PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Kevin M. Guckian	01/22/2010
Richard D. Caldwell	01/22/2010
Gnanasambandam Kumaravel	01/22/2010
Wen-Cherng Lee	01/15/2010
Edward Yin-Shiang Lin	01/14/2010
Xiaogao Liu	01/14/2010
Bin Ma	01/14/2010
Daniel M. Scott	01/22/2010
Zhan Shi	01/19/2010
Guo Zhu Zheng	01/14/2010
Arthur G. Taveras	01/19/2010
Jermaine Thomas	01/14/2010

RECEIVING PARTY DATA

Name:	Biogen Idec MA Inc.
Street Address:	14 Cambridge Center
City:	Cambridge
State/Country:	MASSACHUSETTS
Postal Code:	02142

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12588883

CORRESPONDENCE DATA

Fax Number: (202)429-3902

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 202-429-3000

Email: kwilliams@steptoe.com

PATENT 501462583 REEL: 025931 FRAME: 0969

12588883

7 W W W W W

Correspondent Name: Harold H. Fox

Address Line 1: 1330 Connecticut Avenue, NW

Address Line 4: Washington, DISTRICT OF COLUMBIA 20036

ATTORNEY DOCKET NUMBER: 14937.0068

NAME OF SUBMITTER: Kristen M. Williams

Total Attachments: 13

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PATENT REEL: 025931 FRAME: 0970

<u>ASSIGNMENT</u>

For valuable consideration, we, <u>Kevin M. GUCKIAN</u>, of <u>Marlborough</u>, <u>Massachusetts</u>; <u>Richard D. CALDWELL</u>; of <u>Sommerville</u>, <u>Massachusetts</u>; <u>Gnanasambandam KUMARAVEL</u>, of <u>Westford</u>, <u>Massachusetts</u>; <u>Wen-Cherng LEE</u>, of <u>Lexington</u>, <u>Massachusetts</u>; <u>Edward Yin-Shiang LIN</u>, of <u>Chestnut Hill</u>, <u>Massachusetts</u>; <u>Xiaogao LIU</u>, of <u>Dover</u>, <u>Massachusetts</u>; <u>Bin MA</u>, of <u>Arlington</u>, <u>Massachusetts</u>; <u>Daniel M. SCOTT</u>, of <u>Weston</u>, <u>Massachusetts</u>; <u>Zhan SHI</u>, of <u>Concord</u>, <u>Massachusetts</u>; <u>Guo Zhu ZHENG</u>, of <u>Lexington</u>, <u>Massachusetts</u>; <u>Arthur G. TAVERAS</u>, of <u>Southborough</u>, <u>Massachusetts</u>; and <u>Jermaine THOMAS</u>, of <u>Chelsea</u>, <u>Massachusetts</u>; hereby assign to <u>Biogen Idec MA Inc.</u>, a corporation of <u>Massachusetts</u> having a place of business at:

14 Cambridge Center Cambridge, Massachusetts 02142,

and its successors and assigns (collectively hereinafter called "the Assignee"), our entire right, title and interest throughout the world in the inventions and improvements which are subject of an application for United States Patent entitled BICYCLIC ARYLSPHINGOSINE 1-PHOSPHATE ANALOGS, filed October 30, 2009, and assigned U.S. Serial Number 12/588,883 this assignment including said application, any and all United States and foreign utility patents and patent applications, including continuation, continuation-in-part, divisional, reissue, and reexamination applications, utility models, and design registrations granted for any of said inventions or improvements, and the right to claim priority based on the filing date of said application under the International Convention for the Protection of Industrial Property, the Patent Cooperation Treaty, the European Patent Convention, and all other treaties of like purposes; and we authorize the Assignee to apply in all countries in our name or in its own name for patents, utility models, design registrations and like rights of exclusion and for inventors' certificates for said inventions and improvements; and we agree for ourselves and our respective heirs, legal representatives and assigns, without further compensation to perform such lawful acts and to sign such further applications, assignments, Preliminary Statements and other lawful documents as the Assignee may reasonably request to effectuate fully this assignment.

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PATENT REEL: 025931 FRAME: 0971

DATE:	1/22/2010		Kevin M. Guckian	<u></u>	
STATE (OF MASSACHOS	<i>[][</i>]) S	SS.		
B. appeared	efore me this <u>32</u> <u>Kevin M. Guckian</u> kn	day of	to be the person whose na	, 20 <u>/ð</u> ime is subsc	, personally
foregoing	Assignment, proved t	o me throu	igh satisfactory evidence o	of identifica	tion in the form
his/her fro	ee act and deed for the	purposes t	and acknowledged that he therein contained.	she execut	ed the same as
[Notary's	Seal Haral		Notary Public My Commission Expires:	/	KATHLEEN PHILPOT Notary Public monwealth of Massachusetts Mr. Commission Expires
{notary's	Seal Here]				My Commission Expires December 2, 2016

DATE: 1-22-2010	Richard D. Caldwell	2	
STATE OF NASSOCHUSETTS COUNTY OF NWOLESEX)) SS.		
Before me this <u>22</u> day appeared <u>Richard D. Caldwell</u> known to foregoing Assignment, proved to me the confany budy. In	o me to be the person whose rough satisfactory evidence	name is sub of identifica	escribed to the
his/her free act and deed for the purpos	es therein contained. Alenti Notary Public	Mpn	KATHLEEN PHILPOT
[Notary's Seal Here]	My Commission Expires		Notary Public nmonwealth of Massachusetts My Commission Expires December 2, 2016

