustment. Each Right held of record prior to such adjustment of the number of Rights shall become that number of Rights (calculated to the nearest one-hundred-thousandth) obtained by dividing the Purchase Price in effect immediately prior to adjustment of the Purchase Price by the Purchase Price in effect immediately after adjustment of the Purchase Price. The Company shall make a public announcement of its election to adjust the number of Rights, indicating the record date for the adjustment, and, if known at the time, the amount of the adjustment to be made. This record date may be the date on which the Purchase Price is adjusted or any day thereafter, but, if the Rights Certificates have been issued, shall be at least ten (10) days later than the date of the public announcement. If Rights Certificates have been issued, upon each adjustment of the number of Rights pursuant to this Section 11(i), the Company shall, as promptly as practicable, cause to be distributed to holders of record of Rights Certificates on such record date Rights Certificates evidencing, subject to Section 14 hereof, the additional Rights to which such holders shall be entitled as a result of such adjustment, or, at the option of the Company, shall cause to be distributed to such holders of record in substitution and replacement for the Rights Certificates held by such holders prior to the date of adjustment, and upon surrender thereof, if required by the Company, new Rights Certificates evidencing all the Rights to which such holders shall be entitled after such adjustment. Rights Certificates so to be

distributed shall be issued, executed and countersigned in the manner provided for herein (and may bear, at the option of the Company, the adjusted Purchase Price) and shall be registered in the names of the holders of record of Rights Certificates on the record date specified in the public announcement.

(j) Irrespective of any adjustment or change in the Purchase Price or the number of one one-thousandths of a share of Preferred Stock issuable upon the exercise of the Rights, the Rights Certificates theretofore and thereafter issued may continue to express the Purchase Price per one one-thousandth of a share and the number of one one-thousandths of a share which were expressed in the initial Rights Certificates issued hereunder.

(k) Before taking any action that would cause an adjustment reducing the Purchase Price below the then par value, if any, of the number of one one-thousandths of a share of Preferred Stock issuable upon exercise of the Rights, the Company shall take any corporate action which may, in the opinion of its counsel, be necessary in order that the Company may validly and legally issue such number of one one-thousandths of a share of fully paid and nonassessable Preferred Stock at such adjusted Purchase Price.

(l) In any case in which this Section 11 shall require that an adjustment in the Purchase Price be made effective as of a record date for a specified event, the Company may elect to defer until the occurrence of such event the issuance to the holder of any Right exercised after such record date the number of one one-thousandths of a share of Preferred Stock and other capital stock or securities of the Company, if any, issuable upon such exercise over and above the number of one one-thousandths of a share of Preferred Stock and other capital stock or securities of the Company, if any, issuable upon such exercise on the basis of the Purchase Price in effect prior to such adjustment; provided, however, that the Company shall deliver to such holder a due bill or other appropriate instrument evidencing such holder's right to receive such additional shares (fractional or otherwise) or securities upon the occurrence of the event requiring such adjustment.

(m) Anything in this Section 11 to the contrary notwithstanding, the Company shall be entitled to make such reductions in the Purchase Price, in addition to those adjustments expressly required by this Section 11, as and to the extent that in their good faith judgment the Board shall determine to be advisable in order that any (i) consolidation or subdivision of the Preferred Stock, (ii) issuance wholly for cash of any shares of Preferred Stock at less than the current market price, (iii) issuance wholly for cash of shares of Preferred Stock or securities which by their terms are convertible into or exchangeable for shares of Preferred Stock, (iv) stock dividends or (v) issuance of rights, options or warrants referred to in this Section 11, hereafter made by the Company to holders of its Preferred Stock shall not be taxable to such stockholders.

(n) The Company covenants and agrees that it shall not, at any time after the Distribution Date, (i) consolidate with any other Person (other than a Subsidiary of the Company in a transaction that complies with Section 11(o) hereof), (ii) merge with or into any other Person (other than a Subsidiary of the Company in a transaction which complies with Section 11(o) hereof), or (iii) sell or transfer (or permit any Subsidiary to sell or transfer), in one transaction, or a series of related transactions, assets or earning power aggregating more than 50% of the assets

or earning power of the Company and its Subsidiaries (taken as a whole) to any other Person or Persons (other than the Company and/or any of its Subsidiaries in one or more transactions each of which complies with Section 11(o) hereof), if (x) at the time of or immediately after such consolidation, merger or sale there are any charter or bylaw provisions or any rights, warrants or other instruments or securities outstanding or agreements in effect that would substantially diminish or otherwise eliminate the benefits intended to be afforded by the Rights or (y) prior to, simultaneously with or immediately after such consolidation, merger or sale, the stockholders of the Person who constitutes, or would constitute, the "Principal Party" for purposes of Section 13(a) hereof shall have received a distribution of Rights previously owned by such Person or any of its Affiliates or Associates. The Company shall not consummate any consolidation, merger, sale or transfer described in clause (i), (ii) or (iii) of the prior sentence unless prior thereto the Company and such other Person shall have executed and delivered to the Rights Agent a supplemental agreement evidencing compliance with this Section 11(n).

(o) The Company covenants and agrees that, after the Distribution Date, it will not, except as permitted by Section 23, Section 24 or Section 27 hereof, take (or permit any Subsidiary to take) any action if at the time such action is taken it is reasonably foreseeable that such action will diminish substantially or otherwise eliminate the benefits intended to be afforded by the Rights.

(p) Anything in this Agreement to the contrary notwithstanding, in the event that the Company shall at any time after the Record Date and prior to the Distribution Date (i) declare or pay any dividend on the outstanding shares of Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding shares of Common Stock, or (iii) combine the outstanding shares of Common Stock into a smaller number of shares, the number of Rights associated with each share of Common Stock then outstanding, or issued or delivered thereafter but prior to the Distribution Date, shall be proportionately adjusted so that the number of Rights thereafter associated with each share of Common Stock following any such event shall equal the result obtained by multiplying the number of Rights associated with each share of Common Stock immediately prior to such event by a fraction, the numerator of which shall be the number of shares of Common Stock outstanding immediately prior to the occurrence of such event and the denominator of which shall be the number of shares of Common Stock outstanding immediately following the occurrence of such event.

Section 12. Certificate of Adjusted Purchase Price or Number of Shares. Whenever an adjustment is made as provided in Section 11 or Section 13 hereof, the Company shall promptly (a) prepare a certificate setting forth such adjustment and a brief statement of the facts accounting for such adjustment, (b) file with the Rights Agent, and with each transfer agent for the Preferred Stock and the Common Stock, a copy of such certificate, and (c) mail a brief summary thereof to each holder of a Rights Certificate (or, if prior to the Distribution Date, to each holder of a certificate representing shares of Common Stock) in accordance with Section 26 hereof. The Rights Agent shall be fully protected in relying on any such certificate and on any adjustment therein contained and shall not be deemed to have knowledge of any adjustment unless and until it shall have received such certificate.

Section 13. Consolidation, Merger or Sale or Transfer of Assets or Earning Power.

(a) In the event that, at any time after a Person has become an Acquiring Person, (x) the Company shall consolidate with, or merge with and into, any other Person (other than a Subsidiary of the Company in a transaction that complies with Section 11(o) hereof), and the Company shall not be the continuing or surviving corporation of such consolidation or merger, (y) any Person (other than a Subsidiary of the Company in a transaction that complies with Section 11(o) hereof) shall consolidate with, or merge with or into, the Company, and the Company shall be the continuing or surviving corporation of such consolidation or merger and, in connection with such consolidation or merger, all or part of the outstanding shares of Common Stock shall be changed into or exchanged for stock or other securities of any other Person or cash or any other property, or (z) the Company shall sell or otherwise transfer (or one or more of its Subsidiaries shall sell or otherwise transfer), in one transaction or a series of related transactions, assets or earning power aggregating more than 50% of the assets or earning power of the Company and its Subsidiaries (taken as a whole) to any Person or Persons (other than the Company or any Subsidiary of the Company in one or more transactions each of which complies with Section 11(o) hereof), then, and in each such case and except as contemplated by Section 13(d) hereof, proper provision shall be made so that: (i) each holder of a Right, except as provided in Section 7(e) hereof, shall thereafter have the right to receive, upon the exercise thereof at the then current Purchase Price in accordance with the terms of this Agreement, such number of validly authorized and issued, fully paid, non-assessable and freely tradeable shares of Common Stock of the Principal Party (as such term is hereinafter defined), which shall not be subject to any liens, encumbrances, rights of first refusal or other adverse claims, as shall be equal to the result obtained by (1) multiplying the then current Purchase Price by the number of one one-thousandths of a share of Preferred Stock for which a Right is exercisable immediately prior to the first occurrence of a Section 13 Event (or, if a Section 11(a)(ii) Event has occurred prior to the first occurrence of a Section 13 Event, multiplying the number of such one one-thousandths of a share for which a Right was exercisable immediately prior to the first occurrence of a Section 11(a)(ii) Event by the Purchase Price in effect immediately prior to such first occurrence), and (2) dividing that product (which, following the first occurrence of a Section 13 Event, shall be referred to as the "Purchase Price" for each Right and for all purposes of this Agreement) by 50% of the current market price (determined pursuant to Section 11(d)(i) hereof) per share of the Common Stock of such Principal Party on the date of consummation of such Section 13 Event; (ii) such Principal Party shall thereafter be liable for, and shall assume, by virtue of such Section 13 Event, all the obligations and duties of the Company pursuant to this Agreement; (iii) the term "Company" shall thereafter be deemed to refer to such Principal Party, it being specifically intended that, subject to clause (v) below, the provisions of Section 11 hereof shall apply only to such Principal Party following the first occurrence of a Section 13 Event; (iv) such Principal Party shall take such steps (including, but not limited to, the reservation of a sufficient number of shares of its Common Stock) in connection with the consummation of any such transaction as may be necessary to assure that the provisions hereof shall thereafter be applicable, as nearly as reasonably may be, in relation to its shares of Common Stock thereafter deliverable upon the exercise of the Rights; and (v) the provisions of Section 11(a)(ii) hereof shall be of no effect following the first occurrence of any Section 13 Event.

