

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4781710

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT	
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT	
<b>CONVEYING PARTY DATA</b>		
	<b>Name</b>	<b>Execution Date</b>
	AHMAD M. ABDUL-FATTAH	05/19/2008
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	BIOGEN IDEC MA INC.	
<b>Street Address:</b>	14 CAMBRIDGE CENTER	
<b>City:</b>	CAMBRIDGE	
<b>State/Country:</b>	MASSACHUSETTS	
<b>Postal Code:</b>	02142	
<b>PROPERTY NUMBERS Total: 1</b>		
<b>Property Type</b>	<b>Number</b>	
<b>Patent Number:</b>	9623088	
<b>CORRESPONDENCE DATA</b>		
<b>Fax Number:</b>		
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
<b>Phone:</b>	202-371-2600	
<b>Email:</b>	ckim@skgf.com, bdudley@skgf.com, ttopssecretary2@skgf.com	
<b>Correspondent Name:</b>	STERNE, KESSLER, GOLDSTEIN & FOX P.L.L.C.	
<b>Address Line 1:</b>	1100 NEW YORK AVENUE NW	
<b>Address Line 4:</b>	WASHINGTON, D.C. 20005	
<b>ATTORNEY DOCKET NUMBER:</b>	4159.436000C	
<b>NAME OF SUBMITTER:</b>	JI-EUN KIM, REG. NO. 68504	
<b>SIGNATURE:</b>	/Ji-Eun Kim/	
<b>DATE SIGNED:</b>	01/18/2018	
<b>Total Attachments: 6</b>		
source=4159.436000C-Assignment#page1.tif		
source=4159.436000C-Assignment#page2.tif		
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**EMPLOYEE PROPRIETARY INFORMATION AND INVENTIONS  
AND DISPUTE RESOLUTION AGREEMENT**

This Employee Proprietary Information and Inventions/Dispute Resolution Agreement (hereinafter the "Agreement") shall be effective as of the first day of my employment with Biogen Idec Inc. (together with its subsidiaries and any other corporate affiliates hereinafter collectively, the "Company") or, if I already am employed by the Company, on the date that I sign this Agreement. In consideration of my employment or continued employment, as the case may be, and the compensation to be received by me from the Company from time to time, I hereby specifically acknowledge, understand and agree that:

Nature of Employment Relationship

1. My employment with the Company has been entered into voluntarily and I may resign at any time. Similarly, the Company may terminate my employment at any time without cause or notice, and for any reason, without resort to any policies, practices or procedures. No implied oral or written agreements contrary to the express language of this Agreement are valid unless they are in writing and signed by the Board of Directors or the President of the Company.

Protection of the Company's Intellectual Property and Goodwill

2. The Company is engaged in a continuous program of research, development, production, sales and marketing. I am expected to make new contributions and/or inventions of value to the Company as a part of my employment by the Company.
3. My employment creates a relationship of confidence and trust between me and the Company with respect to any nonpublic information applicable to or related to the business of the Company or applicable to or related to the business of any client or customer of the Company or to the disclosure of nonpublic information to the Company by any person or entity, which may be made known to me by the Company or by a client or customer of the Company, or created or learned by me during the period of my employment.
4. The Company possesses and will possess information that has been created, discovered, developed, or otherwise become known to the Company (including without limitation information created, discovered, developed, or made known by me) and/or in which property rights have been assigned or otherwise conveyed to the Company, which information has commercial value in the business in which the Company is engaged or will engage and is not generally known to the public. All of the aforementioned information is hereinafter called "Proprietary Information." By way of illustration, but not limitation, Proprietary Information includes trade secrets, processes, nonpublic patent applications, formulas, data, know-how, improvements, inventions, techniques, biological materials, marketing plans, strategies, forecasts, customer lists, personnel and non-public financial information.
5. All Proprietary Information shall be the sole and exclusive property of the Company and its assigns, and the Company and its assigns shall be the sole and exclusive owner of all patents or other rights in connection therewith. I hereby assign to the Company, or such other entity as the Company directs in writing, any rights I may have or acquire in such Proprietary Information.
6. At all times, both during my employment by the Company and after its termination for any reason, I will keep in confidence and trust all Proprietary Information, and I will not use or disclose any Proprietary Information without the written consent of the Company, except as may be necessary in the ordinary course of performing my duties as an employee of the Company.
7. All documents, records, notes, apparatus, computers, data storage devices, equipment and other physical property, and all documents and records (whether stored electronically or in hard copies), whether or not pertaining to Proprietary Information, furnished to me by the Company or produced by me or others in connection with my employment with the Company, shall be and remain the sole property of the Company. I will promptly return and deliver such property and any copies to the Company as and when requested by the

Company. Should the Company not so request, I shall return and deliver all such property upon termination of my employment with the Company for any reason, and I will not take with me any such property or any reproduction of such property, in any form, upon termination.