DATE:	1/22/20	:10		Gnercia	mbada	m ki	ment
-			G	nanasambanda	m Kuma	ravel	
STATE O	of <u>Massac</u>	husett	()) ss .				
COUNTY	OF MODI	esex	ر				
Be	fore me this _	32 d	ay of 🚄	en vary	,, 2	0/0	, personally
appeared C	Inanasambano	lam Kumara	<u>vel</u> known	to me to be the	e person	whose na	ıme is subscribed
to the foreg	going Assignr	nent, proved	to me thro	ugh satisfactor	ry eviden	ce of ide	ntification in the
form of <u></u>	Onfary	Badge	IO,	and acknowle	dged that	t h e /she e	executed the same
	• /	•		rein contained.			
			Nota	La lien ry Public	Tlu	Spos	
į̇́Notary's S	Seal Here]		Му С	Commission Ex	(pires:	Con	KATHLEEN PHILPOT Notary Public nmonwealth of Massachusetts My Commission Expires December 2, 2016

DATE: 01/15/2010 (Jen Elec Wen-Cherng Lee
STATE OF //ASSACHUSE 775) SS. COUNTY OF // MOLLSex
Before me this
Notary Public My Commission Expires: [Notary's Seal Here] KATHLEEN PHILPOT Notary Public Coronnonwealth of Massachusett My Commission Expires December 2, 2016

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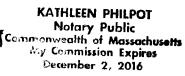
DATE: 1/14/2010	Edward Yin-Shiang Lin
STATE OF MASCACHUSETTS) S COUNTY OF MASCACHUSETTS) S	SS.
appeared Edward Yin-Shiang Lin l known the foregoing Assignment, proved to me the	f <u>Januare</u> , 2010, personally to me to be the person whose name is subscribed to hrough satisfactory evidence of identification in the
as his/her free act and deed for the purpose	and acknowledged that he/she executed the same es therein contained.
[Notary's Seal Here]	Notary Public My Commission Expires: My Commonwealth of Massachusetts My Commonwealth of Massachusetts My Commission Expires December 2, 2016

DATE: 1/14/20/0	MW Gus Fis aogao Liu
STATE OF MASSACHUSE HS) SS. COUNTY OF MIDDLE SEX	
	nowledged that he/she executed the same as
	y Public
My C	Commission Expires: 🔥 KATHLEEN PHIL

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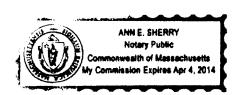
KATHLEEN PHILPOT
Notary Public
Commonwealth of Massachusetts
My Commission Expires
December 2, 2016

DATE: 1-14.2010 Bin Ma
STATE OF MASSACHUSETTS) SS. COUNTY OF MADDLESEX
Before me this // day of /AYUAY, 20/0, personally appeared Bin Mal known to me to be the person whose name is subscribed to the foregoing Assignment, proved to me through satisfactory evidence of identification in the form of
Confly Brage In , and acknowledged that he/she executed the same as
his/her free act and deed for the purposes therein contained.
Notary Public My Commission Expires: [Notary's Seal Here]



COUNTY OF MIDDLESEX Before me this 32 day of January appeared Daniel M. Scottl known to me to be the person whose name is subscribed to the foregoing Assignment, proved to me through satisfactory evidence of identification in the form of Linfany Bridge ID, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained. KATHLEEN PHILPOT Notary Public Commonwealth of Massachusetts My Commission Expires December 2, 2016 My Commission Expires:

DATE: 19- Jan. 2010	Zhan Shi
STATE OF Massachuse Hs) COUNTY OF Middlesex	S.
appeared Zhan Shil known to me to be the Assignment, proved to me through satisfac	person whose name is subscribed to the foregoing tory evidence of identification in the form of a cknowledged that he/she executed the same as
his/her free act and deed for the purposes the	
Ī	Notary Public (ANN SHERRY) My Commission Expires: April 4, 2014
[Notary's Seal Here]	My Commission Expires: April 4, 2014



DATE: 01/14/20/0

Guo Zhu Zheng

STATE OF <u>[[ASSXCHUSEHS]</u>]

COUNTY OF MIDDLESE

Before me this _____/___

day of January

20_____, personally

appeared Guo Zhu Zheng known to me to be the person whose name is subscribed to the foregoing Assignment, proved to me through satisfactory evidence of identification in the form of Confacy Sales To, and acknowledged that he/she executed the same as

his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

ires:

KATHLEEN PHILPOT Notary Public

Service verify of Massachusetts
A. Commission Expires
December 2, 2016

My Commission Expires

December 2, 2016

STATE OF ASSTCHUSERS)

STATE OF ASSTCHUSERS

Before me this Aday of Annual 200, personally appeared Arthur G. Taveras known to me to be the person whose name is subscribed to the foregoing Assignment, proved to me through satisfactory evidence of identification in the form of Annual Badge ID, and acknowledged that he/she executed the same as his/her free act and deed for the purposes therein contained.

Notary Public

My Commission Expires:

KATHLEEN PHILPOT

Notary Public

My Commission Expires:

DATE: 01/14/2010 Jermaine Thomas
STATE OF MASSACHUSEHS) SS. COUNTY OF MIDDLESEX
Before me this /4 day of January, 20 10, personally
appeared <u>Jermaine Thomas</u> known to me to be the person whose name is subscribed to the
foregoing Assignment, proved to me through satisfactory evidence of identification in the form
of Confany Intgo In, and acknowledged that he/she executed the same as
his/her free act and deed for the purposes therein contained.
Cathleen Thil san
Notary Public KATHLEEN PHILPOT My Commission Expires: [Notary's Seal Here]
December 2, 2016

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RECORDED: 03/10/2011

PATENT REEL: 025931 FRAME: 0983