(b) “Principal Party” shall mean

(i) in the case of any transaction described in clause (x) or (y) of the first sentence of Section 13(a), the Person that is the issuer of any securities into which shares of Common Stock of the Company are converted in such merger or consolidation, and if no securities are so issued, the Person that is the other party to such merger or consolidation; and

(ii) in the case of any transaction described in clause (z) of the first sentence of Section 13(a), the Person that is the party receiving the greatest portion of the assets or earning power transferred pursuant to such transaction or transactions;

provided, however, that in any such case, (1) if the Common Stock of such Person is not at such time and has not been continuously over the preceding twelve (12) month period registered under Section 12 of the Exchange Act, and such Person is a direct or indirect Subsidiary of another Person the Common Stock of which is and has been so registered, “Principal Party” shall refer to such other Person; (2) in case such Person is a Subsidiary, directly or indirectly, of more than one Person, the Common Stocks of two or more of which are and have been so registered, “Principal Party” shall refer to whichever of such Persons is the issuer of the Common Stock having the greatest aggregate market value; and (3) in case such Person is owned, directly or indirectly, by a joint venture formed by two or more Persons that are not owned, directly or indirectly, by the same Person, the rules set forth in (1) and (2) above shall apply to each of the chains of ownership having an interest in such joint venture as if such party were a “Subsidiary” of both or all of such joint ventures and the Principal Parties in each such chain shall bear the obligations set forth in this Section 13 in the same ratio as their direct or indirect interests in such Person bear to the total of such interests.

(c) The Company shall not consummate any such consolidation, merger, sale or transfer unless the Principal Party shall have a sufficient number of authorized shares of its Common Stock which have not been issued or reserved for issuance to permit the exercise in full of the Rights in accordance with this Section 13 and unless prior thereto the Company and such Principal Party shall have executed and delivered to the Rights Agent a supplemental agreement providing for the terms set forth in paragraphs (a) and (b) of this Section 13 and further providing that, as soon as practicable after the date of any consolidation, merger or sale of assets mentioned in paragraph (a) of this Section 13, the Principal Party will

(i) prepare and file a registration statement under the Act, with respect to the Rights and the securities purchasable upon exercise of the Rights on an appropriate form, and will use its best efforts to cause such registration statement to (A) become effective as soon as practicable after such filing and (B) remain effective (with a prospectus at all times meeting the requirements of the Act) until the Expiration Date;

(ii) use its best efforts to qualify or register the Rights and the securities purchasable upon exercise of the Rights under the blue sky laws of such jurisdictions as may be necessary or appropriate; and

(iii) deliver to holders of the Rights historical financial statements for the Principal Party and each of its Affiliates that comply in all respects with the requirements for registration on Form 10 under the Exchange Act.

The provisions of this Section 13 shall similarly apply to successive mergers or consolidations or sales or other transfers. In the event that a Section 13 Event shall occur at the same time as, or at any time after, the occurrence of a Section 11(a)(ii) Event, the Rights which have not theretofore been exercised shall thereafter become exercisable in the manner described in Section 13(a).

(d) Notwithstanding anything in this Agreement to the contrary, Section 13 shall not be applicable to a transaction described in subparagraphs (x) and (y) of Section 13(a) if (i) such transaction is consummated with a Person or Persons (or a wholly owned subsidiary of any such Person or Persons) who acquired shares of Common Stock pursuant to a Permitted Offer, (ii) the price per share of Common Stock paid in such transaction is not less than the price per share of Common Stock paid to all holders of shares of Common Stock whose shares were purchased pursuant to such Permitted Offer, and (iii) the form of consideration paid in such transaction is the same as the form of consideration paid pursuant to such Permitted Offer. Upon consummation of any such transaction contemplated by this Section 13(d), all Rights hereunder shall expire.

Section 14. Fractional Rights and Fractional Shares.

(a) The Company shall not be required to issue fractions of Rights, except prior to the Distribution Date as provided in Section 11(i) or (p) hereof, or to distribute Rights Certificates that evidence fractional Rights. In lieu of such fractional Rights, there shall be paid to the registered holders of the Rights Certificates with regard to which such fractional Rights would otherwise be issuable, an amount in cash equal to the same fraction of the current market value of a whole Right. For purposes of this Section 14(a), the current market value of a whole Right shall be the closing price of the Rights for the Trading Day immediately prior to the date on which such fractional Rights would have been otherwise issuable. The closing price of the Rights for any day shall be the last sale price, regular way, or, in case no such sale takes place on such day, the average of the closing bid and asked prices, regular way, in either case as reported in the principal consolidated transaction reporting system with respect to securities listed or admitted to trading on the principal national securities exchange on which the Rights are listed or admitted to trading, or if the Rights are not listed or admitted to trading on any national securities exchange, the last quoted price or, if not so quoted, the average of the high bid and the low asked prices in the over-the-counter market, as reported by Nasdaq or such other system then in use or, if on any such date the Rights are not quoted by any such organization, the average of the closing bid and asked prices as furnished by a professional market maker making a market in the Rights selected by the Board. All references in this Section to closing prices, last quoted prices or other stock prices means prices during regular trading hours, without giving effect to any after-hours or extended hours trading. If on any such date no such market maker is making a market in the Rights, the fair value of the Rights on such date as determined in good faith by the Board shall be used, which determination shall be described in a statement filed with Rights Agent and shall be conclusive for all purposes.

(b) The Company shall not be required to issue fractions of shares of Preferred Stock (other than fractions which are integral multiples of one one-thousandth of a share of Preferred Stock) upon exercise of the Rights or to distribute certificates that evidence fractional shares of Preferred Stock (other than fractions which are integral multiples of one one-thousandth of a

share of Preferred Stock). Fractional shares of Preferred Stock in integral multiples of one one-thousandth of a share of Preferred Stock may, at the election of the Company, be evidenced by depositary receipts; provided, however, that holders of such depositary receipts shall have all of the designations and the powers, preferences and rights, and the qualifications, limitations and restrictions to which they are entitled as beneficial owners of the shares of Preferred Stock represented by such depositary receipts. In lieu of fractional shares of Preferred Stock (other than fractions which are integral multiples of one one-thousandth of a share of Preferred Stock), the Company shall pay to the registered holders of Rights Certificates at the time such Rights are exercised as herein provided an amount in cash equal to the same fraction of the current market value of one one-thousandth of a share of Preferred Stock. For purposes of this Section 14(b), the current market value of one one-thousandth of a share of Preferred Stock shall be one one-thousandth of the closing price of a share of Preferred Stock (as determined pursuant to Section 11(d)(ii) hereof) for the Trading Day immediately prior to the date of such exercise.

(c) Following the occurrence of a Triggering Event, the Company shall not be required to issue fractions of shares of Common Stock upon exercise of the Rights or to distribute certificates which evidence fractional shares of Common Stock. In lieu of fractional shares of Common Stock, the Company shall pay to the registered holders of Rights Certificates at the time such Rights are exercised as herein provided an amount in cash equal to the same fraction of the current market price of one (1) share of Common Stock (as determined pursuant to Section 11(d)(i) hereof) for the Trading Day immediately prior to the date of such exercise.

(d) The holder of a Right by the acceptance of such Right expressly waives his right to receive any fractional Rights or any fractional shares upon exercise of a Right, except as permitted by this Section 14.

Section 15. Rights of Action. All rights of action in respect of this Agreement, except the rights of action expressly given to the Rights Agent in Section 18 hereof, are vested in the respective registered holders of the Rights Certificates (and, prior to the Distribution Date, the registered holders of the Common Stock); and any registered holder of any Rights Certificate (or, prior to the Distribution Date, of the Common Stock), without the consent of the Rights Agent or of the holder of any other Rights Certificate (or, prior to the Distribution Date, of the Common Stock), may, in his own behalf and for his own benefit, enforce, and may institute and maintain any suit, action or proceeding against the Company to enforce, or otherwise act in respect of, his right to exercise the Rights evidenced by such Rights Certificate in the manner provided in such Rights Certificate and in this Agreement. Without limiting the foregoing or any remedies available to the holders of Rights, it is specifically acknowledged that the holders of Rights would not have an adequate remedy at law for any breach of this Agreement and shall be entitled to specific performance of the obligations hereunder and injunctive relief against actual or threatened violations of the obligations hereunder of any Person subject to this Agreement.

Section 16. Agreement of Rights Holders. Every holder of a Right by accepting the same consents and agrees with the Company and the Rights Agent and with every other holder of a Right that:

(a) prior to the Distribution Date, the Rights will be transferable only in connection with the transfer of Common Stock;

(b) after the Distribution Date, the Rights Certificates are transferable only on the registry books of the Rights Agent if surrendered at the office of the Rights Agent designated for such purposes, duly endorsed or accompanied by a proper instrument of transfer and with the appropriate forms and certificates duly completed and fully executed;

(c) subject to Section 6(a) and Section 7(f) hereof, the Company and the Rights Agent may deem and treat the person in whose name a Rights Certificate (or, prior to the Distribution Date, the associated Common Stock certificate) is registered as the absolute owner thereof and of the Rights evidenced thereby (notwithstanding any notations of ownership or writing on the Rights Certificates or the associated Common Stock certificate made by anyone other than the Company or the Rights Agent) for all purposes whatsoever, and neither the Company nor the Rights Agent, subject to the penultimate sentence of Section 7(e) hereof, shall be required to be affected by any notice to the contrary; and

(d) notwithstanding anything in this Agreement to the contrary, neither the Company nor the Rights Agent shall have any liability to any holder of a Right or other Person as a result of its inability to perform any of its obligations under this Agreement by reason of any preliminary or permanent injunction or other order, decree or ruling issued by a court of competent jurisdiction or by a governmental, regulatory or administrative agency or commission, or any statute, rule, regulation or executive order promulgated or enacted by any governmental authority, prohibiting or otherwise restraining performance of such obligation; provided, however, the Company must use its best efforts to prevent the issuance of any such order, decree or ruling and to have any such order, decree or ruling lifted or otherwise overturned as soon as possible.

