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

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**FORM S-8  
REGISTRATION STATEMENT**  
*UNDER  
THE SECURITIES ACT OF 1933*

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**Schrödinger, Inc.**

(Exact Name of Registrant as Specified in Its Charter)

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

**95-4284541**  
(I.R.S. Employer  
Identification No.)

**120 West 45th Street, 17th Floor,  
New York, New York**  
(Address of Principal Executive Offices)

**10036**  
(Zip Code)

**2010 Stock Plan, as amended  
2020 Equity Incentive Plan  
2020 Employee Stock Purchase Plan**  
(Full Title of the Plan)

**Ramy Farid, Ph.D.**  
**President and Chief Executive Officer**  
**Schrödinger, Inc.**  
**120 West 45th Street, 17th Floor**  
**New York, New York 10036**  
(Name and Address of Agent For Service)

**(212) 295-5800**  
(Telephone Number, Including Area Code, of Agent For Service)

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Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer   
Non-accelerated filer

Accelerated filer   
Smaller reporting company   
Emerging growth company

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act.

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**CALCULATION OF REGISTRATION FEE**

Title of Securities to be Registered	Amount to be Registered(1)	Proposed Maximum Offering Price Per Share	Proposed Maximum Aggregate Offering Price	Amount of Registration Fee
Common Stock, \$0.01 par value per share	11,385,526 shares(2)	\$17.71(3)	\$201,659,487.02(3)	\$26,176

- (1) In accordance with Rule 416 under the Securities Act of 1933, as amended, this registration statement shall be deemed to cover any additional securities that may from time to time be offered or issued to prevent dilution resulting from stock splits, stock dividends or similar transactions.
- (2) Consists of (i) 4,913,936 shares issuable under the 2010 Stock Plan, (ii) 5,884,745 shares issuable under the 2020 Equity Incentive Plan; and (iii) 586,845 shares issuable under the 2020 Employee Stock Purchase Plan. Upon the expiration, termination, surrender, cancellation, forfeiture or repurchase of outstanding awards under the 2010 Stock Plan, the unissued balance of shares issuable under such awards will become issuable under the 2020 Equity Incentive Plan.
- (3) Estimated solely for the purpose of calculating the registration fee pursuant to Rules 457(c) and 457(h) of the Securities Act of 1933, as amended. The price per share and aggregate offering price are calculated based on (a) \$3.57, the weighted average per share exercise price of the 4,913,936 shares subject to outstanding stock option grants under the 2010 Stock Plan, at exercise prices ranging from \$0.75 to \$11.52 per share, and (b) \$28.45, the average of the high and low sales price of the registrant's common stock on the Nasdaq Global Select Market on February 6, 2020, in accordance with Rule 457(c) under the Securities Act of 1933, as amended, for the 5,884,745 shares issuable under the 2020 Equity Incentive Plan and the 586,845 shares issuable under the 2020 Employee Stock Purchase Plan. Pursuant to the 2020 Employee Stock Purchase Plan, the purchase price of the shares of common stock reserved for issuance thereunder will be 85% of the lesser of the closing price of the common stock on (i) the first business day of the applicable offering period and (ii) the last business day of the applicable offering period.

**PART I**  
**INFORMATION REQUIRED IN THE SECTION 10(a) PROSPECTUS**

**Item 1. Plan Information.**

The information required by Item 1 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act of 1933, as amended (the "Securities Act").

**Item 2. Registrant Information and Employee Plan Annual Information.**

The written statement required by Item 2 is included in documents sent or given to participants in the plans covered by this registration statement pursuant to Rule 428(b)(1) of the Securities Act.

**PART II**  
**INFORMATION REQUIRED IN THE REGISTRATION STATEMENT**

**Item 3. Incorporation of Documents by Reference.**

The registrant is subject to the informational and reporting requirements of Sections 13(a), 14, and 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and in accordance therewith files reports, proxy statements and other information with the Securities and Exchange Commission (the "Commission"). The following documents, which are on file with the Commission, are incorporated in this registration statement by reference:

(a) The registrant's latest annual report filed pursuant to Section 13(a) or 15(d) of the Exchange Act or the latest prospectus filed pursuant to Rule 424(b) under the Securities Act that contains audited financial statements for the registrant's latest fiscal year for which such statements have been filed.

(b) All other reports filed pursuant to Section 13(a) or 15(d) of the Exchange Act since the end of the fiscal year covered by the document referred to in (a) above.

(c) The description of the securities contained in the registrant's registration statement on Form 8-A filed under the Exchange Act, including any amendment or report filed for the purpose of updating such description.

All documents subsequently filed by the registrant pursuant to Sections 13(a), 13(c), 14 and 15(d) of the Exchange Act, prior to the filing of a post-effective amendment which indicates that all securities offered hereby have been sold or which deregisters all securities then remaining unsold, shall be deemed to be incorporated by reference in this registration statement and to be part hereof from the date of the filing of such documents. Any statement contained in a document incorporated or deemed to be incorporated by reference herein shall be deemed to be modified or superseded for the purposes of this registration statement to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement. Any statement so modified or superseded shall not be deemed, except as so modified or superseded, to constitute a part of this registration statement.

**Item 4. Description of Securities.**

Not applicable.

**Item 5. Interests of Named Experts and Counsel.**

Richards, Layton & Finger, P.A. has opined as to the legality of the securities being offered by this registration statement.

**Item 6. Indemnification of Directors and Officers.**

Section 102 of the Delaware General Corporation Law (the "DGCL"), permits a corporation to eliminate the personal liability of its directors or its stockholders for monetary damages for a breach of fiduciary duty as a director, except where the director breached his or her duty of loyalty, failed to act in good faith, engaged in intentional misconduct or knowingly violated a law, authorized the payment of a dividend or approved a stock repurchase in violation of Delaware corporate law or obtained an improper personal benefit. The registrant's certificate of incorporation that will be effective upon the closing of its initial public offering of common stock provides that no director shall be personally liable to the registrant or the registrant's stockholders for monetary damages for any breach of fiduciary duty as a director, notwithstanding any provision of law imposing such liability, except to the extent that the DGCL prohibits the elimination or limitation of liability of directors for breaches of fiduciary duty.

Section 145 of the DGCL provides that a corporation has the power to indemnify a director, officer, employee or agent of the corporation and certain other persons serving at the request of the corporation in related capacities against expenses (including attorneys' fees), judgments, fines, and amounts paid in settlements actually and reasonably incurred by the person in connection with an action, suit, or proceeding to which he or she is or is threatened to be made a party by reason of such position, if such person acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, and, in any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful, except that, in the case of actions brought by or in the right of the corporation, no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, such person is fairly and reasonably entitled to indemnification for such expenses which the Court of Chancery or such other court shall deem proper.

The registrant's certificate of incorporation that will be effective upon the closing of its initial public offering of common stock provides that the registrant will indemnify each person who was or is a party or threatened to be made a party to any threatened, pending or completed action, suit, or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of the registrant), by reason of the fact that he or she is or was, or has agreed to become, a director or officer of the registrant, or is or was serving, or has agreed to serve, at the request of the registrant as a director, officer, partner, employee or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust, or other enterprise (all such persons being referred to as an Indemnitee), or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees), judgments, fines, and amounts paid in settlement actually and reasonably incurred in connection with such action, suit, or proceeding and any appeal therefrom if such Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the registrant, and, with respect to any criminal action or proceeding, he or she had no reasonable cause to believe his or her conduct was unlawful.

The registrant's certificate of incorporation that will be effective upon the closing of its initial public offering of common stock also provides that the registrant will indemnify any Indemnitee who was or is a party to an action or suit by or in the right of the registrant to procure a judgment in the registrant's favor by reason of the fact that the Indemnitee is or was, or has agreed to become, a director or officer of the registrant, or is or was serving, or has agreed to serve, at the request of the registrant as a director, officer, partner, employee, or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust, or other enterprise, or by reason of any action alleged to have been taken or omitted in such capacity, against all expenses (including attorneys' fees) and, to the extent permitted by law, amounts paid in settlement actually and reasonably incurred in connection with such action, suit or proceeding, and any appeal therefrom, if the Indemnitee acted in good faith and in a manner he or she reasonably believed to be in, or not opposed to, the best interests of the registrant, except that no indemnification shall be made with respect to any claim, issue or matter as to which such person shall have been adjudged to be liable to the registrant, unless a court determines that, despite such adjudication but in view of all of the circumstances, he or she is entitled to indemnification of such expenses. Notwithstanding the foregoing, to the extent that any Indemnitee has been successful, on the merits or otherwise, he or she will be indemnified by the registrant against all expenses (including attorneys' fees) actually and reasonably incurred by him or her or on his or her behalf in connection therewith. If the registrant does not assume the defense, expenses must be advanced to an Indemnitee under certain circumstances.

In addition, the registrant has entered into indemnification agreements with all of the registrant's executive officers and directors. In general, these agreements provide that the registrant will indemnify the executive officer or director to the fullest extent permitted by law for claims arising in his or her capacity as an executive officer or director of the registrant or in connection with his or her service at the request of the registrant for another corporation or entity. The indemnification agreements also provide for procedures that will apply in the event that an executive officer or director makes a claim for indemnification and establish certain presumptions that are favorable to the executive officer or director.

The registrant maintains a general liability insurance policy that covers certain liabilities of the registrant's directors and officers arising out of claims based on acts or omissions in their capacities as directors or officers.

#### **Item 7. Exemption from Registration Claimed.**

Not applicable.

#### **Item 8. Exhibits.**

The following exhibits are incorporated herein by reference:

<u>Number</u>	<u>Description</u>
4.1*	<a href="#"><u>Amended and Restated Certificate of Incorporation, as amended, of the Registrant</u></a>
4.2	<a href="#"><u>Amended and Restated Bylaws, as amended, of the Registrant (incorporated by reference to Exhibit 3.2 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-235890) filed with the Securities and Exchange Commission on January 27, 2020)</u></a>
4.3	<a href="#"><u>Form of Restated Certificate of Incorporation of the Registrant (to be effective upon the closing of the Registrant's initial public offering) (incorporated by reference to Exhibit 3.3 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-235890) filed with the Securities and Exchange Commission on January 27, 2020).</u></a>
4.4	<a href="#"><u>Form of Amended and Restated Bylaws of the Registrant (to be effective upon the closing of the Registrant's initial public offering) (incorporated by reference to Exhibit 3.4 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-235890) filed with the Securities and Exchange Commission on January 27, 2020).</u></a>
5.1*	<a href="#"><u>Opinion of Richards, Layton &amp; Finger, P.A., special Delaware counsel to the Registrant</u></a>
23.1*	<a href="#"><u>Consent of Richards, Layton &amp; Finger, P.A. (included in Exhibit 5.1)</u></a>
23.2*	<a href="#"><u>Consent of KPMG LLP, independent registered public accounting firm</u></a>
24.1*	<a href="#"><u>Power of attorney (included on the signature page of this registration statement)</u></a>
99.1	<a href="#"><u>2010 Stock Plan, as amended (incorporated by reference to Exhibit 10.2 to the Registrant's Registration Statement on Form S-1 (File No. 333-235890) filed with the Securities and Exchange Commission on January 10, 2020)</u></a>
99.2	<a href="#"><u>2020 Equity Incentive Plan (incorporated by reference to Exhibit 10.4 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-235890) filed with the Securities and Exchange Commission on January 27, 2020).</u></a>
99.3	<a href="#"><u>2020 Employee Stock Purchase Plan (incorporated by reference to Exhibit 10.6 to Amendment No. 1 to the Registrant's Registration Statement on Form S-1 (File No. 333-235890) filed with the Securities and Exchange Commission on January 27, 2020).</u></a>

\* Filed herewith

## Item 9. Undertakings.

1. Item 512(a) of Regulation S-K. The undersigned registrant hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement:

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

*provided, however*, that paragraphs (1)(i) and (ii) do not apply if the information required to be included in a post-effective amendment by those paragraphs is contained in reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or Section 15(d) of the Exchange Act that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

2. Item 512(b) of Regulation S-K. The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act, each filing of the registrant's annual report pursuant to Section 13(a) or Section 15(d) of the Exchange Act that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial *bona fide* offering thereof.

