PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
DEAN STAMOS	12/19/2008
ESTHER MARTINBOROUGH	01/16/2009
NICOLE ZIMMERMAN	01/06/2009
TIMOTHY NEUBERT	01/23/2009
MEHDI MICHEL DJAMEL NUMA	12/12/2008
TARA WHITNEY	01/16/2009
AARTI SAMEER KAWATKA	12/15/2008

RECEIVING PARTY DATA

Name:	VERTEX PHARMACEUTICALS INCORPORATED
Street Address:	130 WAVERLY STREET
City:	CAMBRIDGE
State/Country:	MASSACHUSETTS
Postal Code:	02139

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13967732

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER: VPI/07-143 US DV2

PATENT

REEL: 031651 FRAME: 0962

NAME OF SUBMITTER:	LAUREN M. DEVINCENZO
Signature:	/Lauren M. DeVincenzo/
Date:	11/21/2013
Total Attachments: 11 source=07-143 US DV1_Executed_Assignm	nent#page2.tif nent#page3.tif nent#page4.tif nent#page5.tif nent#page5.tif nent#page6.tif nent#page7.tif nent#page8.tif nent#page8.tif
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PATENT REEL: 031651 FRAME: 0963

Attorney Docket No.: VPI/07-143 US

ASSIGNMENT

We,

- (1) Dean Stamos, of Carlsbad, California;
- (2) Esther Martinborough, of San Diego, California;
- (3) Nicole Zimmermann, of San Diego, California;
- (4) Timothy Neubert, of San Diego, California;
- (5) Mehdi Michel Djamel Numa, of San Diego, California;
- (6) Tara Whitney of San Diego, California; and
- (7) Aarti Sameer Kawatkar of Newton, Massachusetts,

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: HETEROCYCLIC DERIVATIVES AS MODULATORS OF ION CHANNELS, and filed in the United States Patent and Trademark Office on November 12, 2008, under Application Number 12/269,108, including any renewals, revivals, reissues, reexaminations, extensions, continuations, and divisions thereof, and any substitute applications therefor, and/or
- (b) the International Patent Application entitled: HETEROCYCLIC DERIVATIVES AS MODULATORS OF ION CHANNELS, filed under the Patent Cooperation Treaty in the United States Receiving Office on November 12, 2008, under Application No. PCT/US2008/83165, 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 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):

60/987,485	United States of America	November 13, 2007
61/088,141	United States of America	August 12, 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.

_	
(1) Dean Stamos
Γ	Date: 12 19 08

County of San Diego ss

December, 20 08 by Wear Stamps, proved to

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

Notary Public

My Commission Expires: 10-20-2011



	Attallife
(2) Esther Ma	artinborough
Date:	01/16/09

County of San Diego ss

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

January, 2009 by Esther Martinborush, proved to

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

Notary Public

My Commission Expires: 10-2011



Nicole Zr -
(3) Nicole Zimmermann
Date: 01/06/2009

County of San Olego ss

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

January, 2009 by Nicote Zimmermann, proved to

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

Notary Public
My Com Notary Public My Commission Expires: 5/4/1

(4) Timothy Neubert

Date: 1/23/09

State of California

County of Sau Diego ss

Subscribed and sworn to (or affirmed) before me this (date) 23rd, day of

January, 2009 by Timothy Neubert, proved to

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

Notary Public

My Commission Expires: 10-20-2011



(5) Mehdi Michel Djamel Numa
Date: 12.12.08

State of California

County of Sau Dieso ss

Subscribed and sworn to (or affirmed) before me this (date) ____/2^{+l₁}, day of

December, 2008 by Mehali Michel Djamel Numaproved to

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

Notary Public

My Commission Expires: 10-20-2011



Trohetney
(6) Tara Whitney
Date: 01/16/09

County of San Diego ss

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

January, 20 69 by Tara Whitney, proved to

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

Notary Public

My Commission Expires: 10-20-20!



Aval	
(7) Aarti Sameer Kawatka	
Date: 12 15 08	

State of California
County of Middlesex ss
Subscribed and sworn to (or affirmed) before me this (date), day of
December, 2008 by i'm persow, proved to
me on the basis of satisfactory evidence to be the person(s) who appeared before me.
Notary Public My Commission Expires: 130 2015
(Notary Seal)

ACKNOWLEDGMENT OF ASSIGNEE

By: Stephen V. Nesbitt Chief Patent Counsel VERTEX PHARMACEUTICALS INCOR	DOD ATED
Date: $\frac{2/2/2009}{}$	FORATED
Commonwealth of Massachusetts County of Middlesex	
On this day of, 2008, before personally appeared Stephen L. Nesbitt (name of through satisfactory evidence of identification of identity, a driver's license, other (please person whose name is signed on this document the contents of the document are truthful and account and belief.	of document signer), proved to me which was/were: personal knowledge se identify), to be the and who swore or affirmed to me that
Notary Public My Commission Expires: 5/8/09.	LISA M. ROMANO Notary Public Commonwealth of Massachusetts My Commission Expires May 8, 2009

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RECORDED: 11/21/2013