Section 17. Rights Certificate Holder Not Deemed a Stockholder. No holder, as such, of any Rights Certificate shall be entitled to vote, receive dividends or be deemed for any purpose the holder of the number of one one-thousandths of a share of Preferred Stock or any other securities of the Company which may at any time be issuable on the exercise of the Rights represented thereby, nor shall anything contained herein or in any Rights Certificate be construed to confer upon the holder of any Rights Certificate, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action, or to receive notice of meetings or other actions affecting stockholders (except as provided in Section 25 hereof), or to receive dividends or subscription rights, or otherwise, until the Right or Rights evidenced by such Rights Certificate shall have been exercised in accordance with the provisions hereof.

Section 18. Concerning the Rights Agent.

(a) The Company agrees to pay to the Rights Agent reasonable compensation for all services rendered by it hereunder and, from time to time, on demand of the Rights Agent, its reasonable expenses and counsel fees and disbursements and other disbursements incurred in the administration and execution of this Agreement and the exercise and performance of its duties

hereunder. The Company also agrees to indemnify the Rights Agent for, and to hold it harmless against, any loss, liability or expense, incurred without gross negligence, bad faith or willful misconduct on the part of the Rights Agent, for anything done or omitted by the Rights Agent in connection with the acceptance and administration of this Agreement, including the costs and expenses of defending against any claim of liability in the premises.

(b) The Rights Agent shall be protected and shall incur no liability for or in respect of any action taken, suffered or omitted by it in connection with its administration of this Agreement in reliance upon any Rights Certificate or certificate for Common Stock or for other securities of the Company, instrument of assignment or transfer, power of attorney, endorsement, affidavit, letter, notice, direction, consent, certificate, statement, or other paper or document believed by it to be genuine and to be signed, executed and, where necessary, verified or acknowledged, by the proper Person or Persons, or otherwise upon the advice of counsel as set forth in Section 20 hereof.

Section 19. Merger or Consolidation or Change of Name of Rights Agent.

(a) Any corporation into which the Rights Agent or any successor Rights Agent may be merged or with which it may be consolidated, or any corporation resulting from any merger or consolidation to which the Rights Agent or any successor Rights Agent shall be a party, or any corporation succeeding to the corporate trust business of the Rights Agent or any successor Rights Agent, shall be the successor to the Rights Agent under this Agreement without the execution or filing of any paper or any further act on the part of any of the parties hereto; provided, however, that such corporation would be eligible for appointment as a successor Rights Agent under the provisions of Section 21 hereof. In case at the time such successor Rights Agent shall succeed to the agency created by this Agreement, any of the Rights Certificates shall have been countersigned but not delivered, any such successor Rights Agent may adopt the countersignature of a predecessor Rights Agent and deliver such Rights Certificates so countersigned; and in case at that time any of the Rights Certificates shall not have been countersigned, any successor Rights Agent may countersign such Rights Certificates either in the name of the predecessor or in the name of the successor Rights Agent; and in all such cases such Rights Certificates shall have the full force provided in the Rights Certificates and in this Agreement.

(b) In case at any time the name of the Rights Agent shall be changed and at such time any of the Rights Certificates shall have been countersigned but not delivered, the Rights Agent may adopt the countersignature under its prior name and deliver Rights Certificates so countersigned; and in case at that time any of the Rights Certificates shall not have been countersigned, the Rights Agent may countersign such Rights Certificates either in its prior name or in its changed name; and in all such cases such Rights Certificates shall have the full force provided in the Rights Certificates and in this Agreement.

Section 20. Duties of Rights Agent. The Rights Agent undertakes the duties and obligations imposed by this Agreement upon the following terms and conditions, by all of which the Company and the holders of Rights Certificates, by their acceptance thereof, shall be bound:

(a) The Rights Agent may consult with legal counsel (who may be legal counsel for the Company), and the opinion of such counsel shall be full and complete authorization and protection to the Rights Agent as to any action taken or omitted by it in good faith and in accordance with such opinion.

(b) Whenever in the performance of its duties under this Agreement the Rights Agent shall deem it necessary or desirable that any fact or matter (including, without limitation, the identity of any Acquiring Person and the determination of “current market price”) be proved or established by the Company prior to taking or suffering any action hereunder, such fact or matter (unless other evidence in respect thereof be herein specifically prescribed) may be deemed to be conclusively proved and established by a certificate signed by the Chairman of the Board, the President, any Vice President, the Treasurer, any Assistant Treasurer, the Secretary or any Assistant Secretary of the Company and delivered to the Rights Agent; and such certificate shall be full authorization to the Rights Agent for any action taken or suffered in good faith by it under the provisions of this Agreement in reliance upon such certificate.

(c) The Rights Agent shall be liable hereunder only for its own gross negligence, bad faith or willful misconduct.

(d) The Rights Agent shall not be liable for or by reason of any of the statements of fact or recitals contained in this Agreement or in the Rights Certificates or be required to verify the same (except as to its countersignature on such Rights Certificates), but all such statements and recitals are and shall be deemed to have been made by the Company only.

(e) The Rights Agent shall not be under any responsibility in respect of the validity of this Agreement or the execution and delivery hereof (except the due execution hereof by the Rights Agent) or in respect of the validity or execution of any Rights Certificate (except its countersignature thereof); nor shall it be responsible for any breach by the Company of any covenant or condition contained in this Agreement or in any Rights Certificate; nor shall it be responsible for any adjustment required under the provisions of Section 11, Section 13 or Section 24 hereof or responsible for the manner, method or amount of any such adjustment or the ascertaining of the existence of facts that would require any such adjustment (except with respect to the exercise of Rights evidenced by Rights Certificates after receipt of a certificate describing any such adjustment, delivered pursuant to Section 12); nor shall it by any act hereunder be deemed to make any representation or warranty as to the authorization or reservation of any shares of Common Stock or Preferred Stock to be issued pursuant to this Agreement or any Rights Certificate or as to whether any shares of Common Stock or Preferred Stock will, when so issued, be validly authorized and issued, fully paid and nonassessable.

(f) The Company agrees that it will perform, execute, acknowledge and deliver or cause to be performed, executed, acknowledged and delivered all such further and other acts, instruments and assurances as may reasonably be required by the Rights Agent for the carrying out or performing by the Rights Agent of the provisions of this Agreement.

(g) The Rights Agent is hereby authorized and directed to accept instructions with respect to the performance of its duties hereunder from the Chairman of the Board, the President, any Vice President, the Secretary, any Assistant Secretary, the Treasurer or any Assistant

Treasurer of the Company, and to apply to such officers for advice or instructions in connection with its duties, and it shall not be liable for any action taken or suffered to be taken by it in good faith in accordance with instructions of any such officer. Any application by the Rights Agent for written instructions from the Company may, at the option of the Rights Agent, set forth in writing any action proposed to be taken or omitted by the Rights Agent with respect to its duties or obligations under this Rights Agreement and the date on and/or after which such action shall be taken or omitted and the Rights Agent shall not be liable for any action taken or omitted in accordance with a proposal included in any such application on or after the date specified therein (which date shall not be less than five Business Days after the date any such officer actually receives such application, unless any such officer shall have consented in writing to an earlier date) unless, prior to taking or omitting any such action, the Rights Agent has received written instructions in response to such application specifying the action to be taken or omitted.

(h) The Rights Agent and any stockholder, director, officer or employee of the Rights Agent may buy, sell or deal in any of the Rights or other securities of the Company or become pecuniarily interested in any transaction in which the Company may be interested, or contract with or lend money to the Company or otherwise act as fully and freely as though it were not Rights Agent under this Agreement. Nothing herein shall preclude the Rights Agent from acting in any other capacity for the Company or for any other legal entity.

(i) The Rights Agent may execute and exercise any of the rights or powers hereby vested in it or perform any duty hereunder either itself or by or through its attorneys or agents, and the Rights Agent shall not be answerable or accountable for any act, default, neglect or misconduct of any such attorneys or agents or for any loss to the Company resulting from any such act, default, neglect or misconduct; provided, however, reasonable care was exercised in the selection and continued employment thereof.

(j) No provision of this Agreement shall require the Rights Agent to expend or risk its own funds or otherwise incur any financial liability in the performance of any of its duties hereunder or in the exercise of its rights if there shall be reasonable grounds for believing that repayment of such funds or adequate indemnification against such risk or liability is not reasonably assured to it.

(k) If, with respect to any Rights Certificate surrendered to the Rights Agent for exercise or transfer, the certificate attached to the form of assignment or form of election to purchase, as the case may be, has not been completed, the Company and the Rights Agent will deem the beneficial owner of the rights evidenced by such Rights Certificate to be an Acquiring Person or an Affiliate or Associate thereof and such assignment or election to purchase will not be honored.