3. Item 512(h) of Regulation S-K. Insofar as indemnification for liabilities arising under the Securities Act may be permitted to directors, officers and controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act and will be governed by the final adjudication of such issue.

## SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-8 and has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York on this 6th day of February, 2020.

### SCHRÖDINGER, INC.

By: /s/ Ramy Farid

Ramy Farid, Ph.D.

*President and Chief Executive Officer*

## POWER OF ATTORNEY AND SIGNATURES

We, the undersigned officers and directors of Schrödinger, Inc., hereby severally constitute and appoint Ramy Farid, Joel Lebowitz and Yvonne Tran, and each of them singly, our true and lawful attorneys with full power to them, and each of them singly, to sign for us and in our names in the capacities indicated below, the registration statement on Form S-8 filed herewith and any and all subsequent amendments to said registration statement, and generally to do all such things in our names and on our behalf in our capacities as officers and directors to enable Schrödinger, Inc. to comply with the provisions of the Securities Act of 1933, as amended, and all requirements of the Securities and Exchange Commission, hereby ratifying and confirming our signatures as they may be signed by our said attorneys, or any of them, to said registration statement and any and all amendments thereto.

Pursuant to the requirements of the Securities Act of 1933, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

<u>Signature</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Ramy Farid</u> Ramy Farid, Ph.D.	President and Chief Executive Officer, Director (Principal Executive Officer)	February 6, 2020
<u>/s/ Joel Lebowitz</u> Joel Lebowitz	Chief Financial Officer (Principal Financial Officer)	February 6, 2020
<u>/s/ Jenny Herman</u> Jenny Herman	Vice President, Controller (Principal Accounting Officer)	February 6, 2020
<u>/s/ Michael Lynton</u> Michael Lynton	Chairman of the Board	February 6, 2020
<u>/s/ Richard Friesner</u> Richard Friesner, Ph.D.	Director	February 6, 2020
<u>/s/ Rosana Kapeller-Libermann</u> Rosana Kapeller-Libermann, M.D., Ph.D.	Director	February 6, 2020
<u>/s/ Gary Sender</u> Gary Sender	Director	February 6, 2020
<u>/s/ Nancy Thornberry</u> Nancy Thornberry	Director	February 6, 2020
<u>/s/ Timothy Wright</u> Timothy Wright, M.D.	Director	February 6, 2020

**AMENDED AND RESTATED  
CERTIFICATE OF INCORPORATION  
OF  
SCHRÖDINGER, INC.**

**(Pursuant to Sections 242 and 245 of the  
General Corporation Law of the State of Delaware)**

Schrödinger, Inc., a corporation organized and existing under and by virtue of the provisions of the General Corporation Law of the State of Delaware (the “**General Corporation Law**”),

**DOES HEREBY CERTIFY:**

1. That the name of this corporation is Schrödinger, Inc., and that this corporation was originally incorporated pursuant to the General Corporation Law on May 22, 1995 under the name Schrödinger, Inc.

2. That the Board of Directors duly adopted resolutions proposing to amend and restate the Amended and Restated Certificate of Incorporation of this corporation, declaring said amendment and restatement to be advisable and in the best interests of this corporation and its stockholders, and authorizing the appropriate officers of this corporation to solicit the consent of the stockholders therefor, which resolution setting forth the proposed amendment and restatement is as follows:

**RESOLVED**, that the Amended and Restated Certificate of Incorporation of this corporation be amended and restated in its entirety to read as follows:

**FIRST:** The name of this corporation is Schrödinger, Inc. (the “**Corporation**”).

**SECOND:** The address of the registered office of the Corporation in the State of Delaware is 160 Greentree Drive, Suite 101, in the City of Dover, County of Kent, 19904, The name of its registered agent at such address is National Registered Agents, Inc.

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

**FOURTH:** The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 415,000,000 shares of Common Stock, \$0.01 par value per share (“**Common Stock**”), (ii) 146,199,885 shares of Non-Voting Common Stock, \$0.01 par value per share (“**Non-Voting Common Stock**” and, together with the Common Stock, the “**Combined Common Stock**”), and (iii) 318,042,806 shares of Preferred Stock, \$0.01 par value per share (“**Preferred Stock**”).

The following is a statement of the designations and the powers, privileges and rights, and the qualifications, limitations or restrictions thereof, in respect of each class of capital stock of the Corporation.

## A. COMMON STOCK

1. General. The voting, dividend and liquidation rights of the holders of the Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein.

2. Voting. The holders of the Common Stock are entitled to one vote at all meetings of stockholders (and written actions in lieu of meetings) for each share of Common Stock held. The number of authorized shares of Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Amended and Restated Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

3. Mergers, Etc. In the event of any merger, consolidation, share exchange, reclassification or other similar transaction in which the shares of Non-Voting Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, each share of Common Stock will at the same time be similarly exchanged or changed in an amount per whole share equal to the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, that each share of Non-Voting Common Stock would be entitled to receive as a result of such transaction. In the event of any dividend or other distribution paid on the Non-Voting Common Stock in additional shares of Non-Voting Common Stock, a dividend or distribution, as applicable, will at the same time be similarly paid on the Common Stock in additional shares of Common Stock at the rate payable upon each share of Non-Voting Common Stock. In the event of any dividend or other distribution paid on the Non-Voting Common Stock not in additional shares of Non-Voting Common Stock, a dividend or distribution, as applicable, will at the same time be similarly paid on the Common Stock at the rate payable upon each share of Non-Voting Common Stock. In the event of any stock split, combination or other similar recapitalization splitting, combining or otherwise affecting the shares of Non-Voting Common Stock, each share of Common Stock will at the same time be similarly split, combined or otherwise affected so each share of Non-Voting Common Stock shall remain convertible into one share of Common Stock. In the event the holders of Non-Voting Common Stock are provided the right to convert or exchange Non-Voting Common Stock for stock or securities, cash and/or any other property, then the holders of the Common Stock shall be provided the same right as though such holders of shares of Common Stock were instead to hold an equal number of shares of Non-Voting Common Stock. In the event that the Corporation offers to repurchase shares of Non-Voting Common Stock from its stockholders generally, the Corporation shall offer to repurchase Common Stock pro rata as if such shares of Common Stock were instead an equal number of shares of Non-Voting Common Stock.

## B. NON-VOTING COMMON STOCK

1. General. The dividend and liquidation rights of the holders of the Non-Voting Common Stock are subject to and qualified by the rights, powers and preferences of the holders of the Preferred Stock set forth herein. Except as otherwise required by law or as expressly provided in this Restated Certificate, each share of Non-Voting Common Stock shall have the same powers, rights, preferences, privileges and qualifications and shall rank equally, share ratably and be identical in all respects as to all matters with each share of Common Stock.

2. Voting. The holders of the Non-Voting Common Stock shall not be entitled to any voting rights in respect of their shares of Non-Voting Common Stock, except as required by law or as expressly provided in this Restated Certificate. The number of authorized shares of Non-Voting Common Stock may be increased or decreased (but not below the number of shares thereof then outstanding) by (in addition to any vote of the holders of one or more series of Preferred Stock that may be required by the terms of this Amended and Restated Certificate of Incorporation) the affirmative vote of the holders of shares of capital stock of the Corporation representing a majority of the votes represented by all outstanding shares of capital stock of the Corporation entitled to vote, irrespective of the provisions of Section 242(b)(2) of the General Corporation Law.

3. Optional Conversion.

3.1 Right to Convert. Each share of Non-Voting Common Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into one (1) fully paid and nonassessable share of Common Stock.

3.2 Mechanics of Conversion.

3.2.1 Notice of Conversion. In order for a holder of Non-Voting Common Stock to voluntarily convert shares of Non-Voting Common Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Non-Voting Common Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Non-Voting Common Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Non-Voting Common Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder's name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the "**Non-Voting Common Stock Conversion Time**"), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Non-Voting Common Stock Conversion Time, (i) issue and deliver to such holder of Non-Voting Common Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Non-Voting Common Stock represented by the surrendered certificate that were not converted into Common Stock and (ii) pay all declared but unpaid dividends, if any, on the shares of Non-Voting Common Stock converted.

3.2.2 Reservation of Shares. The Corporation shall at all times when the Non-Voting Common Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Non-Voting Common Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Non-Voting Common Stock into Common Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Non-Voting Common Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Amended and Restated Certificate of Incorporation.

3.2.3 Effect of Conversion. All shares of Non-Voting Common Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Non-Voting Common Stock Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor and to receive payment of any dividends declared but unpaid thereon. Any shares of Non-Voting Common Stock so converted shall become authorized but unissued shares and may be reissued.

3.2.4 Taxes. The Corporation shall pay any and all issuance and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Non-Voting Common Stock pursuant to this Section 3. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Non-Voting Common Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4. Mergers, Etc. In the event of any merger, consolidation, share exchange, reclassification or other similar transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, each share of Non-Voting Common Stock will at the same time be similarly exchanged or changed in an amount per whole share equal to the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, that each share of Common Stock would be entitled to receive as a result of such transaction. In the event of any dividend or distribution paid on the Common Stock in additional shares of Common Stock, a dividend or distribution, as applicable, will at the same time be similarly paid on the Non-Voting Common Stock in additional shares of Non-Voting Common Stock at the rate payable upon each share of Common Stock. In the event of any dividend or other distribution paid on the Common Stock not in additional shares of Common Stock, a dividend or distribution, as applicable, will at the same time be similarly paid

on the Non-Voting Common Stock at the rate payable upon each share of Common Stock. In the event of any stock split, combination or other similar recapitalization splitting, combining or otherwise affecting the shares of Common Stock, each share of Non-Voting Common Stock will at the same time be similarly split, combined or otherwise affected so each share of Non-Voting Common Stock shall remain convertible into one share of Common Stock. In the event the holders of Common Stock are provided the right to convert or exchange Common Stock for stock or securities, cash and/or any other property, then the holders of shares of Non-Voting Common Stock shall be provided the same right based upon the number of shares of Common Stock such holders would be entitled to receive if such shares of Non-Voting Common Stock were converted into an equal number of shares of Common Stock immediately prior to such offering. In the event that the Corporation offers to repurchase shares of Common Stock from its stockholders generally, the Corporation shall offer to repurchase Non-Voting Common Stock pro rata as if such shares of Non-Voting Common Stock were converted into an equal number of shares of Common Stock immediately prior to such repurchase.

### C. PREFERRED STOCK

134,704,785 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series A Preferred Stock**”, 29,468,101 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series B Preferred Stock**”, 47,242,235 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series C Preferred Stock**”, 39,540,611 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series D Preferred Stock**” and 67,087,074 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series E Preferred Stock**”, each with the following rights, preferences, powers, and privileges and the following restrictions, qualifications and limitations. Unless otherwise indicated, references to “Sections” or “Subsections” in this Part C of this Article Fourth refer to sections and subsections of Part C of this Article Fourth.

#### 1. Dividends.

(a) The Corporation shall not declare, pay or set aside any dividends on shares of any other class or series of capital stock of the Corporation (other than dividends on shares of Common Stock payable in shares of Common Stock or dividends on shares of Non-Voting Common Stock payable in shares of Non-Voting Common Stock) unless (in addition to the obtaining of any consents required elsewhere in this Amended and Restated Certificate of Incorporation) the holders of the Preferred Stock then outstanding shall first receive a dividend on each outstanding share of Preferred Stock in an amount equal to (i) \$0.07453 per share of Series E Preferred Stock, (ii) \$0.0278195 per share of Series D Preferred Stock, (iii) \$0.0211675 per share of Series C Preferred Stock, (iv) \$0.016967 per share of Series B Preferred Stock and (v) \$0.00675 per share of Series A Preferred Stock (each subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such series of Preferred Stock). Such dividends shall be paid on a pari passu basis, shall not be cumulative and shall be paid when, if and as declared by the Board of Directors of the Corporation.

