PATENT ASSIGNMENT

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SUBMISSION TYPE:		NEW ASSIGNMENT	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:		ASSIGNMENT	ASSIGNMENT	
CONVEYING PAR	TY DATA			
		Name	Execution Date	
Hayley Binch		01/26/2010		
Dennis Hurley		01/22/2010		
Lev T.D. Fanning		01/27/2010		
Peter D.J. Grootenhuis			01/27/2010	
Martyn Botfield			03/03/2010	
Frederick Van Goor			01/26/2010	
Name:	Vertex Pharm	Vertex Pharmaceuticals Incorporated		
Name:	Vertex Pharm	armaceuticals Incorporated		
Street Address:		130 Waverly Street		
City:	Cambridge			
State/Country:		MASSACHUSETTS 02139		
Postal Code:	02139			
PROPERTY NUME	BERS Total: 1			
Property	у Туре	Numt	Number	
Application Number: 13718		13718539		
CORRESPONDEN	ICE DATA			
Fax Number: <i>Correspondence w</i> Phone: Email: Correspondent Nau Address Line 1: Address Line 4:	617 341 marilyn_r me: Vertex Pl 130 Wav	Mail when the fax attempt is unsuccess	sful.	
ATTORNEY DOCKET NUMBER:		VP1/08-157 US DV1	VP1/08-157 US DV1	
NAME OF SUBMITTER:		Marilyn Murphy		
502285772	2		PATENT REEL: 030082 FRAME: 0638	

REEL: 030082 FRAME: 0638

Total Attachments: 9				
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Attorney Docket No. (VPI/08-157 US) + WO

ASSIGNMENT

We,

(1) Hayley Binch, of Encinitas, California;

(2) Dennis Hurley, of San Marcos, California;

(3) Lev T.D. Fanning, of San Marcos, California;

(4) Peter D.J. Grootenhuis, of San Diego, California;

(5) Martyn Botfield, of Concord, Massachusetts; and

(6) Fredrick Van Goor, of San Diego, California,

for good and valuable consideration, receipt of which is hereby acknowledged, have assigned, sold and transferred to, and do hereby assign, sell and transfer to, Vertex Pharmaceuticals Incorporated, a corporation organized and existing under the laws of the Commonwealth of Massachusetts and having an office and a place of business at 130 Waverly Street, Cambridge, MA 02139, its successors and assigns, all hereinafter referred to as the ASSIGNEE:

(1) the entire right, title and interest in the United States and in all countries throughout the world in and to any and all of my/our inventions, and discoveries disclosed in:

(a) the application for United States Letters Patent entitled: **MODULATORS OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR**, and filed in the United States Patent and Trademark Office on **December 21**, 2009, under Application Number 12/643,188, including any renewals, revivals, reissues, reexaminations, extensions, continuations, and divisions thereof, and any substitute applications therefor, and/or

(b) the International Patent Application entitled: MODULATORS OF CYSTIC FIBROSIS TRANSMEMBRANE CONDUCTANCE REGULATOR filed under the Patent Cooperation Treaty in the United States Receiving Office on December 21, 2009, under Application No. PCT/US2009/068939, and designating all countries, including any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof, and any substitute applications therefor;

(2) the full and complete right to file patent applications in the name of the ASSIGNEE, its designee, or in my/our names at the election of the ASSIGNEE or its

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designee, on the aforesaid inventions, discoveries and applications in the United States and in any other country of the world;

(3) the entire right, title and interest in and to any Letters Patent which may issue thereon in the United States or in any other country of the world, and in and to any renewals, revivals, reissues, reexaminations, extensions, continuations and divisions thereof; and

(4) the entire right, title and interest in and to all Convention and Treaty Rights of all kinds thereon, including without limitation all rights of priority in any country of the world, in and to the above inventions, discoveries and applications including, but not limited to, the following priority application(s):

61/141,631	United States	December 30, 2008
Application No.	Country	Filing Date

and all rights of priority in any country of the world deriving from the aboveidentified International Patent Application.

We hereby authorize and request the competent authorities to grant and to issue any and all such Letters Patent in the United States and throughout the world to the ASSIGNEE of the entire right, title and interest therein, as fully and entirely as the same would have been held and enjoyed by me/us had this assignment, sale and transfer not been made.