Section 21. Change of Rights Agent. The Rights Agent or any successor Rights Agent may resign and be discharged from its duties under this Agreement upon thirty (30) days' notice in writing mailed to the Company, and to each transfer agent of the Common Stock and Preferred Stock, by registered or certified mail, and to the holders of the Rights Certificates by first-class mail. The Company may remove the Rights Agent or any successor Rights Agent upon thirty (30) days' notice in writing, mailed to the Rights Agent or successor Rights Agent, as

the case may be, and to each transfer agent of the Common Stock and Preferred Stock, by registered or certified mail, and to the holders of the Rights Certificates by first-class mail. In the event the transfer agency relationship in effect between the Company and the Rights Agent terminates, the Rights Agent will be deemed to resign automatically on the effective date of such termination, and any required notice will be sent by the Company. If the Rights Agent shall resign or be removed or shall otherwise become incapable of acting, the Company shall appoint a successor to the Rights Agent. If the Company shall fail to make such appointment within a period of thirty (30) days after giving notice of such removal or after it has been notified in writing of such resignation or incapacity by the resigning or incapacitated Rights Agent or by the holder of a Rights Certificate (who shall, with such notice, submit his Rights Certificate for inspection by the Company), then any registered holder of any Rights Certificate may apply to any court of competent jurisdiction for the appointment of a new Rights Agent. Any successor Rights Agent, whether appointed by the Company or by such a court, shall be (a) a corporation organized and doing business under the laws of the United States (or of any state of the United States) in good standing, which is authorized under such laws to exercise corporate trust or stock transfer powers and is subject to supervision or examination by federal or state authority and which has at the time of its appointment as Rights Agent a combined capital and surplus of at least \$50,000,000 or (b) an affiliate of a corporation described in clause (a) of this sentence. After appointment, the successor Rights Agent shall be vested with the same powers, rights, duties and responsibilities as if it had been originally named as Rights Agent without further act or deed; but the predecessor Rights Agent shall deliver and transfer to the successor Rights Agent any property at the time held by it hereunder, and execute and deliver any further assurance, conveyance, act or deed necessary for the purpose. Not later than the effective date of any such appointment, the Company shall file notice thereof in writing with the predecessor Rights Agent and each transfer agent of the Common Stock and the Preferred Stock, and mail a notice thereof in writing to the registered holders of the Rights Certificates. Failure to give any notice provided for in this Section 21, however, or any defect therein, shall not affect the legality or validity of the resignation or removal of the Rights Agent or the appointment of the successor Rights Agent, as the case may be.

Section 22. Issuance of New Rights Certificates. Notwithstanding any of the provisions of this Agreement or of the Rights to the contrary, the Company may, at its option, issue new Rights Certificates evidencing Rights in such form as may be approved by the Board to reflect any adjustment or change in the Purchase Price and the number or kind or class of shares or other securities or property purchasable under the Rights Certificates made in accordance with the provisions of this Agreement.

Section 23. Redemption; Independent Director Review.

(a) The Board may, at its option, at any time prior to the earlier of (i) the close of business on the tenth Business Day (or such later date as may be determined by the Board pursuant to clause (i) of the first sentence of Section 3(a) with respect to the Distribution Date) following the Stock Acquisition Date (or, if the Stock Acquisition Date shall have occurred prior to the Record Date, the close of business on the tenth Business Day following the Record Date) and (ii) the Final Expiration Date, redeem all but not less than all the then outstanding Rights at a redemption price of \$0.001 per Right, as such amount may be appropriately adjusted to reflect

any stock split, stock dividend or similar transaction occurring after the date hereof (such redemption price being hereinafter referred to as the "Redemption Price"). The redemption of the Rights by the Board may be made effective at such time, on such basis and with such conditions as the Board in its sole discretion may establish. The Company may, at its option, pay the Redemption Price in cash, shares of Common Stock (based on the "current market price," as defined in Section 11(d)(i) hereof, of the Common Stock at the time of redemption) or any other form of consideration, or any combination of any of the foregoing, deemed appropriate by the Board. Notwithstanding anything contained in this Agreement to the contrary, the Rights shall not be exercisable after the first occurrence of a Section 11(a)(ii) Event until such time as the Company's right of redemption hereunder has expired.

(b) Immediately upon the action of the Board ordering the redemption of the Rights, evidence of which shall have been filed with the Rights Agent and without any further action and without any notice, the right to exercise the Rights shall terminate and the only right thereafter of the holders of Rights shall be to receive the Redemption Price for each Right so held. Promptly after the action of the Board ordering the redemption of the Rights, the Company shall give notice of such redemption to the Rights Agent and the holders of the then outstanding Rights by mailing such notice to all such holders at each holder's last address as it appears upon the registry books of the Rights Agent or, prior to the Distribution Date, on the registry books of the Transfer Agent for the Common Stock. Any notice which is mailed in the manner herein provided shall be deemed given, whether or not the holder receives the notice. Each such notice of redemption will state the method by which the payment of the Redemption Price will be made.

(c) In the event of a redemption of the Rights in accordance with this Agreement, the Company may, at its option, discharge all of its obligations with respect to the Rights by (i) issuing a press release announcing the manner of redemption of the Rights in accordance with this Agreement and (ii) mailing payment of the Redemption Price to the registered holders of the Rights at their last addresses as they appear on the registry books of the Rights Agent or, prior to the Distribution Date, on the registry books of the Transfer Agent of the Common Stock, and upon such action, all outstanding Rights and Right Certificates shall be null and void without any further action by the Company.

Section 24. Exchange.

(a) The Board may, at its option, at any time after a Section 11(a)(ii) Event, exchange all or part of the then outstanding and exercisable Rights (which (i) shall not include Rights that

have become void pursuant to the provisions of Section 7(e) hereof, and (ii) shall include, without limitation, any Rights issued after the Distribution Date) for shares of Common Stock at an exchange ratio of one share of Common Stock per Right, appropriately adjusted to reflect any stock split, stock dividend or similar transaction occurring after the date hereof (such exchange ratio being hereinafter referred to as the "Exchange Ratio"). Notwithstanding the foregoing, the Board shall not be empowered to effect such exchange at any time after any Person (other than the Company, any Subsidiary of the Company, any employee benefit plan of the Company or any such Subsidiary, or any entity holding Common Stock for or pursuant to the terms of any such plan), together with all Affiliates and Associates of such Person, becomes the Beneficial Owner of 50% or more of the shares of Common Stock then outstanding.

(b) Immediately upon the action of the Board ordering the exchange of any Rights pursuant to subSection (a) of this Section 24, evidence of which shall have been filed with the Rights Agent, and without any further action and without any notice, the right to exercise such Rights shall terminate and the only right thereafter of a holder of such Rights shall be to receive that number of shares of Common Stock equal to the number of such Rights held by such holder multiplied by the Exchange Ratio. The Company shall promptly give public notice of any such exchange; provided, however, that the failure to give, or any defect in, such notice shall not affect the validity of such exchange. The Company promptly shall mail a notice of any such exchange to all of the holders of such Rights at their last addresses as they appear upon the registry books of the Rights Agent. Any notice which is mailed in the manner herein provided shall be deemed given, whether or not the holder receives the notice. Each such notice of exchange shall state the method by which the exchange of shares of Common Stock for Rights will be effected and, in the event of any partial exchange, the number of Rights which will be exchanged. Any partial exchange shall be effected pro rata based on the number of Rights (other than Rights which have become void pursuant to the provisions of Section 7(e) hereof) held by each holder of Rights.

(c) In any exchange pursuant to this Section 24, the Company, at its option, may substitute Preferred Stock (or equivalent preferred stock, as such term is defined in Section 11(b) hereof) for shares of Common Stock exchangeable for Rights, at the initial rate of one one-thousandth of a share of Preferred Stock (or equivalent preferred stock) for each share of Common Stock, as appropriately adjusted to reflect adjustments in the voting rights of the Preferred Stock pursuant to Section 3(A) of the Certificate of Designations attached hereto as Exhibit A, so that the fraction of a share of Preferred Stock (or equivalent preferred stock) delivered in lieu of each share of Common Stock shall have the same voting rights as one share of Common Stock.

(d) In the event that there shall not be sufficient shares of Common Stock or Preferred Stock issued but not outstanding or authorized but unissued to permit any exchange of Rights as contemplated in accordance with this Section 24, the Company shall take all such action as may be necessary to authorize additional shares of Common Stock or Preferred Stock for issuance upon exchange of the Rights.

(e) The Company shall not be required to issue fractions of shares of Common Stock or to distribute certificates which evidence fractional shares of Common Stock. In lieu of such

fractional shares of Common Stock, there shall be paid to the registered holders of the Right Certificates with regard to which such fractional shares of Common Stock would otherwise be issuable, an amount in cash equal to the same fraction of the current market value of a whole share of Common Stock. For the purposes of this subSection (e), the current market value of a whole share of Common Stock shall be the closing price per share of Common Stock (as determined pursuant to the second sentence of Section 11(d)(i) hereof) for the Trading Day immediately prior to the date of exchange pursuant to this Section 24.

Section 25. Notice of Certain Events.