(b) If, after dividends in the full preferential amounts specified in Section 1(a) for holders of Preferred Stock have been paid or declared and set apart in any calendar year of the Corporation, the Board of Directors of the Corporation shall declare any additional dividends, then such additional dividends shall be declared ratably among all holders of Combined Common Stock and Preferred Stock, pro rata based on the number of shares held by each such holder, treating for such purpose all shares of Preferred Stock as if they had been converted into the greatest whole number of shares of Combined Common Stock then issuable pursuant to the terms of Section 4.

2. Liquidation, Dissolution or Winding Up; Certain Mergers, Consolidations and Asset Sales.

2.1 Preferential Payments to Holders of Preferred Stock. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or any Deemed Liquidation Event:

(a) First, the holders of shares of Series E Preferred Stock then outstanding shall be entitled to be paid, out of the assets of the Corporation available for distribution to its stockholders (before any payment shall be made to any of the holders of Series D Preferred Stock, Series C Preferred Stock, Series B Preferred Stock, Series A Preferred Stock and Combined Common Stock by reason of their ownership thereof), an amount per share equal to the Series E Original Issue Price (as defined below) plus any dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series E Preferred Stock the full amount to which they shall be entitled under the first sentence of this Subsection 2.1(a), the holders of shares of Series E Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

(b) Next, after the payments in the foregoing Subsection 2.1(a) have been made, the holders of Series C Preferred Stock and the holders of Series D Preferred Stock shall be entitled to be paid, out of the assets of the Corporation then available for distribution to its stockholders (if any, following payments to the holders of Series E Preferred Stock pursuant to Subsection 2.1(a) but before any payment shall be made to any of the holders of Series B Preferred Stock, Series A Preferred Stock and Combined Common Stock by reason of their ownership thereof), on a pari passu basis, (i) in the case of the Series D Preferred Stock, an amount per share equal to the Series D Original Issue Price (as defined below) plus any dividends declared but unpaid thereon and (ii) in the case of Series C Preferred Stock, an amount per share equal to the Series C Original Issue Price (as defined below) plus any dividends declared but unpaid thereon. If upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series D Preferred Stock and Series C Preferred Stock the full amount to which they shall be entitled under clause (i) or clause (ii) of the first sentence of this Subsection 2.1(b), as applicable, the holders of shares of Series D Preferred Stock and Series C Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

(c) Next, after the payments in the foregoing Subsection 2.1(a) and Subsection 2.1(b) have been made, the holders of Series B Preferred Stock and the holders of Series A Preferred Stock shall be entitled to be paid, out of the assets of the Corporation then available for distribution to its stockholders (if any, following payments to the holders of Series E Preferred Stock, Series D Preferred Stock and Series C Preferred Stock pursuant to Subsection 2.1(a) and Subsection 2.1(b), respectively, but before any payment shall be made to any of the holders of Combined Common Stock by reason of their ownership thereof), on a pari passu basis, (i) in the case of the Series B Preferred Stock, an amount per share equal to the Series B Original Issue Price (as defined below) plus any dividends declared but unpaid thereon (the “**Series B Liquidation Preference**”) and (ii) in the case of Series A Preferred Stock, an amount per share equal to the Series A Original Issue Price (as defined below) plus any dividends declared but unpaid thereon (the “**Series A Liquidation Preference**”). If upon any such liquidation, dissolution or winding up of the Corporation, the assets of the Corporation available for distribution to its stockholders shall be insufficient to pay the holders of shares of Series B Preferred Stock and Series A Preferred Stock the full amount to which they shall be entitled under clause (i) or clause (ii) of the first sentence of this Subsection 2.1(c), as applicable, the holders of shares of Series B Preferred Stock and Series A Preferred Stock shall share ratably in any distribution of the assets available for distribution in proportion to the respective amounts which would otherwise be payable in respect of the shares held by them upon such distribution if all amounts payable on or with respect to such shares were paid in full.

The “**Series E Original Issue Price**” shall mean \$1.4906 per share of Series E Preferred Stock, the “**Series D Original Issue Price**” shall mean \$0.55639 per share of Series D Preferred Stock, “**Series C Original Issue Price**” shall mean \$0.42335 per share of Series C Preferred Stock, the “**Series B Original Issue Price**” shall mean \$0.33935 per share of Series B Preferred Stock and the “**Series A Original Issue Price**” shall mean \$0.135 per share of Series A Preferred Stock (each subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to such series of Preferred Stock). The Series E Original Issue Price, Series D Original Issue Price, Series C Original Issue Price, Series B Original Issue Price and Series A Original Issue Price are sometimes collectively referred to herein as the “**Original Issue Price.**”

2.2 Distribution of Remaining Assets. In the event of any voluntary or involuntary liquidation, dissolution or winding up of the Corporation or Deemed Liquidation Event, after the payment of all preferential amounts required to be paid to the holders of shares of Preferred Stock pursuant to Subsection 2.1, the remaining assets of the Corporation available for distribution to its stockholders shall be distributed among the holders of the shares of Preferred Stock and Combined Common Stock, pro rata based on the number of shares held by each such holder, treating for this purpose all shares of Preferred Stock as if they had been converted to Combined Common Stock pursuant to the terms of this Amended and Restated Certificate of Incorporation immediately prior to such dissolution, liquidation or winding up of the Corporation.

### 2.3 Deemed Liquidation Events.

2.3.1 Definition. Each of the following events shall be considered a “**Deemed Liquidation Event**” unless the holders of at least 70% of the outstanding shares of Preferred Stock (voting together as a single class and not separate series, and on an as-converted basis) elect otherwise by written notice sent to the Corporation at least 10 days prior to the effective date of any such event:

(a) a merger or consolidation in which the Corporation is a constituent party other than a merger or consolidation involving the Corporation in which the shares of capital stock of the Corporation outstanding immediately prior to such merger or consolidation continue to represent, or are converted into or exchanged for shares of capital stock that represent, immediately following such merger or consolidation, at least a majority, by voting power, of the capital stock (or equivalent equity security) of (1) the surviving or resulting entity or (2) if the surviving or resulting entity is a wholly owned subsidiary of another entity immediately following such merger or consolidation, the parent corporation of such surviving or resulting entity;

(b) (i) the sale, lease, transfer or other disposition, in a single transaction or a series of related transactions, by the Corporation or any subsidiary of the Corporation of all or substantially all the assets of the Corporation and its subsidiaries taken as a whole or the sale or disposition (whether by merger or otherwise) of one or more subsidiaries of the Corporation if substantially all of the assets of the Corporation and its subsidiaries taken as a whole are held by such subsidiary or subsidiaries, except where such sale, lease, transfer or other disposition is to a wholly owned subsidiary of the Corporation or (ii) the exclusive license, in a single transaction or a series of related transactions, by the Corporation of all or substantially all of the Company Intellectual Property (as defined in the Series E Purchase Agreement (as defined below)), except where such exclusive license is to a wholly owned subsidiary of the Corporation; or

(c) the closing of the transfer (whether by merger, consolidation or otherwise), in one transaction or a series of related transactions, to a person or group of affiliated persons (other than an underwriter of the Corporation's securities), of the Corporation's securities if after such closing, such person or group of affiliated persons would hold greater than 50% of the outstanding voting stock of the Corporation (or of the surviving or acquiring entity); provided that the consummation of the transactions contemplated by that certain Series E Preferred Stock Purchase Agreement (the "**Series E Purchase Agreement**") by and among the Corporation and the purchasers described therein, dated on or about the date upon which this Amended and Restated Certificate of Incorporation is accepted for filing by the Secretary of State of the State of Delaware (and as amended from time to time), shall not constitute a Deemed Liquidation Event under any provision of this Subsection 2.3.1.

2.3.2 Effecting a Deemed Liquidation Event By Merger or Consolidation. The Corporation shall not have the power to effect a Deemed Liquidation Event referred to in Subsection 2.3.1(a) unless the agreement or plan of merger or consolidation for such transaction (the "**Merger Agreement**") provides that the consideration payable to the stockholders of the Corporation shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2.

2.3.3 Amount Deemed Paid or Distributed. In any Deemed Liquidation Event, if any portion of the proceeds received by the Corporation or its stockholders is paid in a form other than cash, the value of such non-cash proceeds will be deemed to be equal to the fair market value of such non-cash proceeds, as determined in good faith by the Board of Directors of the Corporation, provided that any securities included in such non-cash proceeds shall be valued as follows:

(a) Securities not subject to investment letter or other similar restrictions on free marketability covered by (b) below:

(i) If traded on a securities exchange, the value per share (or other applicable unit) of such securities shall be deemed to be the average of the closing prices of such securities on such exchange over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Deemed Liquidation Event;

(ii) If actively traded over-the-counter, the value per share (or other applicable unit) of such securities shall be deemed to be the average of the closing bid or sale prices (whichever is applicable) of such securities over the twenty (20) trading-day period ending three (3) trading days prior to the closing of the Deemed Liquidation Event; and

(iii) If there is no active public market, the value shall be the fair market value thereof, as determined in good faith by the Board of Directors of the Corporation.

(b) Securities subject to investment letter or other restrictions on free marketability (other than restrictions arising solely by virtue of a stockholder's status as an affiliate or former affiliate of the Corporation) shall be valued by (i) determining the fair market value such securities would have in the absence of any such restrictions, as set forth above in Subsection 2.3.3(a)(i), Subsection 2.3.3(a)(ii) or Subsection 2.3.3(a)(iii), as applicable, and (ii) applying a discount to the fair market value so determined, the amount of such discount being determined in good faith by the Board of Directors of the Corporation, to reflect the reduced fair market value of such securities subject to such restrictions.

(c) The foregoing methods for determining the value of securities to be distributed in connection with a Deemed Liquidation Event shall, upon the approval of the definitive agreements governing such Deemed Liquidation Event by the stockholders under the General Corporation Law and Subsections 3.3 3.4 and 3.5 of this Article IV(B), be superseded by any methods for determining such value set forth in the definitive agreements governing such Deemed Liquidation Event.

2.3.4 Allocation of Escrow. In the event of a Deemed Liquidation Event pursuant to Subsection 2.3.1(a)(i), if any portion of the consideration payable to the stockholders of the Corporation is placed into escrow and/or is payable to the stockholders of the Corporation subject to contingencies, the Merger Agreement shall provide that (a) the portion of such consideration that is not placed in escrow and not subject to any contingencies (the "**Initial Consideration**") shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 as if the Initial Consideration were the only consideration payable in connection with such Deemed Liquidation Event and (b) any additional consideration which becomes payable to the stockholders of the Corporation upon release from escrow or satisfaction of contingencies shall be allocated among the holders of capital stock of the Corporation in accordance with Subsections 2.1 and 2.2 after taking into account the previous payment of the Initial Consideration as part of the same transaction.

### 3. Voting.

3.1 General. On any matter presented to the stockholders of the Corporation for their action or consideration at any meeting of stockholders of the Corporation (or by written consent of stockholders in lieu of meeting), each holder of outstanding shares of Preferred Stock shall be entitled to cast the number of votes equal to the number of whole shares of Common Stock into which the shares of Preferred Stock held by such holder are convertible as of the record date

for determining stockholders entitled to vote on such matter. Except as provided by law or by the other provisions of this Amended and Restated Certificate of Incorporation, as amended from time to time, holders of Preferred Stock shall vote together with the holders of Common Stock as a single class and on an as-converted to Common Stock basis.