8. During the period of my employment by the Company, I will not, without the Company's prior written consent, engage in any employment or activity other than for the Company in any business in which the Company is now or may during the course of my employment become engaged.
9. I will promptly disclose to the Company, or any persons designated by it, all improvements, inventions, formulas, biological materials, processes, techniques, know-how, and data, whether or not patentable, which are made or conceived or reduced to practice or learned by me, either alone or jointly with others, during the period of my employment and which are related to or useful in the actual or anticipated business of the Company, or result from tasks assigned me by the Company or result from use of premises, or equipment or materials, possessed, owned, leased, or contracted for by the Company (all said improvements, inventions, formulas, biological materials, processes, techniques, know-how, and data shall be collectively hereinafter called "Inventions").<sup>1</sup>
10. My ownership interest in all Inventions that I make, conceive, reduce to practice or develop (in whole or in part, either alone or jointly with others) during my employment, shall be the sole and exclusive property of the Company and its assigns, and the Company and its assigns shall be the sole and exclusive owner of all patents and other rights in connection therewith. I will assign to the Company, or such corporate affiliate as Company may specify, any rights I may have or acquire in such Inventions. As to all such Inventions, I will assist the Company in every proper way (but at the Company's expense) to obtain and from time to time enforce patents on said Inventions in any and all countries. To that end I will, without limitation, assist and cooperate in legal proceedings, and will execute all documents for use in applying for and for obtaining and maintaining such patents thereon and enforcing the same, as the Company may desire, together with any assignments thereof to the Company or person designated by it. My obligation to assist the Company in obtaining and enforcing patents for such Inventions in any and all countries shall continue beyond the termination of my employment for any reason, but the Company shall compensate me at the rate of pay I was receiving at the time of my termination for time actually spent by me at the Company's request on such assistance. In the event that the Company is unable for any reason whatsoever to secure my signature to any lawful and necessary document required to apply for any such patent or to prosecute any patent application with respect to such an Invention (including renewals, extensions, continuations, divisions or continuations in part thereof), I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents, as my agents and attorney-in-fact to act for and in my behalf and instead of me, to execute and file any such application and to do all other

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<sup>1</sup> APPLICABLE TO CALIFORNIA-BASED EMPLOYEES ONLY

This Agreement does not require assignment of an invention which an employee cannot be obligated to assign under Section 2870 of the California Labor Code (hereafter called "Section 2870") (quoted below). However I will disclose any Inventions as required by Section 9 hereof regardless of whether I believe the Invention is protected by Section 2870, in order to permit the Company to engage in a review process to determine such issues as may arise. Such disclosure shall be received in confidence by the Company.

*California Labor Code § 2870. Application of provision providing that employee shall assign or offer to assign rights in invention to employer.*

Any provision in an employment agreement which provides that an employee shall assign or offer to assign any of his or her rights in an invention to his or her employer shall not apply to an invention to which no equipment, supplies, facility, or trade secret information of the employer was used and which was developed entirely on the employee's own time, and (a) which does not relate (1) to the business of the employer or (2) to the employer's actual or demonstrably anticipated research or development, or (b) which does not result from any work performed by the employee for the employer. Any provision which purports to apply to such an invention is to that extent against the public policy of this state and is to that extent void and unenforceable.

lawfully permitted acts to further the prosecution and issuance of patents thereon with the same legal force and effect as if executed by me.