(a) In case the Company shall propose, at any time after the Distribution Date, (i) to pay any dividend payable in stock of any class to the holders of Preferred Stock or to make any other distribution to the holders of Preferred Stock (other than a regular quarterly cash dividend out of earnings or retained earnings of the Company), or (ii) to offer to the holders of Preferred Stock rights or warrants to subscribe for or to purchase any additional shares of Preferred Stock or shares of stock of any class or any other securities, rights or options, or (iii) to effect any reclassification of its Preferred Stock (other than a reclassification involving only the subdivision of outstanding shares of Preferred Stock), or (iv) to effect any consolidation or merger into or with any other Person (other than a Subsidiary of the Company in a transaction which complies with Section 11(o) hereof), or to effect any sale or other transfer (or to permit one or more of its Subsidiaries to effect any sale or other transfer), in one transaction or a series of related transactions, of more than 50% of the assets or earning power of the Company and its Subsidiaries (taken as a whole) to any other Person or Persons (other than the Company and/or any of its Subsidiaries in one or more transactions each of which complies with Section 11(o) hereof), or (v) to effect the liquidation, dissolution or winding up of the Company, then, in each such case, the Company shall give to each holder of a Rights Certificate, to the extent feasible and in accordance with Section 26 hereof, a notice of such proposed action, which shall specify the record date for the purposes of such stock dividend, distribution of rights or warrants, or the date on which such reclassification, consolidation, merger, sale, transfer, liquidation, dissolution, or winding up is to take place and the date of participation therein by the holders of the shares of Preferred Stock, if any such date is to be fixed, and such notice shall be so given in the case of any action covered by clause (i) or (ii) above at least twenty (20) days prior to the record date for determining holders of the shares of Preferred Stock for purposes of such action, and in the case of any such other action, at least twenty (20) days prior to the date of the taking of such proposed action or the date of participation therein by the holders of the shares of Preferred Stock, whichever shall be the earlier.

(b) In case a Section 11(a)(ii) Event shall occur, then, in any such case, (i) the Company shall as soon as practicable thereafter give to each holder of a Rights Certificate, to the extent feasible and in accordance with Section 26 hereof, a notice of the occurrence of such event, which shall specify the event and the consequences of the event to holders of Rights under Section 11(a)(ii) hereof, and (ii) all references in the preceding paragraph to Preferred Stock shall be deemed thereafter to refer also to Common Stock and/or, if appropriate, other securities; provided that the failure to give such notice shall not affect the validity of such consent.

Section 26. Notices. Notices or demands authorized by this Agreement to be given or made by the Rights Agent or by the holder of any Rights Certificate to or on the Company shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed (until another address is filed in writing with the Rights Agent) as follows:

Momenta Pharmaceuticals, Inc.  
675 West Kendall Street  
Cambridge, MA 02142  
Attention: Chief Executive Officer

with a copy to:

Wilmer Cutler Pickering Hale and Dorr LLP  
60 State Street  
Boston, MA 02109  
Attention: Steven D. Singer, Esq.

Subject to the provisions of Section 21, any notice or demand authorized by this Agreement to be given or made by the Company or by the holder of any Rights Certificate to or on the Rights Agent shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed (until another address is filed in writing with the Company) as follows:

American Stock Transfer & Trust Company  
59 Maiden Lane  
New York, NY 10038  
Attention: Corporate Trust Department

Notices or demands authorized by this Agreement to be given or made by the Company or the Rights Agent to the holder of any Rights Certificate (or, if prior to the Distribution Date, to the holder of certificates representing shares of Common Stock) shall be sufficiently given or made if sent by first-class mail, postage prepaid, addressed to such holder at the address of such holder as shown on the registry books of the Company.

Section 27. Supplements and Amendments. Except as provided in the penultimate sentence of this Section 27, for so long as the Rights are then redeemable, the Company may, in its sole and absolute discretion, and the Rights Agent shall, if the Company so directs, supplement or amend any provision of this Agreement in any respect without the approval of any holders of the Rights. At any time when the Rights are no longer redeemable, except as provided in the penultimate sentence of this Section 27, the Company may, by approval of at least 75% of the members of the Board, and the Rights Agent shall, if the Company so directs, supplement or amend this Agreement without the approval of any holders of Rights in order (i) to cure any ambiguity or (ii) to correct or supplement any provision contained herein which may be defective or inconsistent with any other provisions herein, provided that no such supplement or amendment shall adversely affect the interests of the holders of Rights as such (other than an Acquiring Person or an Affiliate or Associate of an Acquiring Person). Upon the delivery of a certificate from an appropriate officer of the Company which states that the proposed supplement

or amendment is in compliance with the terms of this Section 27, the Rights Agent shall execute such supplement or amendment. Any supplement or amendment that the Rights Agent is required to sign pursuant to this Section 27 shall be effective upon execution by the Company (whether or not then executed by the Rights Agent or the certificate referred to in the immediately preceding sentence has been delivered). Notwithstanding anything contained in this Agreement to the contrary, no supplement or amendment shall be made which changes the Redemption Price. Prior to the Distribution Date, the interests of the holders of Rights shall be deemed coincident with the interests of the holders of Common Stock.

Section 28. Successors. All the covenants and provisions of this Agreement by or for the benefit of the Company or the Rights Agent shall bind and inure to the benefit of their respective successors and assigns hereunder.

Section 29. Actions by the Board, etc. The Board shall have the exclusive power and authority to administer this Agreement and to exercise all rights and powers specifically granted to the Board or to the Company, or as may be necessary or advisable in the administration of this Agreement, including, without limitation, the right and power to (i) interpret the provisions of this Agreement, and (ii) make all determinations deemed necessary or advisable for the administration of this Agreement (including a determination to redeem or not redeem the Rights or to amend this Agreement). All such actions, calculations, interpretations and determinations (including, for purposes of clause (y) below, all omissions with respect to the foregoing) which are done or made by the Board in good faith, shall (x) be final, conclusive and binding on the Company, the Rights Agent, the holders of the Rights and all other parties, and (y) not subject the Board to any liability to the holders of the Rights.

Section 30. Benefits of this Agreement. Nothing in this Agreement shall be construed to give to any Person other than the Company, the Rights Agent and the registered holders of the Rights Certificates (and, prior to the Distribution Date, registered holders of the Common Stock) any legal or equitable right, remedy or claim under this Agreement; but this Agreement shall be for the sole and exclusive benefit of the Company, the Rights Agent and the registered holders of the Rights Certificates (and, prior to the Distribution Date, registered holders of the Common Stock).

Section 31. Severability. If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction or other authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated; provided, however, that notwithstanding anything in this Agreement to the contrary, if any such term, provision, covenant or restriction is held by such court or authority to be invalid, void or unenforceable and the Board determines in its good faith judgment that severing the invalid, void or unenforceable language from this Agreement would adversely affect the purpose or effect of this Agreement, the right of redemption set forth in Section 23 hereof shall be reinstated and shall not expire until the close of business on the tenth day following the date of such determination by the Board.

Section 32. Governing Law. This Agreement, each Right and each Rights Certificate issued hereunder shall be deemed to be a contract made under the laws of the State of Delaware and for all purposes shall be governed by and construed in accordance with the laws of Delaware applicable to contracts made and to be performed entirely within Delaware.

Section 33. Counterparts. This Agreement may be executed in any number of counterparts and each of such counterparts shall for all purposes be deemed to be an original, and all such counterparts shall together constitute but one and the same instrument.

Section 34. Descriptive Headings. Descriptive headings of the several Sections of this Agreement are inserted for convenience only and shall not control or affect the meaning or construction of any of the provisions hereof.

*[Remainder of Page Intentionally Left Blank]*

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be duly executed and their respective corporate seals to be hereunto affixed and attested, all as of the day and year first above written.

Attest:

MOMENTA PHARMACEUTICALS, INC.

By: /s/ Lisa Shmerling  
Name: Lisa Caron Shmerling  
Title: Deputy General Counsel

By: /s/ Alan L. Crane  
Name: Alan L. Crane  
Title: President and Chief Executive Officer

Attest:

AMERICAN STOCK TRANSFER & TRUST COMPANY

By: /s/ Susan Silber  
Name: Susan Silber  
Title: Assistant Secretary

By: /s/ Herbert J. Lemmer  
Name: Herbert J. Lemmer  
Title: Vice President

EXHIBIT A  
FORM OF  
CERTIFICATE OF DESIGNATIONS  
OF  
SERIES A JUNIOR PARTICIPATING PREFERRED STOCK  
OF  
MOMENTA PHARMACEUTICALS, INC.

Momenta Pharmaceuticals, Inc., a corporation organized and existing under the laws of the State of Delaware (hereinafter called the "Corporation"), hereby certifies that the following resolution was adopted by the Board of Directors of the Corporation at a meeting duly called and held on October 31, 2005:

RESOLVED: That pursuant to the authority granted to and vested in the Board of Directors of the Corporation (hereinafter called the "Board") in accordance with the provisions of the Certificate of Incorporation, as amended, the Board hereby creates a series of Preferred Stock, \$.01 par value per share, of the Corporation and hereby states the designation and number of shares, and fixes the relative rights, preferences and limitations thereof as follows:

**Series A Junior Participating Preferred Stock:**

Section 1. Designation and Amount. The shares of such series shall be designated as "Series A Junior Participating Preferred Stock" (the "Series A Preferred Stock") and the number of shares constituting the Series A Preferred Stock shall be one hundred thousand (100,000). Such number of shares may be increased or decreased by resolution of the Board prior to issuance; provided, that no decrease shall reduce the number of shares of Series A Preferred Stock to a number less than the number of shares then outstanding plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Corporation convertible into Series A Preferred Stock.

Section 2. Dividends and Distributions.