**3.2 Election of Directors.** The holders of record of the shares of Series B Preferred Stock, the holders of record of shares of Series C Preferred Stock and the holders of record of shares of Series D Preferred Stock, voting together as a single class and on an as-converted basis (the “**Series B/C/D Holders**”), shall be entitled to elect one (1) director of the Corporation (the “**Series B/C/D Director**”). Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the Series B/C/D Holders, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of such stockholders. If the Series B/C/D Holders fail to elect a director to fill the directorship for which they are entitled to elect a director, pursuant to the first sentence of this Subsection 3.2, then such directorship shall remain vacant until such time as the Series B/C/D Holders elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. The holders of record of the shares of Series E Preferred Stock (other than any Excluded Series E Holder (as defined below), exclusively and voting as a separate class (the “**Series E Voting Holders**”), shall be entitled to elect one (1) director of the Corporation (the “**Series E Director**”). Any director elected as provided in the preceding sentence may be removed without cause by, and only by, the affirmative vote of the Series E Voting Holders, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of such stockholders. If the Series E Voting Holders fail to elect a director to fill the directorship for which they are entitled to elect a director, pursuant to this Subsection 3.2, then such directorship shall remain vacant until such time as the Series E Voting Holders elect a person to fill such directorship by vote or written consent in lieu of a meeting; and no such directorship may be filled by stockholders of the Corporation other than by the stockholders of the Corporation that are entitled to elect a person to fill such directorship, voting exclusively and as a separate class. For purposes of this Subsection 3.2, an “**Excluded Series E Holder**” shall mean any holder of Series E Preferred Stock who owns beneficially or of record as of the Series E Original Issue Date, a number of shares of Series E Preferred Stock in excess of 26,834,829 (as adjusted for any stock split, stock dividend, combination or other similar recapitalization after the date hereof). For the avoidance of doubt, an Excluded Series E Holder shall not be entitled to vote on the election of the Series E Director and the presence in person or by proxy of any Excluded Series E Holder shall not be required to constitute a quorum at any meeting of stockholders held for the election of the Series E Director. The holders of record who hold shares of Common Stock as of the record date for such vote, exclusively and voting as a separate class, shall be entitled to elect the balance of the total number of directors of the Corporation, and any director so elected may be removed without cause by, and only by, the affirmative vote of the holders of record who hold shares of Common Stock as of the record date for such vote, exclusively and voting as a separate class, given either at a special meeting of such stockholders duly called for that purpose or pursuant to a written consent of such stockholders. The rights of the Series B/C/D Holders under the first sentence of this Subsection 3.2 shall terminate on the first date on which there are issued and outstanding less than an aggregate of 11,625,000 shares of Series B Preferred Stock, Series C Preferred Stock and Series D Preferred

Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to any such series of Preferred Stock), and the rights of the Series E Voting Holders under this Subsection 3.2 shall terminate on the first date on which there are issued and outstanding less than an aggregate of 6,708,000 shares of Series E Preferred Stock held by Series E Voting Holders (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series E Preferred Stock). Following the termination pursuant to the preceding sentence of the rights of the Series B/C/D Holders or the Series E Voting Holders, such Series B/C/D Director or Series E Director, as the case may be, shall be elected by the holders of record of the shares of Common Stock, exclusively and voting as a separate class. At any meeting held for the purpose of electing a director, the presence in person or by proxy of the holders of a majority of the outstanding shares of the class or series entitled to elect such director shall constitute a quorum for the purpose of electing such director. Except as otherwise provided in this Subsection 3.2, a vacancy in any directorship filled by the holders of any class or series shall be filled only by vote or written consent in lieu of a meeting of the holders of such class or series or by any remaining director or directors elected by the holders of such class or series pursuant to this Subsection 3.2. For the avoidance of doubt, the holders of shares of Series B Preferred Stock, Series C Preferred Stock and Series D Preferred Stock shall not vote such shares in any director election other than elections of the Series B/C/D Director, the Excluded Series E Holder shall not be entitled to vote its shares in elections of the Series E Director and the holders of shares of Series A Preferred Stock shall not vote such shares in any director election.

**3.3 Series B/C/D/E Preferred Stock Protective Provisions.** At any time when at least an aggregate of 59,800,000 shares of Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to any such series of Preferred Stock) are outstanding, the Corporation shall not either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or by this Amended and Restated Certificate of Incorporation) the written consent or affirmative vote of the holders of a majority of the then outstanding shares of the Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) as a single class and on an as-converted basis and any such act or transaction entered into without such consent or vote shall be null and void ab initio, and of no force or effect:

(a) amend, alter or repeal any provision of this Amended and Restated Certificate of Incorporation or Bylaws of the Corporation to alter or change the rights, preferences or privileges of the Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock or Series E Preferred Stock in a manner that adversely affects such rights, preferences or privileges;

(b) increase or decrease the number of authorized shares of Common Stock, Non-Voting Common Stock, Preferred Stock or any series thereof;

(c) create, or authorize the creation of (by reclassification or otherwise), any additional class or series of capital stock or create, or authorize the creation of (by reclassification or otherwise) any security convertible into or exercisable for any such new class or series of capital stock that is senior to or on a parity with the Series B Preferred Stock, the Series C Preferred Stock, the Series D Preferred Stock or the Series E Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation and the payment of dividends;

(d) purchase or redeem (or permit any subsidiary to purchase or redeem) or pay or declare any dividend or make any distribution on, any shares of capital stock of the Corporation other than (i) dividends or other distributions payable on the Common Stock solely in the form of additional shares of Common Stock and (ii) repurchases of stock from former employees, officers, directors, consultants or other persons who performed services for the Corporation or any subsidiary in connection with the cessation of such employment or service at no greater than the original purchase price thereof;

(e) create any bonds, notes, or other obligations convertible into, exchangeable for, or having option rights to purchase, shares of capital stock unless the same ranks junior to the Series B Preferred Stock, Series C Preferred Stock, Series D Preferred Stock and Series E Preferred Stock with respect to the distribution of assets on the liquidation, dissolution or winding up of the Corporation and the payment of dividends;

(f) liquidate, dissolve or wind up the business and affairs of the Corporation, including, without limitation, make an assignment for the benefit of creditors, admit in writing the Corporation's inability to pay its debts as they become due, file a voluntary petition for bankruptcy, file any petition or answer seeking any reorganization, arrangement, composition, readjustment, dissolution or similar relief under any present or future statute, law or regulation, file any answer admitting the material allegations of a petition filed against the Corporation in any such proceeding, or seek or consent to or acquiesce in the appointment of any trustee, receiver or liquidator of the Corporation, or of all or any substantial part of the properties of the Corporation, or the Corporation or otherwise take any action looking to the liquidation dissolution or winding up of the Corporation, effect any Deemed Liquidation Event, or consent to any of the foregoing;

(g) take any action that results in the Corporation incurring or assuming more than \$5,000,000 of indebtedness, either on an individual or cumulative basis, or in the encumbrance of a substantial portion of the Corporation's assets;

(h) authorize the Corporation to enter into or materially amend any material contract or arrangement with (i) any officer, director or founder, (ii) any stockholder of the Corporation holding a number of shares of capital stock of the Corporation that exceeds 3% of the total number of shares of capital stock of the Corporation then outstanding (determined on an as-converted basis), (iii) any parent or subsidiary of the Corporation or (iv) any person controlling, controlled by, or under common control with any person or entity described in clause (i), (ii) or (iii) (except for (x) any such contract or arrangement in which the aggregate value to or obligation of the Corporation is either (i) less than \$100,000, or (ii) greater than or equal to \$100,000 but less than \$500,000 and such contract or arrangement has been approved by the disinterested members of the Board of Directors of the Corporation and (y) any employment agreement between the Corporation and an officer of the Corporation, the terms of which have been approved by the Board of Directors of the Corporation);

(i) (i) form any subsidiary other than a wholly owned subsidiary or (ii) permit any subsidiary of the Corporation in which the Corporation holds a controlling voting interest to sell or issue stock to any party other than the Corporation, provided that the approval otherwise required pursuant to this Section 3.3 shall not be required with respect to any subsidiary or entity described in clause (i) or (ii) above if (x) Deerfield Management Company, L.P.

(“Deerfield”), any affiliate of Deerfield or any entity in which either Deerfield or any affiliate of Deerfield (collectively, the “**Deerfield-Related Entities**”), directly or indirectly, holds a voting interest in, or is issued or holds stock of, such subsidiary or other entity in an amount that represents beneficial ownership of not less than 5% of the equity of such subsidiary or other entity, (y) such Deerfield-Related Entity either (A) controls (as defined in Rule 12b-2 of the Securities Exchange Act of 1934, as amended) such subsidiary or other entity, or (B) is a “major investor,” “major holder” or has comparable status in such subsidiary or entity (or affiliate thereof) as and to the extent that the term “major investor,” “major holder” or any comparable term that conveys participation, information and co-sale rights, is understood or defined with respect to such entity’s (or such affiliate’s) governing corporate documents and (z) such action by the Corporation has been approved by the Board of Directors of the Corporation;

(j) authorize the acquisition of any other entity or business;

(k) authorize the Corporation to increase the number of shares of Common Stock authorized for issuance under the Corporation’s 2010 Stock Plan, the Corporation’s 2002 Stock Incentive Plan or any similar stock option plan subsequently adopted by the Corporation;

(l) adopt any new option, stock purchase, phantom stock, profit sharing or other equity incentive plan;

(m) change the principal business of the Corporation, enter new lines of business, or exit the current line of business; or

(n) increase or decrease the authorized number of directors constituting the Board of Directors of the Corporation from five (5) directors.

3.4 Series A Preferred Stock Protective Provisions. At any time when at least 44,452,580 shares of Series A Preferred Stock (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Series A Preferred Stock) are outstanding, the Corporation shall not, either directly or indirectly by amendment, merger, consolidation or otherwise, do any of the following without (in addition to any other vote required by law or by this Amended and Restated Certificate of Incorporation) the written consent or affirmative vote of the holders of at least a majority of the then outstanding shares of Series A Preferred Stock, given in writing or by vote at a meeting, consenting or voting (as the case may be) separately as a class and as a separate series:

(a) amend, alter or repeal any provision of this Amended and Restated Certificate of Incorporation or Bylaws of the Corporation to alter or change the rights, preferences or privileges of the Series A Preferred Stock in a manner that adversely affects such rights, preferences or privileges;

(b) increase or decrease the number of authorized shares of Preferred Stock that are designated as Series A Preferred Stock; or

(c) liquidate, dissolve or wind up the business and affairs of the Corporation, effect any Deemed Liquidation Event other than a Deemed Liquidation Event in which the valuation of the Corporation equals or exceeds \$345,000,000, or consent to any of the foregoing.

#### 4. Optional Conversion.

The holders of the Preferred Stock shall have conversion rights as follows (the “**Conversion Rights**”):

##### 4.1 Right to Convert.

4.1.1 Conversion Ratio. Each share of a series of Preferred Stock shall be convertible, at the option of the holder thereof, at any time and from time to time, and without the payment of additional consideration by the holder thereof, into such number of fully paid and nonassessable shares of Common Stock as is determined by dividing the applicable Original Issue Price by the Conversion Price (as defined below) in effect at the time of conversion. The “**Conversion Price**” shall initially be equal to (i) with respect to the Series A Preferred Stock, \$0.135 per share, (ii) with respect to the Series B Preferred Stock, \$0.33935 per share, (iii) with respect to the Series C Preferred Stock, \$0.42335 per share, (iv) with respect to the Series D Preferred Stock, \$0.55639 per share and (v) with respect to the Series E Preferred Stock, \$1.4906 per share. Each such Conversion Price shall be subject to adjustment as provided below.

4.1.2 Termination of Conversion Rights. In the event of a liquidation, dissolution or winding up of the Corporation or a Deemed Liquidation Event, the Conversion Rights shall terminate at the close of business on the last full day preceding the date fixed for the payment of any amounts distributable on such event to the holders of Preferred Stock.

4.2 Fractional Shares. No fractional shares of Common Stock shall be issued upon conversion of the Preferred Stock. In lieu of any fractional shares to which the holder would otherwise be entitled, the Corporation shall pay cash equal to such fraction multiplied by the fair market value of a share of Common Stock as determined in good faith by the Board of Directors of the Corporation. Whether or not fractional shares would be issuable upon such conversion shall be determined on the basis of the total number of shares of Preferred Stock the holder is at the time converting into Common Stock and the aggregate number of shares of Common Stock issuable upon such conversion.

