Express Mail Label No.: EV 317 172 215  
Date: January 29, 2004  
02-06-2004  
Patent Docket No.: VPI/02-128 US  
PTO-1595  
OMB No. 0651-0011 (exp. 4/94)  
Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):
   a) Paul S. Charffison; b) David D. Deininger; c) Anne-Laure Grillot; d) Yusheng Liao; e) Steven M. Roskin; f) Dean Stamos; g) Emanuele Perola; h) Tiansheng Wang; i) Arnaud LeTimm; and j) Joseph Drumm

2. Name and address of receiving party(ies)
   Name: VERTEX PHARMACEUTICALS INCORPORATED
   Internal Address:
   Street Address: 130 WAVERLY STREET
                  CAMBRIDGE, MASSACHUSETTS 02139-422

3. Nature of conveyance:
   ☒ Assignment  ☐ Merger  ☐ Security Agreement  ☐ Change of Name  ☐ Other
   Additional name(s) & address(es) attached?  ☐ Yes  ☒ No
   Execution Date: a) 1/27/04; b) 1/27/04; c) 1/29/04; d) 1/26/04; e) 1/26/04; f) 1/19/04; g) 1/26/04; h) 1/26/04; i) 1/26/04 and j) 1/26/04

4. Application number(s) or patent number(s):
   If this document is being filed together with a new application, the execution date of the application is
   A. Patent Application No(s): 10167638
   B. Patent No(s):
   Additional numbers attached?  ☐ Yes  ☒ No

5. Name and address of party to whom correspondence
   Concerning document should be mailed:
   Name: Andrea L. C. Robidoux
   Address: VERTEX PHARMACEUTICALS INCORPORATED
            130 Waverly Street
            Cambridge, MA 02139-4242

6. Total number of applications and patents involved: [1]

7. Total fee (37 CFR 3.41) $40.00
   ☒ Enclosed  ☐ The Commissioner is authorized to charge Deposit Account No: 50-0725, Reference No. VPI/02-128 US.

9. Statement and signature
   To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.
   Andrea L. C. Robidoux
   Name of Person Signing  
   Signature  
   January 29, 2004  
   Date  
Total number of pages including cover sheet, attachments, and document: [8]  

Mail documents to be recorded with required cover sheet information to:
MAIL STOP ASSIGNMENT RECORDATION SERVICES
Director of the U.S. Patents and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450

02/06/2004  03110 UN 00000148 506725 10767638
01 FC 8021 40.00 DA

PATENT
REEL: 014946 FRAME: 0630
ASSIGNMENT

In consideration of One Dollar ($1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, the undersigned Paul S. Charifson of Framingham, MA; David D. Deininger of Arlington, MA; Anne-Laure Grillot of Cambridge, MA; Yusheng Liao of Lexington, MA; Steven M. Ronkin of Watertown, MA; Dean Stamos of Framingham, MA; Emanuele Perola of Cambridge, MA; Tiensheng Wang of Concord, MA; Arnaud LeTiran of Ashland, MA; and Joseph Drumm of Westborough, MA hereby:

Sell, assign and transfer to Vertex Pharmaceuticals, Incorporated, having a place of business at 130 Waverly Street, Cambridge, MA 02139-4242, its successors, assigns and legal representatives, all hereinafter referred to as the ASSIGNEE, the entire right, title and interest for the United States and all foreign countries, in and to any and all inventions which are disclosed in the application for United States Letters Patent entitled “GYRASE INHIBITORS AND USES THEREOF” filed HEREWITH, and given serial number __________ (I/we authorize Vertex Pharmaceuticals, Incorporated to fill in the blank when a serial number is assigned.) in and to said application and all divisional, continuing, substitute, renewal, reissue and all other applications for Letters Patent which have been or shall be filed in the United States and all foreign countries on any of said inventions; including International Patent Application Number __________ and in and to all original and reissued patents which have been or shall be issued in the United States and all foreign countries on said inventions including the right to apply for patent rights in each foreign country and all rights to priority deriving from any of the above-identified application(s) including, but not limited to he following priority application(s):

<table>
<thead>
<tr>
<th>Application No.</th>
<th>Country</th>
<th>Filing Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>60/443,917</td>
<td>US</td>
<td>January 31, 2003</td>
</tr>
</tbody>
</table>

Agree that said ASSIGNEE may apply for and receive Letters Patent for said inventions in its own name; and when requested, without charge to but at the expense of said ASSIGNEE, agree to carry out in good faith the intent and purpose of this assignment by executing all divisional, continuing, substitute, renewal, reissue, and all other patent applications on any and all said inventions, by executing all rightful oaths, assignments, powers of attorney and other papers, by communicating to said ASSIGNEE all facts known to us relating to said inventions and the history thereof, and generally by doing everything possible which said ASSIGNEE shall consider desirable for aiding in securing and maintaining proper patent protection for said inventions and for vesting title to said inventions and all applications for patents and all patents on said inventions, in said ASSIGNEE.

Hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent to said ASSIGNEE.

Covenant with said ASSIGNEE that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been made to others by us, and that full right to convey the same as herein expressed is possessed by us.
ATTORNEY DOCKET NO.: VPI/02-128 US

Agree that said Assignment is effective as of the date of January 29, 2004.

IN WITNESS WHEREOF, I hereeto set my hand and seal at CAMBRIDGE, MA this 27th day of January, 2004.

Paul S. Charifson

STATE OF MASSACHUSETTS

COUNTY OF MIDDLESEX

Before me this 27th day of January, 2004, personally appeared the above known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Notary's Seal Here] My Commission Expires: March 6, 2009

IN WITNESS WHEREOF, I hereeto set my hand and seal at CAMBRIDGE, MA this 27th day of January, 2004.

David D. Deininger

STATE OF MASSACHUSETTS

COUNTY OF MIDDLESEX

Before me this 27th day of January, 2004, personally appeared the above known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

[Notary's Seal Here] My Commission Expires: March 6, 2009

2 of 6
IN WITNESS WHEREOF, I hereto set my hand and seal at CAMBRIDGE, MA, this 24th day of January, 2004, at

Anne-Laure Grillot

STATE OF MASSACHUSETTS
COUNTY OF MIDDLESEX

Before me this 24th day of January, 2004, personally appeared

Yusheng Liao

STATE OF MASSACHUSETTS
COUNTY OF MIDDLESEX

Before me this 24th day of January, 2004, personally appeared

Yusheng Liao

3 of 6
IN WITNESS WHEREOF, I hereto set my hand and seal at Cambridge, MA, this 26th day of January, 2004.

Steven M. Ronkin

STATE OF MASSACHUSETTS

COUNTY OF MIDDLESEX

Before me this 26th day of January, 2004, personally appeared

known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

NOTARY PUBLIC

[Notary's Seal Here]  My Commission Expires: March 6, 2009

IN WITNESS WHEREOF, I hereto set my hand and seal at Cambridge, MA, this 29th day of January, 2004.

Dean Stamos

STATE OF MASSACHUSETTS

COUNTY OF MIDDLESEX

Before me this 29th day of January, 2004, personally appeared

known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

NOTARY PUBLIC

[Notary's Seal Here]  My Commission Expires: March 6, 2009

4 of 6
IN WITNESS WHEREOF, I hereto set my hand and seal at 369 Beland St, MA this 26th day of January, 2004.

Emanuele Perola

STATE OF MASSACHUSETTS

COUNTY OF MIDDLESEX

Before me this 26th day of January, 2004, personally appeared

the above known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

NOTARY PUBLIC

[Notary's Seal Here]  My Commission Expires: March 6, 2009

IN WITNESS WHEREOF, I hereto set my hand and seal at 369 Beland St, MA this 29th day of January, 2004.

Tiensheng Wang

STATE OF MASSACHUSETTS

COUNTY OF MIDDLESEX

Before me this 29th day of January, 2004, personally appeared

the above known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

NOTARY PUBLIC

[Notary's Seal Here]  My Commission Expires: March 6, 2009
IN WITNESS WHEREOF, I hereto set my hand and seal at CAMBRIDGE, MA this 26th day of January, 2004.

Arnaud LeTirn

STATE OF MASSACHUSETTS
COUNTY OF MIDDLESEX

Before me this 26th day of January, 2004, personally appeared the above known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Patricia M. Crawford
NOTARY PUBLIC
MARCH 6, 2004

STATE OF MASSACHUSETTS
COUNTY OF MIDDLESEX

Before me this 26th day of January, 2004, personally appeared the above known to me to be the person whose name of subscribed to the foregoing Assignment and acknowledged that he executed the same as his free act and deed for the purposes therein contained.

Patricia M. Crawford
NOTARY PUBLIC
COMMENCEMENT OF MARCH 6, 2004