(A) Subject to the rights of the holders of any shares of any series of Preferred Stock (or any similar stock) ranking prior and superior to the Series A Preferred Stock with respect to dividends, the holders of shares of Series A Preferred Stock, in preference to the holders of Common Stock, par value \$.0001 per share (the "Common Stock"), of the Corporation, and of any other junior stock, shall be entitled to receive, when, as and if declared by the Board out of

funds of the Corporation legally available for the payment of dividends, quarterly dividends payable in cash on the last day of each fiscal quarter of the Corporation in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Preferred Stock, in an amount per share (rounded to the nearest cent) equal to the greater of (a) \$10 or (b) subject to the provision for adjustment hereinafter set forth, 1,000 times the aggregate per share amount of all cash dividends, and 1,000 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions, other than a dividend payable in shares of Common Stock or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the Common Stock since the immediately preceding Quarterly Dividend Payment Date or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Preferred Stock. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the preceding sentence shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under clause (b) of the first sentence of this Section 2(A) shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

(B) The Corporation shall declare a dividend or distribution on the Series A Preferred Stock as provided in paragraph (A) of this Section immediately after it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock) and the Corporation shall pay such dividend or distribution on the Series A Preferred Stock before the dividend or distribution declared on the Common Stock is paid or set apart; provided that, in the event no dividend or distribution shall have been declared on the Common Stock during the period between any Quarterly Dividend Payment Date and the next subsequent Quarterly Dividend Payment Date, a dividend of \$10 per share on the Series A Preferred Stock shall nevertheless be payable on such subsequent Quarterly Dividend Payment Date.

(C) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares, unless the date of issue of such shares is prior to the record date for the first

Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board may fix a record date for the determination of holders of shares of Series A Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be not more than 60 days prior to the date fixed for the payment thereof.

Section 3. Voting Rights. The holders of shares of Series A Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each share of Series A Preferred Stock shall entitle the holder thereof to 1,000 votes on all matters submitted to a vote of the stockholders of the Corporation. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the number of votes per share to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the number of votes per share to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

(B) Except as otherwise provided herein, in the Certificate of Incorporation or by law, the holders of shares of Series A Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of stockholders of the Corporation.

(C) (i) If at any time dividends on any Series A Preferred Stock shall be in arrears in an amount equal to six quarterly dividends thereon, the holders of the Series A Preferred Stock, voting as a separate series from all other series of Preferred Stock and classes of capital

stock, shall be entitled to elect two members of the Board in addition to any Directors elected by any other series, class or classes of securities and the authorized number of Directors will automatically be increased by two. Promptly thereafter, the Board of the Corporation shall, as soon as may be practicable, call a special meeting of holders of Series A Preferred Stock for the purpose of electing such members of the Board. Such special meeting shall in any event be held within 45 days of the occurrence of such arrearage.

(ii) During any period when the holders of Series A Preferred Stock, voting as a separate series, shall be entitled and shall have exercised their right to elect two Directors, then, and during such time as such right continues, (a) the then authorized number of Directors shall be increased by two, and the holders of Series A Preferred Stock, voting as a separate series, shall be entitled to elect the additional Directors so provided for, and (b) each such additional Director shall not be a member of any existing class of the Board, but shall serve until the next annual meeting of stockholders for the election of Directors, or until his successor shall be elected and shall qualify, or until his right to hold such office terminates pursuant to the provisions of this Section 3(C).

(iii) A Director elected pursuant to the terms hereof may be removed with or without cause by the holders of Series A Preferred Stock entitled to vote in an election of such Director.

(iv) If, during any interval between annual meetings of stockholders for the election of Directors and while the holders of Series A Preferred Stock shall be entitled to elect two Directors, there is no such Director in office by reason of resignation, death or removal, then, promptly thereafter, the Board shall call a special meeting of the holders of Series A Preferred Stock for the purpose of filling such vacancy and such vacancy shall be filled at such special meeting. Such special meeting shall in any event be held within 45 days of the occurrence of such vacancy.

(v) At such time as the arrearage is fully cured, and all dividends accumulated and unpaid on any shares of Series A Preferred Stock outstanding are paid, and, in addition thereto, at least one regular dividend has been paid subsequent to curing such arrearage, the term of office of any Director elected pursuant to this Section 3(C), or his successor, shall automatically terminate, and the authorized number of Directors shall automatically decrease by two, the rights of the holders of the shares of the Series A Preferred Stock to vote as provided in this Section 3(C) shall cease, subject to renewal from time to time upon the same terms and conditions, and the holders of shares of the Series A Preferred Stock shall have only the limited voting rights elsewhere herein set forth.

(D) Except as set forth herein, or as otherwise provided by law, holders of Series A Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

Section 4. Certain Restrictions.

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends, or make any other distributions, on any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock;

(ii) declare or pay dividends, or make any other distributions, on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except dividends paid ratably on the Series A Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such junior stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Preferred Stock; or

(iv) redeem or purchase or otherwise acquire for consideration any shares of Series A Preferred Stock, or any shares of stock ranking on a parity with the Series A Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board) to all holders of such shares upon such terms as the Board, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section 4, purchase or otherwise acquire such shares at such time and in such manner.

Section 5. Reacquired Shares. Any shares of Series A Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and cancelled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock subject to the conditions and restrictions on issuance set forth herein, in the Certificate of Incorporation, or in any other Certificate of Designations creating a series of Preferred Stock or any similar stock or as otherwise required by law.

Section 6. Liquidation, Dissolution or Winding Up.

(A) Upon any liquidation, dissolution or winding up of the Corporation, no distribution shall be made (1) to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock unless, prior thereto, the holders of shares of Series A Preferred Stock shall have received \$1,000 per share, plus an amount equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment, provided that the holders of shares of Series A Preferred Stock shall be entitled to receive an aggregate amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1,000 times the aggregate amount to be distributed per share to holders of shares of Common Stock, or (2) to the holders of shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except distributions made ratably on the Series A Preferred Stock and all such parity stock in proportion to the total amounts to which the holders of all such shares are entitled upon such liquidation, dissolution or winding up.

(B) Neither the consolidation, merger or other business combination of the Corporation with or into any other corporation nor the sale, lease, exchange or conveyance of all or any part of the property, assets or business of the Corporation shall be deemed to be a liquidation, dissolution or winding up of the Corporation for purposes of this Section 6.

(C) In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of paragraph (A) of this Section 6 shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the aggregate amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the proviso in clause (1) of paragraph (A) of this Section 6 shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

Section 7. Consolidation, Merger, etc. Notwithstanding anything to the contrary contained herein, in case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case each share of Series A Preferred Stock shall at the same time be similarly exchanged or changed into an amount per share, subject to the provision for adjustment hereinafter set forth, equal to 1,000

times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time declare or pay any dividend on the Common Stock payable in shares of Common Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Common Stock (by reclassification or otherwise than by payment of a dividend in shares of Common Stock) into a greater or lesser number of shares of Common Stock, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event. In the event the Corporation shall at any time declare or pay any dividend on the Series A Preferred Stock payable in shares of Series A Preferred Stock, or effect a subdivision, combination or consolidation of the outstanding shares of Series A Preferred Stock (by reclassification or otherwise than by payment of a dividend in shares of Series A Preferred Stock) into a greater or lesser number of shares of Series A Preferred Stock, then in each such case the amount set forth in the first sentence of this Section 7 with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Series A Preferred Stock that were outstanding immediately prior to such event and the denominator of which is the number of shares of Series A Preferred Stock outstanding immediately after such event.

Section 8. No Redemption. The shares of Series A Preferred Stock shall not be redeemable.

Section 9. Rank. The Series A Preferred Stock shall rank, with respect to the payment of dividends and the distribution of assets, junior to all series of any other class of the Preferred Stock issued either before or after the issuance of the Series A Preferred Stock, unless the terms of any such series shall provide otherwise.

Section 10. Amendment. At such time as any shares of Series A Preferred Stock are outstanding, the Certificate of Incorporation, as amended, of the Corporation shall not be amended in any manner which would materially alter or change the powers, preferences or special rights of the Series A Preferred Stock so as to affect them adversely without the affirmative vote of the holders of at least two-thirds of the outstanding shares of Series A Preferred Stock, voting together as a single class.

Section 11. Fractional Shares. Series A Preferred Stock may be issued in fractions of a share which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and have the benefit of all other rights of holders of Series A Preferred Stock.

IN WITNESS WHEREOF, this Certificate of Designations is executed on behalf of the Corporation by its Chief Executive Officer this 8<sup>th</sup> day of November, 2005.

MOMENTA PHARMACEUTICALS, INC.

By: \_\_\_\_\_  
Name: Alan L. Crane  
Title: President and Chief Executive Officer

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EXHIBIT B

[Form of Rights Certificate]

Certificate No. R-

Rights

NOT EXERCISABLE AFTER NOVEMBER 6, 2008 OR EARLIER IF REDEEMED OR EXCHANGED BY THE COMPANY. THE RIGHTS ARE SUBJECT TO REDEMPTION AT \$.001 PER RIGHT AND TO EXCHANGE ON THE TERMS SET FORTH IN THE RIGHTS AGREEMENT. UNDER CERTAIN CIRCUMSTANCES, RIGHTS BENEFICIALLY OWNED BY AN ACQUIRING PERSON (AS SUCH TERM IS DEFINED IN THE RIGHTS AGREEMENT) AND ANY SUBSEQUENT HOLDER OF SUCH RIGHTS MAY BECOME NULL AND VOID. [THE RIGHTS REPRESENTED BY THIS RIGHTS CERTIFICATE ARE OR WERE BENEFICIALLY OWNED BY A PERSON WHO WAS OR BECAME AN ACQUIRING PERSON OR AN AFFILIATE OR ASSOCIATE OF AN ACQUIRING PERSON (AS SUCH TERMS ARE DEFINED IN THE RIGHTS AGREEMENT). ACCORDINGLY, THIS RIGHTS CERTIFICATE AND THE RIGHTS REPRESENTED HEREBY MAY BECOME NULL AND VOID IN THE CIRCUMSTANCES SPECIFIED IN SECTION 7(e) OF SUCH AGREEMENT.](1)

MOMENTA PHARMACEUTICALS, INC.