##### 4.3 Mechanics of Conversion.

4.3.1 Notice of Conversion. In order for a holder of Preferred Stock to voluntarily convert shares of Preferred Stock into shares of Common Stock, such holder shall surrender the certificate or certificates for such shares of Preferred Stock (or, if such registered holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate), at the office of the transfer agent for the Preferred Stock (or at the principal office of the Corporation if the Corporation serves as its own transfer agent), together with written notice that such holder elects to convert all or any number of the shares of the Preferred Stock represented by such certificate or certificates and, if applicable, any event on which such conversion is contingent. Such notice shall state such holder’s name or the names of the nominees in which such holder wishes the certificate or certificates for shares of Common Stock to be issued. If required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by a written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or his, her or its attorney duly authorized in

writing. The close of business on the date of receipt by the transfer agent (or by the Corporation if the Corporation serves as its own transfer agent) of such certificates (or lost certificate affidavit and agreement) and notice shall be the time of conversion (the “**Conversion Time**”), and the shares of Common Stock issuable upon conversion of the shares represented by such certificate shall be deemed to be outstanding of record as of such date. The Corporation shall, as soon as practicable after the Conversion Time, (i) issue and deliver to such holder of Preferred Stock, or to his, her or its nominees, a certificate or certificates for the number of full shares of Common Stock issuable upon such conversion in accordance with the provisions hereof and a certificate for the number (if any) of the shares of Preferred Stock represented by the surrendered certificate that were not converted into Common Stock, (ii) pay in cash such amount as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and (iii) pay all declared but unpaid dividends, if any, on the shares of Preferred Stock converted.

4.3.2 Reservation of Shares. The Corporation shall at all times when the Preferred Stock shall be outstanding, reserve and keep available out of its authorized but unissued capital stock, for the purpose of effecting the conversion of the Preferred Stock, such number of its duly authorized shares of Common Stock as shall from time to time be sufficient to effect the conversion of all outstanding Preferred Stock; and if at any time the number of authorized but unissued shares of Common Stock shall not be sufficient to effect the conversion of all then outstanding shares of the Preferred Stock, the Corporation shall take such corporate action as may be necessary to increase its authorized but unissued shares of Common Stock to such number of shares as shall be sufficient for such purposes, including engaging in best efforts to obtain the requisite stockholder approval of any necessary amendment to this Amended and Restated Certificate of Incorporation. Before taking any action which would cause an adjustment reducing the Conversion Price of a series of Preferred Stock below the then par value of the shares of Common Stock issuable upon conversion of such series of Preferred Stock, the Corporation will take any corporate action which may, in the opinion of its counsel, be necessary in order that the Corporation may validly and legally issue fully paid and nonassessable shares of Common Stock at such adjusted Conversion Price.

4.3.3 Effect of Conversion. All shares of Preferred Stock which shall have been surrendered for conversion as herein provided shall no longer be deemed to be outstanding and all rights with respect to such shares shall immediately cease and terminate at the Conversion Time, except only the right of the holders thereof to receive shares of Common Stock in exchange therefor, to receive payment in lieu of any fraction of a share otherwise issuable upon such conversion as provided in Subsection 4.2 and to receive payment of any dividends declared but unpaid thereon. Any shares of Preferred Stock so converted shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of Preferred Stock accordingly.

4.3.4 No Further Adjustment. Upon any such conversion, no adjustment to the Conversion Price of a series of Preferred Stock shall be made for any declared but unpaid dividends on such shares of such series of Preferred Stock surrendered for conversion or on the Common Stock delivered upon conversion.

4.3.5 Taxes. The Corporation shall pay any and all issuance and other similar taxes that may be payable in respect of any issuance or delivery of shares of Common Stock upon conversion of shares of Preferred Stock pursuant to this Section 4. The Corporation shall not, however, be required to pay any tax which may be payable in respect of any transfer involved in the issuance and delivery of shares of Common Stock in a name other than that in which the shares of Preferred Stock so converted were registered, and no such issuance or delivery shall be made unless and until the person or entity requesting such issuance has paid to the Corporation the amount of any such tax or has established, to the satisfaction of the Corporation, that such tax has been paid.

4.4 Adjustments to Conversion Price for Diluting Issuances.

4.4.1 Special Definitions. For purposes of this Article Fourth, the following definitions shall apply:

(a) “**Option**” shall mean rights, options or warrants to subscribe for, purchase or otherwise acquire Combined Common Stock or Convertible Securities.

(b) “**Series E Original Issue Date**” shall mean the date on which the first share of Series E Preferred Stock was issued by the Corporation pursuant to the Series E Purchase Agreement.

(c) “**Convertible Securities**” shall mean any evidences of indebtedness, shares or other securities directly or indirectly convertible into or exchangeable for Combined Common Stock, but excluding Options.

(d) “**Additional Shares of Combined Common Stock**” shall mean all shares of Combined Common Stock issued (or, pursuant to Subsection 4.4.3 below, deemed to be issued) by the Corporation after the Series E Original Issue Date, other than (1) the following shares of Combined Common Stock and (2) shares of Combined Common Stock deemed issued pursuant to the following Options and Convertible Securities (such shares of Combined Common Stock described in clauses (1) and (2), collectively, “**Exempted Securities**”):

(i) shares of Combined Common Stock, Options or Convertible Securities issued as a dividend or distribution on Preferred Stock;

(ii) shares of Combined Common Stock or Options approved by the Board of Directors of the Corporation or a committee thereof issued to employees or directors of, or consultants or advisors to, the Corporation or any of its subsidiaries pursuant to a plan, agreement or arrangement approved by the Board of Directors of the Corporation;

(iii) shares of Combined Common Stock or Convertible Securities actually issued upon the exercise of Options or shares of Combined Common Stock actually issued upon the conversion or exchange of Convertible Securities, in each case provided such issuance is pursuant to the terms of such Option or Convertible Security;

(iv) shares of Combined Common Stock issued in a Qualified IPO (as defined below);

(v) shares of Combined Common Stock issued or issuable pursuant to the transactions contemplated by the Series E Purchase Agreement;

(vi) shares of Combined Common Stock, Options or Convertible Securities issued to persons or entities with which the Corporation has business relationships, provided such issuances are approved by the Board of Directors of the Corporation and are for primarily non-equity financing purposes;

(vii) shares of Combined Common Stock, Options or Convertible Securities issued to banks, equipment lessors or other financial institutions, or to real property lessors, provided such issuances are approved by the Board of Directors and are for primarily non-equity financing purposes; or

(viii) shares of Combined Common Stock, Options or Convertible Securities issued by reason of a dividend, stock split, split-up or other distribution on shares of Combined Common Stock that is covered by Subsection 4.5, 4.6, 4.7 or 4.8.

4.4.2 No Adjustment of Conversion Price. No adjustment in the applicable Conversion Price of a series of Preferred Stock shall be made as the result of the issuance or deemed issuance of Additional Shares of Combined Common Stock if (a) with respect to an adjustment to the Series E Preferred Stock, the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series E Preferred Stock agreeing that no such adjustment shall be made as a result of the issuance or deemed issuance of such Additional Shares of Combined Common Stock, (b) with respect to an adjustment to the Series D Preferred Stock, the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series D Preferred Stock agreeing that no such adjustment shall be made as a result of the issuance or deemed issuance of such Additional Shares of Combined Common Stock, (c) with respect to an adjustment to the Series C Preferred Stock, the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series C Preferred Stock agreeing that no such adjustment shall be made as a result of the issuance or deemed issuance of such Additional Shares of Combined Common Stock, (d) with respect to an adjustment to the Series B Preferred Stock, the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series B Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Combined Common Stock and (e) with respect to an adjustment to the Series A Preferred Stock, the Corporation receives written notice from the holders of a majority of the then outstanding shares of Series A Preferred Stock agreeing that no such adjustment shall be made as the result of the issuance or deemed issuance of such Additional Shares of Combined Common Stock.

4.4.3 Deemed Issuance of Additional Shares of Combined Common Stock.

(a) If the Corporation at any time or from time to time after the Series E Original Issue Date shall issue any Options or Convertible Securities (excluding Options or Convertible Securities which are themselves Exempted Securities) or shall fix a record date for the determination of holders of any class of securities entitled to receive any such Options or Convertible Securities, then the maximum number of shares of Combined Common Stock (as set forth in the instrument relating thereto, assuming the satisfaction of any conditions to exercisability, convertibility or exchangeability but without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options

or, in the case of Convertible Securities and Options therefor, the conversion or exchange of such Convertible Securities, shall be deemed to be Additional Shares of Combined Common Stock issued as of the time of such issuance or, in case such a record date shall have been fixed, as of the close of business on such record date.

(b) If the terms of any Option or Convertible Security, the issuance of which resulted in an adjustment to the applicable Conversion Price of a series of Preferred Stock pursuant to the terms of Subsections 4.4.4 or 4.4.5, as the case may be, are revised as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase or decrease in the number of shares of Combined Common Stock issuable upon the exercise, conversion and/or exchange of any such Option or Convertible Security or (2) any increase or decrease in the consideration payable to the Corporation upon such exercise, conversion and/or exchange, then, effective upon such increase or decrease becoming effective, the applicable Conversion Price of a series of Preferred Stock computed upon the original issue of such Option or Convertible Security (or upon the occurrence of a record date with respect thereto) shall be readjusted to such Conversion Price as would have obtained had such revised terms been in effect upon the original date of issuance of such Option or Convertible Security. Notwithstanding the foregoing, no readjustment pursuant to this clause (b) shall have the effect of increasing the applicable Conversion Price of a series of Preferred Stock to an amount which exceeds the lower of (i) such Conversion Price in effect immediately prior to the original adjustment made as a result of the issuance of such Option or Convertible Security, or (ii) such Conversion Price that would have resulted from any issuances of Additional Shares of Combined Common Stock (other than deemed issuances of Additional Shares of Combined Common Stock as a result of the issuance of such Option or Convertible Security) between the original adjustment date and such readjustment date.

(c) If the terms of any Option or Convertible Security (excluding Options or Convertible Securities which are themselves Exempted Securities), the issuance of which did not result in an adjustment to the applicable Conversion Price of a series of Preferred Stock pursuant to the terms of Subsections 4.4.4 or 4.4.5, as the case may be, (either because the consideration per share (determined pursuant to Subsection 4.4.6) of the Additional Shares of Combined Common Stock subject thereto was equal to or greater than the applicable Conversion Price of such series of Preferred Stock then in effect, or because such Option or Convertible Security was issued before the Series E Original Issue Date), are revised after the Series E Original Issue Date as a result of an amendment to such terms or any other adjustment pursuant to the provisions of such Option or Convertible Security (but excluding automatic adjustments to such terms pursuant to anti-dilution or similar provisions of such Option or Convertible Security) to provide for either (1) any increase in the number of shares of Combined Common Stock issuable upon the exercise, conversion or exchange of any such Option or Convertible Security or (2) any decrease in the consideration payable to the Corporation upon such exercise, conversion or exchange, then such Option or Convertible Security, as so amended or adjusted, and the Additional Shares of Combined Common Stock subject thereto (determined in the manner provided in Subsection 4.4.3(a)) shall be deemed to have been issued effective upon such increase or decrease becoming effective.

(d) Upon the expiration or termination of any unexercised Option or unconverted or unexchanged Convertible Security (or portion thereof) which resulted (either upon its original issuance or upon a revision of its terms) in an adjustment to the applicable Conversion Price of a series of Preferred Stock pursuant to the terms of Subsections 4.4.4 or 4.4.5, as the case may be, such Conversion Price shall be readjusted to such Conversion Price as would have obtained had such Option or Convertible Security (or portion thereof) never been issued.

(e) If the number of shares of Combined Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, is calculable at the time such Option or Convertible Security is issued or amended but is subject to adjustment based upon subsequent events, any adjustment to the applicable Conversion Price of a series of Preferred Stock provided for in this Subsection 4.4.3 shall be effected at the time of such issuance or amendment based on such number of shares or amount of consideration without regard to any provisions for subsequent adjustments (and any subsequent adjustments shall be treated as provided in clauses (b) and (c) of this Subsection 4.4.3). If the number of shares of Combined Common Stock issuable upon the exercise, conversion and/or exchange of any Option or Convertible Security, or the consideration payable to the Corporation upon such exercise, conversion and/or exchange, cannot be calculated at all at the time such Option or Convertible Security is issued or amended, any adjustment to such Conversion Price that would result under the terms of this Subsection 4.4.3 at the time of such issuance or amendment shall instead be effected at the time such number of shares and/or amount of consideration is first calculable (even if subject to subsequent adjustments), assuming for purposes of calculating such adjustment to such Conversion Price that such issuance or amendment took place at the time such calculation can first be made.