11. Any copyrightable works, including, without limitation, literary works, computer programs, artistic works (including design, graphs, drawings, blueprints and other works), recordings, slides, motion pictures and other audio-visual works that I may produce in the course of my employment by the Company shall be "works made for hire," to the maximum extent permitted by law. Any works of authorship that I may prepare alone or with others during my employment with the Company, so far as they relate to the actual or anticipated business of the Company, or processes, personnel, financial information, apparatus, products, researches or research programs of the Company, shall be regarded as prepared by me within the scope of my employment, and, unless otherwise agreed to in a written instrument signed by an officer of the Company, shall be owned by the Company, including, without limitation any copyright(s) in such works of authorship and I hereby assign to the Company any and all rights I may have in such works of authorship and in any and all copyrights therein and copyright registrations thereof. I will execute promptly when requested by the Company to do so any assignment documents that the Company deems necessary or appropriate to serve as further evidence of this assignment. I will, without limitation, assist and cooperate in legal proceedings, and will execute all documents for use in applying for and for obtaining and maintaining copyrights in work of authorship, and in enforcing the same, as the Company may desire, together with any assignments thereof to the Company or person designated by it. My obligation to assist the Company in obtaining and enforcing copyrights in works of authorship, in any and all countries shall continue beyond the termination of my employment for any reason, but the Company shall compensate me at the rate of pay I was receiving at the time of my termination for time actually spent by me at the Company's request on such assistance. In the event that the Company is unable for any reason whatsoever to secure my signature to any lawful and necessary document required to apply for any such copyright or to prosecute any copyright registration application with respect to such work of authorship, or renewal thereof, I hereby irrevocably designate and appoint the Company and its duly authorized officers and agents, as my agents and attorney-in-fact to act for and in my behalf and instead of me, to execute and file any such application and to do all other lawfully permitted acts to further the prosecution and issuance of copyright registrations thereon with the same legal force and effect as if executed by me.
12. As a matter of record I attach hereto Exhibit A, a complete list of all inventions or improvements relevant to the subject matter of my employment by the Company which have been made or conceived or first reduced to practice by me alone or jointly with others prior to my employment with the Company that I desire to remove from the operation of this Agreement, and I covenant that such list is complete. If no such list is attached to this Agreement, I represent that I have no such inventions and improvements at the time of signing this Agreement.
13. Except as set forth on Exhibit A, attached hereto, I have not brought to the Company or used in the performance of my responsibilities at the Company any confidential or proprietary materials or documents of a former employer. I will not do so in the future unless I have first: (i) obtained and provided to the Company written authorization from the former employer for their possession and use, and (ii) obtained written authorization by an officer of the Company for their use in the performance of my responsibilities at the Company. I have recorded on Exhibit A, attached hereto, a complete list of all materials and documents of any former employer I have brought with me to the Company or that I propose to bring with me to the Company or for use in my employment with the Company.
14. I represent that my execution of this Agreement, my employment with the Company and the performance of my proposed duties for the Company will not violate any obligations I may have to any former employer. I will provide to the Company any agreement with a former employer that purports to limit my employment activities subsequent to the termination of that employment relationship. I further represent that my performance of all the terms of this Agreement and as an employee of the Company does not and will not breach any agreement to keep in confidence proprietary information acquired by me in confidence or in trust prior to my employment by the Company. I have not entered into, and I will not enter into, any agreement either written or oral in conflict herewith. During my employment with the Company, I am not to breach any obligation of confidentiality that I may have to former employers.
15. The Company has received and in the future will receive from clients, customers and other third parties, their confidential or proprietary information subject to a duty on the Company's part to maintain the confidentiality

of such information and to use it only for limited purposes. I will hold all such confidential or proprietary information in the strictest confidence and not disclose it to any person, firm or corporation or use it except as necessary in carrying out my work for the Company consistent with the Company's agreement with such third party.

#### Non-Solicitation

16. During the term of my employment and for a period of two (2) years following the separation of my employment with the Company, regardless of the reason for such separation, I will neither (i) offer employment to or hire any Company employee, whether for my own benefit or for the benefit of another person or entity (nor shall I assist any other in doing so) nor (ii) solicit, entice or persuade any employee to leave the Company.

#### Enforcement of Covenants

17. I acknowledge that in the event of my breach or threatened breach of my agreements set forth in this Agreement, the Company will suffer irreparable harm, and monetary damages will be impossible to ascertain and/or inadequate to compensate it for such breach. Therefore, in the event of my breach or threatened breach of any of my obligations, the Company, in addition to and not in limitation of other rights, shall be entitled to injunctive relief (without any obligation by the Company to post a bond) in order to restrain any such breach or threatened breach by me. In the event a court of competent jurisdiction determines that I have violated any provision of this Agreement, the running of the time period of the provision so violated shall be automatically suspended as of the date of such violation until the court determines that such violation has permanently ceased, after which the time period shall recommence and shall run for the remainder of its term.

#### Dispute Resolution

18. In the event of a "Dispute" as that term is defined in Section 20 of this Agreement, either of us may request that the other participate in a mediation administered by the American Arbitration Association in accordance with its Employment Dispute Resolution Rules ("AAA EDR Rules"), such mediation to occur in the geographic location where I am employed. The party upon whom such request is made shall either agree or decline to participate in such mediation within ten (10) days of such request. In the event that mediation occurs, the Company shall pay the full cost of the mediation (excluding attorneys fees, if any, incurred by me).
19. If a Dispute covered by this Agreement is not settled through direct negotiation between the Company and me or any mediation, then any litigation commenced by either of us shall be resolved by a Judge alone (regardless of the location of such litigation), and both parties hereby waive and forever renounce the right to a trial before a civil jury.
20. For purposes of this Agreement, Dispute shall be deemed to include any disputes relating to: (i) the terms and conditions of my employment; (ii) any claimed breach of the covenants set forth in this Agreement, or (iii) any dispute relating to the separation of my employment, whether voluntary or involuntary. Specifically included are any disputes or claims arising under: (i) any local, state or federal discrimination or civil rights statute, regulation or order (including, without limitation, Title VII of the Civil Rights Act of 1964, the Age Discrimination in Employment Act, the Americans With Disabilities Act, and any amendments to the same); (ii) any other local, state or federal employment related statute, regulation or order relating to wages, hours, benefits, or other terms and conditions of employment; (iii) any local, state or federal common law theory; or (iv) any other local, state or federal law or regulation now in existence or that hereafter is enacted (and as amended from time to time) concerning in any way the subject of my employment with the Company or its separation.

