

## PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT										
NATURE OF CONVEYANCE:	ASSIGNMENT										
CONVEYING PARTY DATA											
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Dean Shannon</td> <td>01/09/2012</td> </tr> <tr> <td>Tiansheng Wang</td> <td>01/13/2012</td> </tr> <tr> <td>Simon Giroux</td> <td>01/06/2012</td> </tr> </tbody> </table>		Name	Execution Date	Dean Shannon	01/09/2012	Tiansheng Wang	01/13/2012	Simon Giroux	01/06/2012		
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>Vertex Pharmaceuticals Incorporated</td> </tr> <tr> <td>Street Address:</td> <td>130 Waverly Street</td> </tr> <tr> <td>City:</td> <td>Cambridge</td> </tr> <tr> <td>State/Country:</td> <td>MASSACHUSETTS</td> </tr> <tr> <td>Postal Code:</td> <td>02139</td> </tr> </table>		Name:	Vertex Pharmaceuticals Incorporated	Street Address:	130 Waverly Street	City:	Cambridge	State/Country:	MASSACHUSETTS	Postal Code:	02139
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PROPERTY NUMBERS Total: 2											
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PCT Number:	US1221281										
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CORRESPONDENCE DATA											
<p>Fax Number: (617)444-6483</p> <p>Phone: 617-444-6467</p> <p>Email: usptopatents@vrtx.com</p> <p><i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i></p> <p>Correspondent Name: Vertex Pharmaceuticals Incorporated</p> <p>Address Line 1: 130 Waverly Street</p> <p>Address Line 4: Cambridge, MASSACHUSETTS 02139</p>											
ATTORNEY DOCKET NUMBER:	VPI/11-100 US & WO										
NAME OF SUBMITTER:	Lauren M. DeVincenzo										
Total Attachments: 7											

CH \$80.00 US1221281

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**ASSIGNMENT**

We,

- (1) Dean Shannon, of Milford, Massachusetts;
- (2) Tiansheng Wang, of Concord, Massachusetts; and
- (3) Simon Giroux, of Cambridge, Massachusetts,

for good and valuable consideration, receipt of which is hereby acknowledged, have assigned, sold and transferred to, by virtue of our agreement with Vertex Pharmaceuticals Incorporated 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: PROCESS OF MAKING GYRASE AND TOPOISOMERASE IV INHIBITORS, and filed in the United States Patent and Trademark Office on JANUARY 13, 2012 under Application Number 13/349,884<sup>1</sup>, including any renewals, revivals, reissues, reexaminations, extensions, continuations, and divisions thereof, and any substitute applications therefor, and/or

(b) the International Patent Application entitled: PROCESS OF MAKING GYRASE AND TOPOISOMERASE IV INHIBITORS, filed under the Patent Cooperation Treaty in the United States Receiving Office on JANUARY 13 of 2012,

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<sup>1</sup> We authorize and request ASSIGNEE to insert the filing date and/or application number of said application when known.

under Application No. PCT/US12/21381<sup>2</sup>, 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 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):

61/432,990	United States of America	January 14, 2011
Application No.	Country	Filing Date

and all rights of priority in any country of the world deriving from the above-identified 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

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<sup>2</sup> We authorize and request ASSIGNEE to insert the filing date and/or application number of said application when known.

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.

Dean Shannon

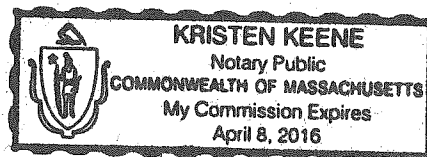
(1) Dean Shannon

Date: January 9, 2012

Commonwealth of Massachusetts  
County of Middlesex

On this 9th day of January, 2012, before me, the undersigned notary public, personally appeared Dean Shannon, proved to me through satisfactory evidence of identification which was/were: ☒ personal knowledge of identity, ☐ a driver's license, ☐ 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/her knowledge and belief.

Kristen Keene  
Notary Public  
My Commission Expires: 4/8/2016.



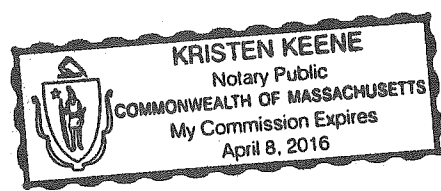
[Signature]  
(2) Tiansheng Wang

Date: 1/13/2012

Commonwealth of Massachusetts  
County of Middlesex

On this 13<sup>th</sup> day of January, 2012, before me, the undersigned notary public, personally appeared Tiansheng Wang, proved to me through satisfactory evidence of identification which was/were: ☒ personal knowledge of identity, ☐ a driver's license, ☐ 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/her knowledge and belief.

Kristen Keene  
Notary Public  
My Commission Expires: 4/8/2016



Simon Giroux

(3) Simon Giroux

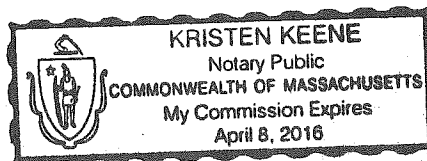
Date: 6-Jan-12

Commonwealth of Massachusetts  
County of Middlesex

On this 6<sup>th</sup> day of January, 2012, before me, the undersigned notary public, personally appeared Simon Giroux, proved to me through satisfactory evidence of identification which was/were: ☒ personal knowledge of identity, ☐ a driver's license, ☐ 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/her knowledge and belief.

Kristen Keene  
Notary Public

My Commission Expires: 4/8/2016





ACKNOWLEDGMENT OF ASSIGNEE

By: Stephen L. Nesbitt

Stephen L. Nesbitt

Vice President and Chief Patent Counsel

VERTEX PHARMACEUTICALS INCORPORATED

Date: January 23, 2012

Commonwealth of Massachusetts

County of Middlesex

On this 23rd day of January 2012, before me, the undersigned notary public, personally appeared Stephen L. Nesbitt (name of document signer), proved to me through satisfactory evidence of identification which was/were: ☒ personal knowledge of identity, ☐ a driver's license, ☐ 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/her knowledge and belief.

Lauren M DeVincenzo

Notary Public

My Commission Expires: 12-17-2015