4.4.4 Adjustment of Conversion Price Upon Issuance of Additional Shares of Combined Common Stock During Initial Period. In the event the Corporation shall, subsequent to the Series E Original Issue Date and prior to the third anniversary of the Series E Original Issue Date (the “**Series E Ratchet Expiration Date**”) issue Additional Shares of Combined Common Stock (including Additional Shares of Combined Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the Conversion Price of the Series E Preferred Stock in effect immediately prior to such issuance, then the Conversion Price of the Series E Preferred Stock shall be reduced, concurrently with such issuance, to the consideration per share received by the Corporation for such issuance or deemed issuance of the Additional Shares of Combined Common Stock; provided that if such issuance or deemed issuance was without consideration, then the Corporation shall be deemed to have received an aggregate of \$0.001 of consideration for all such Additional Shares of Combined Common Stock issued or deemed to be issued.

4.4.5 Adjustment of Conversion Price Upon Issuance of Additional Shares of Combined Common Stock During Subsequent Period. In the event the Corporation shall at any time on or after the Series E Ratchet Expiration Date with respect to the Series E Preferred Stock and on or after the Series E Original Issue Date with respect to the Series D Preferred Stock, Series C Preferred Stock, Series B Preferred Stock and Series A Preferred Stock issue Additional Shares of Combined Common Stock (including Additional Shares of Combined Common Stock deemed to be issued pursuant to Subsection 4.4.3), without consideration or for a consideration per share less than the applicable Conversion Price of a series of Preferred Stock in effect immediately prior to such issuance, then such Conversion Price shall be reduced, concurrently with such issuance, to a price (calculated to the nearest one-hundredth of a cent) determined in accordance with the following formula:

$$CP_2 = CP_1 * ((A + B) \div (A + C)).$$

For purposes of the foregoing formula, the following definitions shall apply:

- (a) “CP<sub>2</sub>” shall mean the applicable Conversion Price of a series of Preferred Stock in effect immediately after such issuance of Additional Shares of Combined Common Stock;
- (b) “CP<sub>1</sub>” shall mean the applicable Conversion Price of such series of Preferred Stock in effect immediately prior to such issuance of Additional Shares of Combined Common Stock;
- (c) “A” shall mean the number of shares of Combined Common Stock outstanding immediately prior to such issuance of Additional Shares of Combined Common Stock (treating for this purpose as outstanding all shares of Combined Common Stock issuable upon exercise of Options outstanding immediately prior to such issuance or upon conversion or exchange of Convertible Securities (including the Preferred Stock) outstanding (assuming exercise of any outstanding Options therefor) immediately prior to such issuance);
- (d) “B” shall mean the number of shares of Combined Common Stock that would have been issued if such Additional Shares of Combined Common Stock had been issued at a price per share equal to CP<sub>1</sub> (determined by dividing the aggregate consideration received by the Corporation in respect of such issuance by CP<sub>1</sub>); and
- (e) “C” shall mean the number of such Additional Shares of Combined Common Stock issued in such transaction.

4.4.6 Determination of Consideration. For purposes of this Subsection 4.4, the value of the consideration received by the Corporation for the issuance of any Additional Shares of Combined Common Stock shall be computed as follows:

- (a) Cash and Property: Such consideration shall:
  - (i) insofar as it consists of cash, be computed at the aggregate amount of cash received by the Corporation, excluding amounts paid or payable for accrued interest;
  - (ii) insofar as it consists of property other than cash, be computed at the fair market value thereof at the time of such issuance, as determined in good faith by the Board of Directors of the Corporation; and
  - (iii) in the event Additional Shares of Combined Common Stock are issued together with other shares or securities or other assets of the Corporation for consideration which covers both, be computed as provided in clauses (i) and (ii) above with respect to an appropriate portion of such consideration so received, as determined in good faith by the Board of Directors of the Corporation.

(b) Options and Convertible Securities. The consideration per share received by the Corporation for Additional Shares of Combined Common Stock deemed to have been issued pursuant to Subsection 4.4.3, relating to Options and Convertible Securities, shall be determined by dividing

(i) the total amount, if any, received or receivable by the Corporation as consideration for the issuance of such Options or Convertible Securities, plus the minimum aggregate amount of additional consideration (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such consideration) payable to the Corporation upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities, by

(ii) the maximum number of shares of Combined Common Stock (as set forth in the instruments relating thereto, without regard to any provision contained therein for a subsequent adjustment of such number) issuable upon the exercise of such Options or the conversion or exchange of such Convertible Securities, or in the case of Options for Convertible Securities, the exercise of such Options for Convertible Securities and the conversion or exchange of such Convertible Securities.

4.4.7 Multiple Closing Dates. In the event the Corporation shall issue on more than one date Additional Shares of Combined Common Stock that are a part of one transaction or a series of related transactions and that would result in an adjustment to the applicable Conversion Price of a series of Preferred Stock pursuant to the terms of Subsections 4.4.4 or 4.4.5, as the case may be, and such issuance dates occur within a period of no more than 90 days from the first such issuance to the final such issuance, then, upon the final such issuance, such Conversion Price shall be readjusted to give effect to all such issuances as if they occurred on the date of the first such issuance (and without giving effect to any additional adjustments as a result of any such subsequent issuances within such period).

4.5 Adjustment for Stock Splits and Combinations. If the Corporation shall at any time or from time to time after the Series E Original Issue Date effect a subdivision of the outstanding Combined Common Stock without a corresponding subdivision of the Preferred Stock, the Conversion Price for each series of Preferred Stock in effect immediately before that subdivision shall be proportionately decreased so that the number of shares of Combined Common Stock issuable on conversion of each share of such series shall be increased in proportion to such increase in the aggregate number of shares of Combined Common Stock outstanding. If the Corporation shall at any time or from time to time after the Series E Original Issue Date combine the outstanding shares of Combined Common Stock without a corresponding combination of the Preferred Stock, the Conversion Price for each series of Preferred Stock in effect immediately before the combination shall be proportionately increased so that the number of shares of Combined Common Stock issuable on conversion of each share of such series shall be decreased in proportion to such decrease in the aggregate number of shares of Combined Common Stock outstanding. Any adjustment under this subsection shall become effective at the close of business on the date the subdivision or combination becomes effective.

4.6 Adjustment for Certain Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series E Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable on the Common Stock in additional shares of Common Stock, then and in each such event the Conversion Price for each series of Preferred Stock in effect immediately before such event shall be decreased as of the time of such issuance or, in the event such a record date shall have been fixed, as of the close of business on such record date, by multiplying the Conversion Price then in effect for such series of Preferred Stock by a fraction:

(1) the numerator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date, and

(2) the denominator of which shall be the total number of shares of Common Stock issued and outstanding immediately prior to the time of such issuance or the close of business on such record date plus the number of shares of Common Stock issuable in payment of such dividend or distribution.

Notwithstanding the foregoing, (a) if such record date shall have been fixed and such dividend is not fully paid or if such distribution is not fully made on the date fixed therefor, the Conversion Price for each series of Preferred Stock shall be recomputed accordingly as of the close of business on such record date and thereafter the Conversion Price for such series of Preferred Stock shall be adjusted pursuant to this subsection as of the time of actual payment of such dividends or distributions; and (b) no such adjustment shall be made if the holders of such series of Preferred Stock simultaneously receive a dividend or other distribution of shares of Common Stock in a number equal to the number of shares of Common Stock as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.7 Adjustments for Other Dividends and Distributions. In the event the Corporation at any time or from time to time after the Series E Original Issue Date shall make or issue, or fix a record date for the determination of holders of Common Stock entitled to receive, a dividend or other distribution payable in securities of the Corporation (other than a distribution of shares of Common Stock in respect of outstanding shares of Common Stock) or in other property and the provisions of Section 1 do not apply to such dividend or distribution, then and in each such event the holders of Preferred Stock shall receive, simultaneously with the distribution to the holders of Common Stock, a dividend or other distribution of such securities or other property in an amount equal to the amount of such securities or other property as they would have received if all outstanding shares of Preferred Stock had been converted into Common Stock on the date of such event.

4.8 Adjustment for Merger or Reorganization, etc. Subject to the provisions of Subsection 2.3, if there shall occur any reorganization, recapitalization, reclassification, consolidation or merger involving the Corporation in which the Common Stock (but not each series of Preferred Stock) is converted into or exchanged for securities, cash or other property (other than a transaction covered by Subsections 4.4, 4.6 or 4.7), then, following any such reorganization, recapitalization, reclassification, consolidation or merger, each share of a series of Preferred Stock shall thereafter be convertible into, in lieu of the Common Stock into which it was

convertible prior to such event, the kind and amount of securities, cash or other property which a holder of the number of shares of Common Stock of the Corporation issuable upon conversion of one share of such series of Preferred Stock immediately prior to such reorganization, recapitalization, reclassification, consolidation or merger would have been entitled to receive pursuant to such transaction; and, in such case, appropriate adjustment (as determined in good faith by the Board of Directors of the Corporation) shall be made in the application of the provisions in this Section 4 with respect to the rights and interests thereafter of the holders of the Preferred Stock, to the end that the provisions set forth in this Section 4 (including provisions with respect to changes in and other adjustments of the Conversion Price of each series of Preferred Stock) shall thereafter be applicable, as nearly as reasonably may be, in relation to any securities or other property thereafter deliverable upon the conversion of such series of Preferred Stock.

4.9 Certificate as to Adjustments. Upon the occurrence of each adjustment or readjustment of the Conversion Price of a series of Preferred Stock pursuant to this Section 4, the Corporation at its expense shall, as promptly as reasonably practicable but in any event not later than 30 days thereafter, compute such adjustment or readjustment in accordance with the terms hereof and furnish to each holder of such series of Preferred Stock a certificate setting forth such adjustment or readjustment (including the kind and amount of securities, cash or other property into which such Preferred Stock is convertible) and showing in detail the facts upon which such adjustment or readjustment is based. The Corporation shall, as promptly as reasonably practicable after the written request at any time of any holder of Preferred Stock (but in any event not later than 30 days thereafter), furnish or cause to be furnished to such holder a certificate setting forth (i) the Conversion Price then in effect for each series of Preferred Stock held by such holder, and (ii) the number of shares of Common Stock and the amount, if any, of other securities, cash or property which then would be received upon the conversion of such Preferred Stock.

4.10 Notice of Record Date. In the event:

(a) the Corporation shall take a record of the holders of its Common Stock (or other capital stock or securities at the time issuable upon conversion of the Preferred Stock) for the purpose of entitling or enabling them to receive any dividend or other distribution, or to receive any right to subscribe for or purchase any shares of capital stock of any class or any other securities, or to receive any other security; or

(b) of any capital reorganization of the Corporation, any reclassification of the Common Stock of the Corporation, or any Deemed Liquidation Event; or

(c) of the voluntary or involuntary dissolution, liquidation or winding up of the Corporation,

then, and in each such case, the Corporation will send or cause to be sent to the holders of the Preferred Stock a notice specifying, as the case may be, (i) the record date for such dividend, distribution or right, and the amount and character of such dividend, distribution or right, or (ii) the effective date on which such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding up is proposed to take place, and the time, if any is to be fixed, as of which the holders of record of Common Stock (or such other capital stock or securities at the time issuable upon the conversion of the Preferred Stock) shall be entitled to exchange their shares of Common Stock (or such other capital stock or securities) for securities or other property deliverable upon such reorganization, reclassification, consolidation, merger, transfer, dissolution, liquidation or winding up, and the amount per share and character of such exchange applicable to the Preferred Stock and the Common Stock. Such notice shall be sent at least 10 days prior to the record date or effective date for the event specified in such notice.