Rights Certificate

This certifies that \_\_\_\_\_, or registered assigns, is the registered owner of the number of Rights set forth above, each of which entitles the owner thereof, subject to the terms, provisions and conditions of the Rights Agreement, dated November 7, 2005 (the "Rights Agreement"), between Momenta Pharmaceuticals, Inc., a Delaware corporation (the "Company"), and American Stock Transfer & Trust Company (the "Rights Agent"), to purchase from the Company after the Distribution Date (as such term is defined in the Rights Agreement) and at any time prior to 5:00 p.m. (Boston time) on November 6, 2008 the office of the Rights Agent designated for such purpose, or its successors as Rights Agent, one one-thousandth of a fully paid, non-assessable share of Series A Junior Participating Preferred Stock (the "Preferred Stock") of the Company, \$.01 par value per share, at a purchase price of \$125 in cash per one one-thousandth of a share (the "Purchase Price"), upon presentation and surrender of this Rights Certificate with the Form of Election to Purchase and related Certificate duly executed. The number of Rights evidenced by this Rights Certificate (and the number of one one-thousandth of a share of Preferred Stock which may be purchased upon exercise hereof) set forth above, and the Purchase Price set forth above, are the number and Purchase Price as of the close of business on November 7, 2005, based on the Preferred Stock as constituted at such date. Capitalized terms used herein and not otherwise defined herein shall have the meanings ascribed to such terms in the Rights Agreement.

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(1) The portion of the legend in brackets shall be inserted only if applicable and shall replace the preceding sentence.

Upon the occurrence of a Section 11(a)(ii) Event, if the Rights evidenced by this Rights Certificate are beneficially owned by (i) an Acquiring Person or an Affiliate or Associate of any such Acquiring Person (as such terms are defined in the Rights Agreement), (ii) a transferee of any such Acquiring Person, Associate or Affiliate who becomes a transferee after the Acquiring Person becomes an Acquiring Person, or (iii) under certain circumstances specified in the Rights Agreement, a transferee of a person who, concurrently with or after such transfer, became an Acquiring Person, or an Affiliate or Associate of an Acquiring Person, such Rights shall become null and void and no holder hereof shall have any right with respect to such Rights from and after the occurrence of such Section 11(a)(ii) Event.

As provided in the Rights Agreement, the Purchase Price and the number and kind of shares of Preferred Stock or other securities which may be purchased upon the exercise of the Rights evidenced by this Rights Certificate are subject to modification and adjustment upon the happening of certain events, including Section 11(a)(ii) Events.

This Rights Certificate is subject to all of the terms, provisions and conditions of the Rights Agreement, which terms, provisions and conditions are hereby incorporated herein by reference and made a part hereof and to which Rights Agreement reference is hereby made for a full description of the rights, limitations of rights, obligations, duties and immunities hereunder of the Rights Agent, the Company and the holders of the Rights Certificates, which limitations of rights include the temporary suspension of the exercisability of such Rights under the specific circumstances set forth in the Rights Agreement. Copies of the Rights Agreement are on file at the principal offices of the Company and are available upon written request to the Company.

This Rights Certificate, with or without other Rights Certificates, upon surrender at the office of the Rights Agent designated for such purpose, with the Form of Election and Certificate set forth on the reverse side duly executed, may be exchanged for another Rights Certificate or Rights Certificates of like tenor and date evidencing Rights entitling the holder to purchase a like aggregate number of one one-thousandths of a share of Preferred Stock as the Rights evidenced by the Rights Certificate or Rights Certificates surrendered shall have entitled such holder to purchase. If this Rights Certificate shall be exercised in part, the holder shall be entitled to receive upon surrender hereof another Rights Certificate or Rights Certificates for the number of whole Rights not exercised.

Subject to the provisions of the Rights Agreement, the Rights evidenced by this Certificate may be redeemed by the Company at its option at a redemption price of \$.001 per Right at any time prior to the earlier of (i) the close of business on the tenth Business Day (or such later date as may be determined by the Board pursuant to clause (i) of the first sentence of Section 3(a) with respect to the Distribution Date) following the Stock Acquisition Date (or, if the Stock Acquisition Date shall have occurred prior to the Record Date, the close of business on the tenth Business Day following the Record Date) and (ii) the Final Expiration Date.

Subject to the provisions of the Rights Agreement, the Company may, at its option, at any time after a Section 11(a)(ii) Event, exchange all or part of the Rights evidenced by this Certificate for shares of the Company's Common Stock or for Preferred Stock (or shares of a class or series of

the Company's preferred stock having the same rights, privileges and preferences as the Preferred Stock).

No fractional shares of Preferred Stock will be issued upon the exercise of any Right or Rights evidenced hereby (other than fractions which are integral multiples of one one-thousandth of a share of Preferred Stock, which may, at the election of the Company, be evidenced by depositary receipts), but in lieu thereof a cash payment will be made, as provided in the Rights Agreement.

No holder of this Rights Certificate, as such, shall be entitled to vote or receive dividends or be deemed for any purpose the holder of shares of Preferred Stock or of any other securities of the Company which may at any time be issuable on the exercise hereof, nor shall anything contained in the Rights Agreement or herein be construed to confer upon the holder hereof, as such, any of the rights of a stockholder of the Company or any right to vote for the election of directors or upon any matter submitted to stockholders at any meeting thereof, or to give or withhold consent to any corporate action, or to receive notice of meetings or other actions affecting stockholders (except as provided in the Rights Agreement), or to receive dividends or subscription rights, or otherwise, until the Right or Rights evidenced by this Rights Certificate shall have been exercised as provided in the Rights Agreement.

This Rights Certificate shall not be valid or obligatory for any purpose until it shall have been countersigned by the Rights Agent.

WITNESS the facsimile signature of the proper officers of the Company and its corporate seal.

Dated as of \_\_\_\_\_

ATTEST:

MOMENTA PHARMACEUTICALS, INC.

\_\_\_\_\_  
Secretary

By: \_\_\_\_\_  
Title: \_\_\_\_\_

COUNTERSIGNED:

AMERICAN STOCK TRANSFER & TRUST  
COMPANY

By: \_\_\_\_\_

Authorized Signature

[Form of Reverse Side of Rights Certificate]

FORM OF ASSIGNMENT

(To be executed by the registered holder if such holder desires to transfer the Rights Certificate.)

FOR VALUE RECEIVED

hereby sells, assigns and transfers unto

(Please print name and address of transferee)

irrevocably constitute and appoint full power of substitution.

this Rights Certificate, together with all right, title and interest therein, and does hereby Attorney, to transfer the within Rights Certificate on the books of the within-named Company, with

Dated: \_\_\_\_\_

\_\_\_\_\_  
Signature

Signature Guaranteed:

Certificate

The undersigned hereby certifies that the Rights evidenced by this Rights Certificate are not beneficially owned by, or being assigned to, an Acquiring Person or an Affiliate or Associate thereof (as such terms are defined pursuant to the Rights Agreement).

Dated: \_\_\_\_\_

\_\_\_\_\_  
Signature

Signature Guaranteed:

NOTICE

The signature to the foregoing Assignment and Certificate must correspond to the name as written upon the face of this Rights Certificate in every particular, without alteration or enlargement or any change whatsoever.

FORM OF ELECTION TO PURCHASE

(To be executed if holder desires to exercise  
Rights represented by the Rights Certificate.)

To: American Stock Transfer & Trust Company

The undersigned hereby irrevocably elects to exercise \_\_\_\_\_ Rights represented by this Rights Certificate to purchase the shares of Preferred Stock issuable upon the exercise of the Rights (or such other securities of the Company or of any other person which may be issuable upon the exercise of the Rights) and requests that certificates for such shares be issued in the name of and delivered to:

Please insert social security  
or other identifying number

(Please print name and address)

If such number of Rights shall not be all the Rights evidenced by this Rights Certificate, a new Rights Certificate for the balance of such Rights shall be registered in the name of and delivered to:

Please insert social security  
or other identifying number

(Please print name and address)

Dated: \_\_\_\_\_

Signature

Signature Guaranteed:

Certificate

The undersigned hereby certifies by checking the appropriate boxes that:

1. \_\_\_\_\_ the Rights evidenced by this Rights Certificate [ ] are [ ] are not being exercised by or on behalf of a Person who is or was an Acquiring Person or an Affiliate or Associate thereof (as such terms are defined pursuant to the Rights Agreement);
2. \_\_\_\_\_ after due inquiry and to the best knowledge of the undersigned, the undersigned [ ] did [ ] did not acquire the Rights evidenced by this Rights Certificate from any Person who is, was or became an Acquiring Person or an Affiliate or Associate thereof.

Dated: \_\_\_\_\_

Signature

Signature Guaranteed:

NOTICE

The signature to the foregoing Election to Purchase and Certificate must correspond to the name as written upon the face of this Rights Certificate in every particular, without alteration or enlargement or any change whatsoever.

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EXHIBIT C

SUMMARY OF RIGHTS TO  
PURCHASE PREFERRED STOCK

Effective November 7, 2005, the Board of Directors of Momenta Pharmaceuticals, Inc. (the "Company"), declared a dividend of one Right for each outstanding share of the Company's Common Stock to stockholders of record at the close of business on November 18, 2005 (the "Record Date"). Each Right entitles the registered holder to purchase from the Company one one-thousandth of a share of Series A Junior Participating Preferred Stock, \$.01 par value per share (the "Preferred Stock"), at a Purchase Price of \$125 in cash, subject to adjustment. The description and terms of the Rights are set forth in a Rights Agreement dated as of November 7, 2005 (the "Rights Agreement") between the Company and American Stock Transfer & Trust Company, as Rights Agent.