We agree, at any time, upon the request of the ASSIGNEE to execute and to deliver to the ASSIGNEE any additional applications for patents for said inventions and discoveries, or any part or parts thereof, and any applications for patents of confirmation, registration and importation based on any Letters Patent issuing on said inventions, discoveries or applications, and divisions, continuations, renewals, revivals, reissues, reexaminations and extensions thereof.

We further agree at any time to execute and to deliver upon request of the ASSIGNEE such additional documents, if any, as are necessary or desirable to secure patent protection on said inventions, discoveries and applications throughout all countries of the world, and otherwise to do the necessary to give full effect to and to perfect the rights of the ASSIGNEE under this Assignment, including the execution, delivery and procurement of any and all further documents evidencing this assignment, transfer and sale as may be necessary or desirable.

trajen Busi

(1) Hayley Binch Date: $\Box | 2c | c c$.

State of California

County of <u>Son Diego</u> ss

Subscribed and sworn to (or affirmed) before me this (date) $\frac{26^{12}}{26}$, day of

January, 2010, by HAYLEY BENCH, proved to

me on the basis of satisfactory evidence to be the person(s) who appeared before me.

<u>Ofilia Rosodo</u> Notary Public

My Commission Expires: $M_{org} 2, 20/0$

(Notary Seal)



(2) Dennis Hurley

Date: 1-22-

County of Son Dueyor ss

Subscribed and sworn to (or affirmed) before me this (date) 22^{2} , day of

Jonuary, 2010, by Dennis Hexley, proved to

me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Ofelia Kozodo Notary Public

My Commission Expires: $\frac{May}{2}$

(Notary Seal)



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(3) Lev T.D. Fanning Date: //27/10

County of Sen Diego ss

Subscribed and sworn to (or affirmed) before me this (date) $32^{\frac{1}{2}}$, day of

January, 2010, by LEVT. D. FANNING, proved to

me on the basis of satisfactory evidence to be the person(s) who appeared before me.

<u>Addia Posodo</u> Notary Public My Commission Expires: <u>Morf 3 ⁻²,</u> 2010.

(Notary Seal)



(4) Peter D. J. Grootenhuis

Date: 1/27/2010

County of SAN DIEGO ss

Subscribed and sworn to (or affirmed) before me this (date) _____, day of

JANUARY, 2010, by PETER GRONTENHUIS, proved to

me on the basis of satisfactory evidence to be the person(s) who appeared before me.

Notary Public My Commission Expires: $\frac{9/20/2015}{2015}$.

(Notary Seal)



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(5) Martyn Date: MARI DIT

Commonwealth of Massachusetts County of Middlesex

On this 2^{ℓ} day of $M\ell\ell$, 2010, before me, the undersigned notary public, personally appeared Martyn Botfield, and proved to me through satisfactory evidence of identification which was: 2^{ℓ} personal knowledge of identity, \Box a driver's license, \Box other (please identify) ______, to be the person whose name is signed on this document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his knowledge and belief.

Notary Public Lisa M. Romano

Notary Public Lisa M. Romano My Commission Expires: 5-13-2014.



(6) Fredrick Van Goor Date: JAN 24 JULO

County of Son Dieyo ss

Subscribed and sworn to (or affirmed) before me this (date) $26^{\frac{1}{2}}$, day of

nucry, 2010, by FREDRICK VAN GOOR___, proved to

me on the basis of satisfactory evidence to be the person(s) who appeared before me.

ia Posodo

<u>Allia rowa</u> Notary Public My Commission Expires: <u>May 3, 20</u>10

(Notary Seal)



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ACKNOWLEDGMENT OF ASSIGNEE

By:

Stephen L. Nesbitt ' Chief Patent Counsel VERTEX PHARMACEUTICALS INCORPORATED

april 6, 2010 Date:

Commonwealth of Massachusetts County of Middlesex

On this 67^{h} day of 476^{h} , 2010, before me, the undersigned notary public, personally appeared Stephen L. Nesbitt, proved to me through satisfactory evidence of identification which was/were: \boxtimes personal knowledge of identity, \square a driver's license, \square other (please identify) ______, to be the person whose name is signed on this document, and who swore or affirmed to me that the contents of the document are truthful and accurate to the best of his/ber knowledge and belief.

M. Romano laa

Notary Public: Lisa M. Romano My Commission Expires: May 13, 2016



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RECORDED: 03/26/2013