## 5. Mandatory Conversion.

5.1 Trigger Events. Upon either (a) the closing of the sale of shares of Common Stock to the public at a price of at least \$2.98 per share (subject to appropriate adjustment in the event of any stock dividend, stock split, combination or other similar recapitalization with respect to the Common Stock), in a firm-commitment underwritten public offering pursuant to an effective registration statement under the Securities Act of 1933, as amended, resulting in at least \$100,000,000 of gross proceeds to the Corporation (a “**Qualified IPO**”) or (b) the date and time, or the occurrence of an event, specified by vote or written consent or agreement of the holders of a majority of the then outstanding shares of the applicable series of Preferred Stock (but only as to such series of Preferred Stock so consenting or agreeing) (the time of such closing or the date and time specified or the time of the event specified in such vote or written consent, the “**Mandatory Conversion Time**”), (A) all outstanding shares of Preferred Stock (but only as to such series of Preferred Stock so consenting or agreeing in the case of clause (b) of this Subsection 5.1) shall automatically be converted into shares of Common Stock, at the then effective conversion rate for such series and (B) such shares may not be reissued by the Corporation; provided, however, that, for so long as shares of Series B Preferred Stock, Series C Preferred Stock or Series D Preferred Stock remain outstanding, in no event shall the Mandatory Conversion Time with respect to the Series E Preferred Stock be prior to the Mandatory Conversion Time for any of the outstanding shares of Series B Preferred Stock, Series C Preferred Stock or Series D Preferred Stock.

5.2 Procedural Requirements. All holders of record of shares of a series of Preferred Stock shall be sent written notice of the Mandatory Conversion Time and the place designated for mandatory conversion of all such shares of Preferred Stock pursuant to this Section 5. Such notice need not be sent in advance of the occurrence of the Mandatory Conversion Time. Upon receipt of such notice, each holder of shares of such series of Preferred Stock shall surrender his, her or its certificate or certificates for all such shares (or, if such holder alleges that such certificate has been lost, stolen or destroyed, a lost certificate affidavit and agreement reasonably acceptable to the Corporation to indemnify the Corporation against any claim that may be made against the Corporation on account of the alleged loss, theft or destruction of such certificate) to the Corporation at the place designated in such notice. If so required by the Corporation, certificates surrendered for conversion shall be endorsed or accompanied by written instrument or instruments of transfer, in form satisfactory to the Corporation, duly executed by the registered holder or by his, her or its attorney duly authorized in writing. All rights with respect to such series of Preferred Stock converted pursuant to Subsection 5.1, including the rights, if any, to receive notices and vote (other than as a holder of Common Stock), will terminate at the Mandatory Conversion Time (notwithstanding the failure of the holder or holders thereof to surrender the certificates at or prior to such time), except only the rights of the holders thereof, upon surrender of their certificate or certificates (or lost certificate affidavit and agreement) therefor, to receive the items provided for in the next sentence of this Subsection 5.2. As soon as practicable after the Mandatory Conversion Time and the surrender of the certificate or certificates (or lost certificate affidavit and agreement) for such series of Preferred Stock, the Corporation shall issue and deliver to such holder, or to his, her or its nominees, a certificate or certificates for the number of full

shares of Common Stock issuable on such conversion in accordance with the provisions hereof, together with cash as provided in Subsection 4.2 in lieu of any fraction of a share of Common Stock otherwise issuable upon such conversion and the payment of any declared but unpaid dividends on the shares of Preferred Stock converted. Such converted series of Preferred Stock shall be retired and cancelled and may not be reissued as shares of such series, and the Corporation may thereafter take such appropriate action (without the need for stockholder action) as may be necessary to reduce the authorized number of shares of such series of Preferred Stock accordingly.

6. Redemption. The Preferred Stock is not redeemable at the option of the holder thereof.

7. Acquired Shares. Any shares of Preferred Stock that are acquired by the Corporation or any of its subsidiaries shall be automatically and immediately cancelled and retired and shall not be reissued, sold or transferred. Neither the Corporation nor any of its subsidiaries may exercise any voting or other rights granted to the holders of Preferred Stock following such acquisition.

8. Waiver. Except as provided in Subsections 4.4.2, 3.3 and 3.4 (the waiver of which shall be governed by the terms thereof), any of the rights, powers, preferences and other terms of the Preferred Stock set forth herein may be waived on behalf of all holders of Preferred Stock by the affirmative written consent or vote of the holders of at least 70% of the shares of Preferred Stock then outstanding, voting together as a single class and not as separate series, and on an as-converted basis.

9. Notices. Any notice required or permitted by the provisions of this Article Fourth to be given to a holder of shares of Preferred Stock shall be mailed, postage prepaid, to the post office address last shown on the records of the Corporation, or given by electronic communication in compliance with the provisions of the General Corporation Law, and shall be deemed sent upon such mailing or electronic transmission.

10. No Implied Limitation. As used in this Amended and Restated Certificate of Incorporation, the words “include” and “including,” and variations thereof, shall not be deemed to be terms of limitation, but rather shall be deemed to be followed in every instance by the words “without limitation.”

**FIFTH:** Subject to any additional vote required by this Amended and Restated Certificate of Incorporation or Bylaws, in furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, repeal, alter, amend and rescind any or all of the Bylaws of the Corporation.

**SIXTH:** Subject to any additional vote required by this Amended and Restated Certificate of Incorporation, the number of directors of the Corporation shall be determined in the manner set forth in the Bylaws of the Corporation.

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

**EIGHTH:** Meetings of stockholders may be held within or without the State of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept outside the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation.

**NINTH:** To the fullest extent permitted by law, a director of the Corporation shall not be personally liable to the Corporation or to its stockholders for monetary damages for breach of fiduciary duty as a director. If the General Corporation Law or any other law of the State of Delaware is amended, after approval by the stockholders of this Article Ninth, to authorize corporate action further eliminating or limiting the personal liability of directors, then the liability of a director of the Corporation shall be eliminated or limited to the fullest extent permitted by the General Corporation Law as so amended.

Any repeal or modification of the foregoing provisions of this Article Ninth by the stockholders of the Corporation shall not adversely affect any right or protection of a director of the Corporation existing at the time of, or increase the liability of any director of the Corporation with respect to any acts or omissions of such director occurring prior to, such repeal or modification.

**TENTH:** To the fullest extent permitted by applicable law, the Corporation is authorized to provide indemnification of (and advancement of expenses to) directors, officers and agents of the Corporation (and any other persons to which General Corporation Law permits the Corporation to provide indemnification) through Bylaw provisions, agreements with such agents or other persons, vote of stockholders or disinterested directors or otherwise, in excess of the indemnification and advancement otherwise permitted by Section 145 of the General Corporation Law.

Any amendment, repeal or modification of the foregoing provisions of this Article Tenth shall not adversely affect any right or protection of any director, officer or other agent of the Corporation existing at the time of such amendment, repeal or modification.

**ELEVENTH:** The Corporation renounces any interest or expectancy of the Corporation in, or in being offered an opportunity to participate in, any Excluded Opportunity. An **“Excluded Opportunity”** is any matter, transaction, opportunity, arrangement, agreement, economic advantage or interest that is presented to, or acquired, created or developed by, or which otherwise comes into the possession or to the knowledge of, (i) any director of the Corporation who is not an employee of the Corporation or any of its subsidiaries, or (ii) any holder of Combined Common Stock or any holder of Preferred Stock (or Common Stock issuable upon the conversion of such Preferred Stock) or any partner, manager, member, director, officer, stockholder, affiliate, employee or agent of any such holder, other than someone who is an employee of the Corporation or any of its subsidiaries. Any repeal or modification of this Article Eleventh will only be prospective and will not affect the rights under this Article Eleventh in effect at the time of the occurrence of any actions or omissions to act giving rise to liability.

\* \* \*

3. That the foregoing amendment and restatement was approved by the holders of the requisite number of shares of this corporation in accordance with Section 228 of the General Corporation Law.

4. That this Amended and Restated Certificate of Incorporation, which restates and integrates and further amends the provisions of this corporation's Amended and Restated Certificate of Incorporation, has been duly adopted in accordance with Sections 242 and 245 of the General Corporation Law.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

**IN WITNESS WHEREOF**, this Amended and Restated Certificate of Incorporation has been executed by a duly authorized officer of this corporation on this 9th day of November, 2018.

By: /s/ Ramy Farid

Ramy Farid, President and Chief  
Executive Officer

STATE OF DELAWARE  
CERTIFICATE OF CHANGE OF REGISTERED AGENT  
AND/OR REGISTERED OFFICE

The corporation organized and existing under the General Corporation Law of the State of Delaware, hereby certifies as follows:

1. The name of the corporation is SCHRODINGER, INC.
2. The Registered Office of the corporation in the State of Delaware is changed to Corporation Trust Center, 1209 Orange Street (street), in the City of Wilmington, County of New Castle Zip Code 19801. The name of the Registered Agent at such address upon whom process against this Corporation may be served is THE CORPORATION TRUST COMPANY .
3. The foregoing change to the registered office/agent was adopted by a resolution of the Board of Directors of the corporation.

By: /s/ Yvonne Tran  
Authorized Officer

Name: Yvonne Tran, Secretary and Chief Legal Officer  
Print or Type

**CERTIFICATE OF AMENDMENT  
OF  
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION  
OF  
SCHRÖDINGER, INC.**

Pursuant to Section 242 of the  
General Corporation Law of the State of Delaware

Schrödinger, Inc. (the “**Corporation**”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “**DGCL**”), does hereby certify as follows:

Resolutions were duly adopted by the Board of Directors of the Corporation pursuant to Sections 141(f) and 242 of the DGCL setting forth an amendment to the Amended and Restated Certificate of Incorporation of the Corporation, as amended (the “**Certificate**”), and declaring such amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the DGCL. The resolutions setting forth the amendment are as follows:

RESOLVED:

The first sentence of Article FOURTH of the Certificate be and hereby is amended by deleting it in its entirety and substituting the following in lieu thereof:

“**FOURTH:** The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 425,000,000 shares of Common Stock, \$0.01 par value per share (“**Common Stock**”), (ii) 146,199,885 shares of Non-Voting Common Stock, \$0.01 par value per share (“**Non-Voting Common Stock**” and, together with the Common Stock, the “**Combined Common Stock**”), and (iii) 328,105,864 shares of Preferred Stock, \$0.01 par value per share (“**Preferred Stock**”).”

FURTHER

RESOLVED:

The first sentence of Part C of Article FOURTH of the Certificate be and hereby is amended by deleting it in its entirety and substituting the following in lieu thereof:

“134,704,785 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series A Preferred Stock**”, 29,468,101 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series B Preferred Stock**”, 47,242,235 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series C Preferred Stock**”, 39,540,611 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series D Preferred Stock**” and 77,150,132 shares of the authorized Preferred Stock of the Corporation are hereby designated “**Series E Preferred Stock**”, each with the following rights, preferences, powers, and privileges and the following restrictions, qualifications and limitations.”

FURTHER  
RESOLVED:

That Subsection 4.4.1(d)(v) of Part C of Article FOURTH of the Certificate be and hereby is amended by deleting it in its entirety and substituting the following in lieu thereof:

“shares of Combined Common Stock issued or issuable pursuant to the transactions contemplated by the Series E Purchase Agreement, as amended from time to time;”

\*\*\*\*\*

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its Chief Executive Officer and President this 24 day of April, 2019.

Schrödinger, Inc.

By: /s/ Ramy Farid

Ramy Farid

Chief Executive Officer and President

**CERTIFICATE OF AMENDMENT  
OF  
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION  
OF  
SCHRÖDINGER, INC.**

Pursuant to Section 242 of the  
General Corporation Law of the State of Delaware

Schrödinger, Inc, (the “**Corporation**”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “**DGCL**”), does hereby certify as follows:

Resolutions were duly adopted by the Board of Directors of the Corporation pursuant to Sections 141(f) and 242 of the DGCL setting forth an amendment to the Amended and Restated Certificate of Incorporation of the Corporation, as amended (the “**Certificate**”), and declaring such amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the DGCL. The resolution setting forth the amendment is as follows:

**RESOLVED:**

Subsection 3.3(n) of Part C of Article FOURTH of the Certificate be and hereby is deleted in its entirety and the following is inserted in lieu thereof:

“increase or decrease the authorized number of directors constituting the Board of Directors of the Corporation from seven (7) directors.”