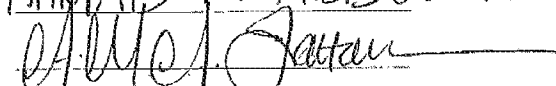
#### Choice of Law/Superseding Agreement/Full Agreement

21. This Agreement shall be deemed to have been made in the Commonwealth of Massachusetts, and shall take effect as an instrument under seal within Massachusetts. The validity, interpretation and performance of this Agreement, and any and all other matters relating to my employment or any separation of employment from the Company shall be governed by, and construed in accordance with the internal law of Massachusetts, without

giving effect to conflict of law principles. Both of us acknowledge that a substantial portion of the Company's business is based out of and directed from the Commonwealth of Massachusetts where the Company maintains its United States corporate headquarters and other facilities, where it administers all employee compensation and benefits, and where this Agreement shall be executed by the Company and thereafter maintained.

22. Any action regarding a Dispute (as defined above) shall be commenced in a court of competent jurisdiction in the Commonwealth of Massachusetts, except if I am employed primarily in a state other than Massachusetts, then an action may be commenced in such other state.
23. This Agreement sets forth the entire agreement and understanding between the Company and me relating to the subject matter herein and merges all prior discussions between us. It supersedes any and all prior agreements (written or oral) relating to the subject matters covered by this Agreement, including any prior agreements covering (i) protection of the Company's intellectual property, or its confidential and proprietary information or documents, and (ii) any dispute resolution process. No modification of or amendment to this Agreement, nor any waiver of any rights under this Agreement will be effective unless in writing signed by an authorized representative of the party to be charged, which in the case of the Company shall be the Board of Directors or the President. I further acknowledge and agree that any subsequent change or changes in my duties, salary or compensation, or subsequent employment with any entity related to the Company (be it a subsidiary, division or other affiliate) will not affect the validity or scope of this Agreement, which shall remain in full force and effect.
24. This Agreement shall inure to the benefit of the Company, and any of its successors and assigns, and I specifically acknowledge and agree that the Company maintains the right to assign this Agreement to any of its successors and assigns, and that I shall be fully bound by the terms of this Agreement upon such assignment.

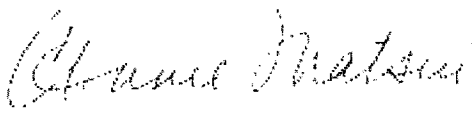
My signature below represents my understanding of, and agreement to, the above terms.

PRINT NAME: AHMAD M. ABDUL-FATTAH  
SIGNATURE:   
DATED: 5-19-2008

ACCEPTED AND AGREED TO:

On behalf of BIOGEN IDEC INC., its subsidiaries and other corporate affiliates

BY: CONNIE MATSUI

SIGNATURE: 

TITLE: EXECUTIVE VICE PRESIDENT

DATED: MARCH 11, 2004

EXHIBIT A

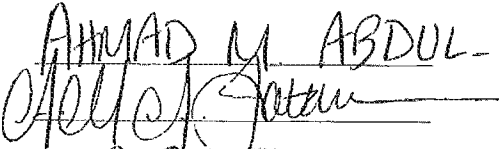
The following is a complete list of all inventions or improvements relevant to the subject matter of my employment by Biogen Idec Inc. and/or its subsidiaries or other corporate affiliates (the "Company") that have been made or conceived or first reduced to practice by me alone or jointly with others prior to my employment by the Company that I desire to remove from the operation of the Company's "Employee Proprietary Information and Inventions/Dispute Resolution Agreement". I agree and understand that any invention or improvement identified by me shall be covered by the terms of the Agreement and not removed therefrom, until this Exhibit A has been validated and signed by a corporate officer of the Company.

☒ No inventions or improvements

☐ See below: Any and all inventions regarding:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

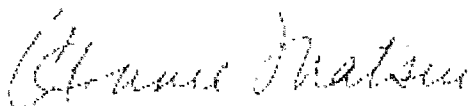
☐ Additional sheets attached

PRINT NAME: AHMAD M. ABDUL-FATTAH  
SIGNATURE:   
DATED: 5-19-2008

Validating Any Exclusions Identified Herein

On behalf of BIOGEN IDEC INC., its subsidiaries and other corporate affiliates

BY: CONNIE MATSUI

SIGNATURE: 

TITLE: EXECUTIVE VICE PRESIDENT

DATED: MARCH 11, 2004