Initially, the Rights are not exercisable and will be attached to all certificates representing outstanding shares of Common Stock, and no separate Rights Certificates will be distributed. The Rights will separate from the Common Stock, and the Distribution Date will occur, upon the earlier of (i) 10 business days following the later of (a) the first date of a public announcement that a person or group of affiliated or associated persons (an "Acquiring Person") has acquired, or obtained the right to acquire, beneficial ownership of 20% or more of the outstanding shares of Common Stock or (b) the first date on which an executive officer of the Company has actual knowledge that an Acquiring Person has become such (the "Stock Acquisition Date") or (ii) 10 business days following the commencement of a tender offer or exchange offer that would result in a person or group beneficially owning 20% or more of the outstanding shares of Common Stock. The Distribution Date may be deferred in circumstances determined by the Board of Directors. In addition, certain inadvertent acquisitions will not trigger the occurrence of the Distribution Date. Until the Distribution Date (or earlier redemption or expiration of the Rights), (i) the Rights will be evidenced by the Common Stock certificates outstanding on the Record Date, together with this Summary of Rights, or by new Common Stock certificates issued after the Record Date which contain a notation incorporating the Rights Agreement by reference, (ii) the Rights will be transferred with and only with such Common Stock certificates, and (iii) the surrender for transfer of any certificates for Common Stock outstanding (with or without a copy of this Summary of Rights or such notation) will also constitute the transfer of the Rights associated with the Common Stock represented by such certificate.

The Rights are not exercisable until the Distribution Date and will expire upon the close of business on November 6, 2008 (the "Final Expiration Date") unless earlier redeemed or exchanged as described below. As soon as practicable after the Distribution Date, separate Rights Certificates will be mailed to holders of record of the Common Stock as of the close of business on the Distribution Date and, thereafter, the separate Rights Certificates alone will represent the Rights. Except as otherwise determined by the Board of Directors, and except for shares of Common Stock issued upon exercise, conversion or exchange of then outstanding options, convertible or exchangeable securities or other contingent obligations to issue shares or

pursuant to any employee benefit plan or arrangement, only shares of Common Stock issued prior to the Distribution Date will be issued with Rights.

In the event that any Person becomes an Acquiring Person, unless the event causing the 20% threshold to be crossed is a Permitted Offer (as defined in the Rights Agreement), then, promptly following the first occurrence of such event, each holder of a Right (except as provided below and in Section 7(e) of the Rights Agreement) shall thereafter have the right to receive, upon exercise, that number of shares of Common Stock of the Company (or, in certain circumstances, cash, property or other securities of the Company) which equals the exercise price of the Right divided by 50% of the current market price (as defined in the Rights Agreement) per share of Common Stock at the date of the occurrence of such event. However, Rights are not exercisable following such event until such time as the Rights are no longer redeemable by the Company as described below. Notwithstanding any of the foregoing, following the occurrence of such event, all Rights that are, or (under certain circumstances specified in the Rights Agreement) were, beneficially owned by any Acquiring Person will be null and void. The event summarized in this paragraph is referred to as a "Section 11(a)(ii) Event."

For example, at an exercise price of \$125 per Right, each Right not owned by an Acquiring Person (or by certain related parties) following a Section 11(a)(ii) Event would entitle its holder to purchase for \$125 such number of shares of Common Stock (or other consideration, as noted above) as equals \$125 divided by one-half of the current market price (as defined in the Rights Agreement) of the Common Stock. Assuming that the Common Stock had a market price of \$25 per share at such time, the holder of each valid Right would be entitled to purchase ten shares of Common Stock, having a market value of 10 x \$25, or \$250, for \$125.

In the event that, at any time after any Person becomes an Acquiring Person, (i) the Company is consolidated with, or merged with and into, another entity and the Company is not the surviving entity of such consolidation or merger (other than a consolidation or merger which follows a Permitted Offer) or if the Company is the surviving entity, but shares of its outstanding Common Stock are changed or exchanged for stock or securities (of any other person) or cash or any other property, or (ii) more than 50% of the Company's assets or earning power is sold or transferred, each holder of a Right (except Rights which previously have been voided as set forth above) shall thereafter have the right to receive, upon exercise, that number of shares of common stock of the acquiring company which equals the exercise price of the Right divided by 50% of the current market price (as defined in the Rights Agreement) of such common stock at the date of the occurrence of the event. The events summarized in this paragraph are referred to as "Section 13 Events." A Section 11(a)(ii) Event and Section 13 Events are collectively referred to as "Triggering Events."

For example, at an exercise price of \$125 per Right, each valid Right following a Section 13 Event would entitle its holder to purchase for \$125 such number of shares of common stock of the acquiring company as equals \$125 divided by one-half of the current market price (as defined in the Rights Agreement) of such common stock. Assuming that such common stock had a market price of \$25 per share at such time, the holder of each valid Right would be entitled to purchase ten shares of common stock of the acquiring company, having a market value of 10 x \$25, or \$250, for \$125.

At any time after the occurrence of a Section 11(a)(ii) Event, when no person owns a majority of the Common Stock, the Board of Directors of the Company may exchange the Rights (other than Rights owned by such Acquiring Person which have become void), in whole or in part, at an exchange ratio of one share of Common Stock, or one one-thousandth of a share of Preferred Stock (or of a share of a class or series of the Company's preferred stock having equivalent rights, preferences and privileges), per Right (subject to adjustment).

The Purchase Price payable, and the number of units of Preferred Stock or other securities or property issuable, upon exercise of the Rights are subject to adjustment from time to time to prevent dilution (i) in the event of a stock dividend on, or a subdivision, combination or reclassification of, the Preferred Stock, (ii) if holders of the Preferred Stock are granted certain rights or warrants to subscribe for Preferred Stock or convertible securities at less than the then-current market price (as defined in the Rights Agreement) of the Preferred Stock, or (iii) upon the distribution to holders of the Preferred Stock of evidences of indebtedness or assets (excluding regular periodic cash dividends paid out of earnings or retained earnings) or of subscription rights or warrants (other than those referred to above). The number of Rights associated with each share of Common Stock is also subject to adjustment in the event of a stock split of the Common Stock or a stock dividend on the Common Stock payable in Common Stock or subdivisions, consolidations or combinations of the Common Stock occurring, in any such case, prior to the Distribution Date.

With certain exceptions, no adjustment in the Purchase Price will be required until cumulative adjustments amount to at least 1% of the Purchase Price. No fractional shares of Preferred Stock (other than fractions which are integral multiples of one one-thousandth of a share of Preferred Stock) will be issued and, in lieu thereof, an adjustment in cash will be made based on the market price of the Preferred Stock on the last trading date prior to the date of exercise.

Preferred Stock purchasable upon exercise of the Rights will not be redeemable. Each share of Preferred Stock will be entitled to receive, when, as and if declared by the Board of Directors, a minimum preferential quarterly dividend payment of \$10 per share or, if greater, an aggregate dividend of 1,000 times the dividend declared per share of Common Stock. In the event of liquidation, the holders of the Preferred Stock will be entitled to a minimum preferential liquidation payment of \$1,000 per share, plus an amount equal to accrued and unpaid dividends, and will be entitled to an aggregate payment of 1,000 times the payment made per share of Common Stock. Each share of Preferred Stock will have 1,000 votes, voting together with the Common Stock. In the event of any merger, consolidation or other transaction in which Common Stock is changed or exchanged, each share of Preferred Stock will be entitled to receive 1,000 times the amount received per share of Common Stock. These rights are protected by customary antidilution provisions. Because of the nature of the Preferred Stock's dividend, liquidation and voting rights, the value of one one-thousandth of a share of Preferred Stock purchasable upon exercise of each Right should approximate the value of one share of Common Stock.

At any time prior to the earlier of the tenth Business Day (or such later date as may be determined by the Board of Directors of the Company) after the Stock Acquisition Date, the Company may redeem the Rights in whole, but not in part, at a price of \$0.001 per Right (the

“Redemption Price”), payable in cash or stock. Immediately upon the redemption of the Rights or such earlier time as established by the Board in the resolution ordering the redemption of the Rights, the Rights will terminate and the only right of the holders of Rights will be to receive the Redemption Price.

Until a Right is exercised, the holder thereof, as such, will have no rights as a stockholder of the Company, including, without limitation, the right to vote or to receive dividends. Although the distribution of the Rights should not be taxable to stockholders or to the Company, stockholders may, depending upon the circumstances, recognize taxable income in the event that the Rights become exercisable for Common Stock (or other consideration) of the Company or for common stock of the acquiring company as set forth above.

Any provision of the Rights Agreement, other than the redemption price, may be amended by the Board prior to such time as the Rights are no longer redeemable. Once the Rights are no longer redeemable, the Board’s authority to amend the Rights is limited to correcting ambiguities or defective or inconsistent provisions in a manner that does not adversely affect the interest of holders of Rights.

The Rights are intended to protect the stockholders of the Company in the event of an unfair or coercive offer to acquire the Company and to provide the Board with adequate time to evaluate unsolicited offers. The Rights may have anti-takeover effects. The Rights will cause substantial dilution to a person or group that attempts to acquire the Company without conditioning the offer on a substantial number of Rights being acquired. The Rights, however, should not affect any prospective offeror willing to make an offer at a fair price and otherwise in the best interests of the Company and its stockholders, as determined by the Board. The Rights should not interfere with any merger or other business combination approved by the Board.

A copy of the Rights Agreement has been filed with the Securities and Exchange Commission as an Exhibit to the Company’s Current Report on Form 8-K dated November 8, 2005. A copy of the Rights Agreement is available free of charge from the Company. This summary description of the Rights does not purport to be complete and is qualified in its entirety by reference to the Rights Agreement, which is incorporated herein by reference.