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its Chief Executive Officer and President this 22nd day of July, 2019.

By: /s/ Ramy Farid  
Ramy Farid  
Chief Executive Officer and President

**CERTIFICATE OF AMENDMENT  
OF  
AMENDED AND RESTATED CERTIFICATE OF INCORPORATION  
OF  
SCHRÖDINGER, INC.**

Pursuant to Section 242 of the  
General Corporation Law of the State of Delaware

Schrödinger, Inc. (the “**Corporation**”), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware (the “**DGCL**”), does hereby certify as follows:

Resolutions were duly adopted by the Board of Directors of the Corporation pursuant to Section 141(f) and Section 242 of the DGCL setting forth an amendment to the Amended and Restated Certificate of Incorporation of the Corporation, as amended (the “**Charter**”) of the Corporation, and declaring such amendment to be advisable. The stockholders of the Corporation duly approved said proposed amendment by written consent in accordance with Sections 228 and 242 of the DGCL. The resolutions setting forth the amendment are as follows:

RESOLVED: That the first paragraph of Article FOURTH of the Charter be and hereby is deleted in its entirety and the following is inserted in lieu thereof:

“That, effective on the filing of this Certificate of Amendment to the Amended and Restated Certificate of Incorporation with the Secretary of State of the State of Delaware (the “**Effective Time**”), a one-for-7.47534 reverse stock split of the Corporation’s Common Stock, par value \$0.01 per share (the “**Common Stock**”), shall become effective, pursuant to which each 7.47534 shares of Common Stock outstanding and held of record by each stockholder of the Corporation (including treasury shares) immediately prior to the Effective Time shall be reclassified and combined into one (1) validly issued, fully paid and nonassessable share of Common Stock automatically and without any action by the holder thereof upon the Effective Time and shall represent one (1) share of Common Stock from and after the Effective Time (such reclassification and combination of shares, the “**Reverse Stock Split**”). The par value of the Common Stock following the Reverse Stock Split shall remain at \$0.01 per share. No fractional shares of Common Stock shall be issued as a result of the Reverse Stock Split and, in lieu thereof, upon surrender after the Effective Time of a certificate which formerly represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time, any person who would otherwise be entitled to a fractional share of Common Stock as a result of the Reverse Stock Split, following the Effective Time, shall be entitled to receive a cash payment equal to the fraction of a share of Common Stock to which such holder would otherwise be entitled multiplied by the fair value per share of the Common Stock immediately prior to the Effective Time as determined by the Board of Directors of the Corporation.

Each stock certificate that, immediately prior to the Effective Time, represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall, from and after the Effective Time, automatically and without the necessity of presenting the same for exchange, represent that number of whole shares of Common Stock after the Effective Time into which the shares formerly represented by such certificate have been reclassified (as well as the right to receive cash in lieu of fractional shares of Common Stock after the Effective Time); provided, however, that each person of record holding a certificate that represented shares of Common Stock that were issued and outstanding immediately prior to the Effective Time shall receive, upon surrender of such certificate, a new certificate evidencing and representing the number of whole shares of Common Stock after the Effective Time into which the shares of Common Stock formerly represented by such certificate shall have been reclassified.

The total number of shares of all classes of stock which the Corporation shall have authority to issue is (i) 425,000,000 shares of Common Stock, (ii) 146,199,885 shares of Limited Common Stock, \$0.01 par value per share ("**Limited Common Stock**") and, together with the Common Stock, the "**Combined Common Stock**", and (iii) 328,105,864 shares of Preferred Stock, \$0.01 par value per share ("**Preferred Stock**")."

FURTHER  
RESOLVED:

All references to "Non-Voting Common Stock" be and hereby are deleted and replaced by references to "Limited Common Stock".

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be signed by its Chief Executive Officer and President this 24th day of January, 2020.

**SCHRÖDINGER, INC.**

By: /s/ Ramy Farid

\_\_\_\_\_  
Ramy Farid  
Chief Executive Officer and President

*[Signature Page to Certificate of Amendment]*

February 6, 2020

Schrödinger, Inc.  
120 West 45th Street, 17th Floor  
New York, New York 10036

Ladies and Gentlemen:

We are acting as special Delaware counsel to Schrödinger, Inc., a Delaware corporation (the “Company”), in connection with the Registration Statement on Form S-8 (the “Registration Statement”) filed by the Company with the Securities and Exchange Commission (the “SEC”) to register (i) 4,913,936 shares of common stock, par value \$0.01 per share (the “Common Stock”), of the Company issuable under the 2010 Stock Plan of the Company, adopted on October 28, 2010, as amended on December 6, 2011, April 5, 2012, December 11, 2012, March 8, 2016, March 15, 2017, November 4, 2017 and November 9, 2018 (the “2010 Stock Plan”), (ii) 5,884,745 shares of Common Stock issuable under the 2020 Equity Incentive Plan of the Company, adopted on January 23, 2020 (the “2020 Stock Plan”), and (iii) 586,845 shares of Common Stock issuable under the 2020 Employee Stock Purchase Plan of the Company, adopted on January 23, 2020 (the “Employee Stock Purchase Plan” and, together with the 2010 Stock Plan and the 2020 Stock Plan, the “Plans” and, such options or awards as may be duly and validly granted or issued under the Plans, the “Awards” and, such shares issuable under the Plans pursuant to any Awards, the “Shares”). In this connection, you have requested our opinions as to certain matters under the General Corporation Law of the State of Delaware (the “General Corporation Law”).

For the purpose of rendering our opinions as expressed herein, we have been furnished and have reviewed the following documents:

(i) the Certificate of Incorporation of the Company, as filed with the Secretary of State of the State of Delaware (the “Secretary of State”) on May 22, 1995, as amended by the Agreement of Merger, dated May 31, 1995, between the Company, all of the directors thereof, Schrödinger, Inc., a California corporation, and all of the directors thereof, as filed with the Secretary of State on June 7, 1995, the Certificate of Amendment of Certificate of Incorporation of the Company, as filed with the Secretary of State on October 10, 1997, the Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on January 7, 1999, the Certificate of Amendment of the Certificate of Incorporation of the Company, as filed with the Secretary of State on June 14, 2000, the Certificate of Renewal and Revival of Charter of the Company, as filed with the Secretary of State on March 30, 2001, the Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on March 27, 2002, the Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on April 27, 2010, the Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on April 26, 2012, the



One Rodney Square ■ 920 North King Street ■ Wilmington, DE 19801 ■ Phone: 302-651-7700 ■ Fax: 302-651-7701

[www.rlf.com](http://www.rlf.com)

Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on December 11, 2012, the Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on September 25, 2014, the Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on June 12, 2015, the Certificate of Amendment of the Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on November 28, 2017, the Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on October 2, 2018, the Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on November 9, 2018, the Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on April 24, 2019, the Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on July 22, 2019, the Certificate of Validation of the Company, as filed with the Secretary of State on December 18, 2019, the Certificate of Validation of the Company, as filed with the Secretary of State on December 18, 2019, the Certificate of Validation of the Company, as filed with the Secretary of State on December 18, 2019, the Certificate of Validation of the Company, as filed with the Secretary of State on December 18, 2019, the Certificate of Validation of the Company, as filed with the Secretary of State on December 18, 2019, the Certificate of Validation of the Company, as filed with the Secretary of State on December 18, 2019, the Certificate of Validation of the Company, as filed with the Secretary of State on December 18, 2019, and the Certificate of Amendment of Amended and Restated Certificate of Incorporation of the Company, as filed with the Secretary of State on January 24, 2020, and the form of Restated Certificate of Incorporation of the Company (the “Restated Certificate of Incorporation”), as filed with the SEC as Exhibit 3.3 to Amendment No. 1 to the Company’s Registration Statement on Form S-1 (File No. 333-235890) filed with the SEC on January 27, 2020 (the “Form S-1 Amendment”), and to be filed with the Secretary of State and effective as of the closing (the “IPO Closing”) of the initial public offering of the Common Stock (collectively, the “Certificate of Incorporation”);

(ii) the bylaws of the Company as in effect at all relevant times through the date hereof (the “Bylaws”);

(iii) the form of Amended and Restated Bylaws of the Company (the “Amended and Restated Bylaws”), as filed with the SEC as Exhibit 3.4 to the Form S-1 Amendment, to be effective as of the IPO Closing;

(iv) the 2010 Stock Plan;

(v) the 2020 Stock Plan;

(vi) the Employee Stock Purchase Plan;

(vii) a certificate of an officer of the Company (including the resolutions of the board of directors (the “Board”) and stockholders of the Company and the other documents and materials attached thereto and certified therein), dated on or about the date hereof, as to certain matters (the “Officer’s Certificate”);

(viii) the Registration Statement; and

(ix) a certificate of the Secretary of State, dated on or about the date hereof, as to the good standing of the Company.

With respect to the foregoing documents, we have assumed: (a) the genuineness of all signatures, and the incumbency, authority, legal right and power and legal capacity under all applicable laws and regulations of each of the officers and other persons and entities signing or whose signatures appear upon each of said documents as or on behalf of the parties thereto; (b) the authenticity of all documents submitted to us as originals; (c) the conformity to authentic originals of all documents submitted to us as certified, conformed, photostatic, electronic or other copies; (d) that the foregoing documents, in the forms submitted to us for our review, have not been and will not be altered or amended in any respect material to our opinions as expressed herein; and (e) all documents submitted to us as forms will be duly completed, and in the case of the Restated Certificate of Incorporation, duly filed with the Secretary of State, in a manner consistent with the opinions stated herein. We have reviewed such documents, and we have made such investigations of law, as we have deemed appropriate as a basis for the opinions expressed below. We have assumed and have not verified the accuracy as to the factual matters of the documents we have reviewed, including the factual matters set forth in the Officer's Certificate. Our knowledge of the Company and its legal and other affairs is limited by the scope of our engagement, which scope includes the delivery of this opinion letter. We do not represent the Company with respect to all legal matters or issues. The Company employs other independent counsel and, to our knowledge, handles certain legal matters and issues without the assistance of independent counsel. We have not participated in the preparation of the Registration Statement and assume no responsibility for its contents, other than this opinion.

Based upon and subject to the foregoing and upon our review of such matters of law as we have deemed necessary and appropriate to render our opinions as expressed herein, and subject to the assumptions, exceptions, limitations and qualifications set forth herein, it is our opinion that the Shares, when and to the extent issued and paid for in accordance with the terms of the applicable Plan and any Awards, will be duly authorized, validly issued, fully paid and non-assessable under the General Corporation Law.

The foregoing opinions are subject to the following exceptions, limitations and qualifications:

A. We are admitted to practice law in the State of Delaware and do not hold ourselves out as being experts on the law of any other jurisdiction. The foregoing opinions are limited to the General Corporation Law currently in effect, and we have not considered and express no opinion on the effect of any other laws or the laws of any other state or jurisdiction, including state or federal laws relating to securities or other federal laws, or the rules and regulations of stock exchanges or of any other regulatory body. In addition, we have not considered and express no opinion as to the applicability of or any compliance with the Delaware Securities Act, 6 Del. C. § 73-101 et seq., or any rules or regulations promulgated thereunder.

B. This opinion speaks only as of the date hereof, and we shall have no obligation to update this opinion in any respect after the date hereof, including with respect to changes in law occurring on or after the date hereof.

We consent to your filing this opinion as an exhibit to the Registration Statement. In giving the foregoing consent, we do not thereby admit that we come within the category of persons whose consent is required under Section 7 of the Securities Act of 1933, as amended, or the rules and regulations of the SEC thereunder.

Very truly yours,

/s/ Richards, Layton & Finger, P.A.

WH/SN/RBG/SCH

Consent of Independent Registered Public Accounting Firm

The Board of Directors  
Schrödinger, Inc.:

We consent to the use of our report incorporated by reference herein.

/s/ KPMG LLP

Portland, Oregon  
February 6, 2020