

PATENT ASSIGNMENT

Electronic Version v1.1
 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT | | | | | | | | | | | | |
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| NATURE OF CONVEYANCE: | ASSIGNMENT | | | | | | | | | | | | |
| CONVEYING PARTY DATA | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Hamed AISSAOUI</td> <td>08/04/2010</td> </tr> <tr> <td>Christoph BOSS</td> <td>08/04/2010</td> </tr> <tr> <td>Ralf KOBERSTEIN</td> <td>08/04/2010</td> </tr> <tr> <td>Thierry SIFFERLEN</td> <td>08/04/2010</td> </tr> <tr> <td>Daniel TRACHSEL</td> <td>08/04/2010</td> </tr> </tbody> </table> | | Name | Execution Date | Hamed AISSAOUI | 08/04/2010 | Christoph BOSS | 08/04/2010 | Ralf KOBERSTEIN | 08/04/2010 | Thierry SIFFERLEN | 08/04/2010 | Daniel TRACHSEL | 08/04/2010 |
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| Thierry SIFFERLEN | 08/04/2010 | | | | | | | | | | | | |
| Daniel TRACHSEL | 08/04/2010 | | | | | | | | | | | | |
| RECEIVING PARTY DATA | | | | | | | | | | | | | |
| Name: | Actelion Pharmaceuticals Ltd. | | | | | | | | | | | | |
| Street Address: | Gewerbestrasse 16 | | | | | | | | | | | | |
| City: | Allschwil | | | | | | | | | | | | |
| State/Country: | SWITZERLAND | | | | | | | | | | | | |
| Postal Code: | CH-4123 | | | | | | | | | | | | |
| PROPERTY NUMBERS Total: 1 | | | | | | | | | | | | | |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>12867630</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 12867630 | | | | | | | | |
| Property Type | Number | | | | | | | | | | | | |
| Application Number: | 12867630 | | | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | | | |
| Fax Number: | (973)912-5236 | | | | | | | | | | | | |
| Phone: | (973)912-5232 | | | | | | | | | | | | |
| Email: | file@hoxpat.com | | | | | | | | | | | | |
| <i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent via US Mail.</i> | | | | | | | | | | | | | |
| Correspondent Name: | Hoxie & Associates LLC | | | | | | | | | | | | |
| Address Line 1: | 75 Main Street, Suite 301 | | | | | | | | | | | | |
| Address Line 4: | Millburn, NEW JERSEY 07041 | | | | | | | | | | | | |
| ATTORNEY DOCKET NUMBER: | AC-101-US | | | | | | | | | | | | |
| NAME OF SUBMITTER: | Brittany LA | | | | | | | | | | | | |
| Total Attachments: 2 source=AC-101-US Assignment 06292012#page1.tif source=AC-101-US Assignment 06292012#page2.tif | | | | | | | | | | | | | |

OP \$40.00 12867630

RECORDATION FORM COVER SHEET PATENTS ONLY

To the Director of the U.S. Patent and Trademark Office: Please record the attached documents or the new address(es) below.

1. Name of conveying party(ies)
Hamed AISSAOUI,
Christoph BOSS,
Ralf KOBERSTEIN,
Thierry SIFFERLEN,
Daniel TRACHSEL
Additional name(s) of conveying party(ies) attached? Yes No

2. Name and address of receiving party(ies)
Name: Actelion Pharmaceuticals Ltd.
Internal Address: _____
Street Address: Gewerbestrasse 16
City: Allschwil
State: _____
Country: SWITZERLAND Zip: CH-4123
Additional name(s) & address(es) attached? Yes No

3. Nature of conveyance/Execution Date(s):
Execution Date(s) 08/04/2010
 Assignment Merger
 Security Agreement Change of Name
 Joint Research Agreement
 Government Interest Assignment
 Executive Order 9424, Confirmatory License
 Other _____


4. Application or patent number(s): This document is being filed together with a new application.
A. Patent Application No.(s)
12/867,630
Additional numbers attached? Yes No

B. Patent No.(s)

5. Name and address to whom correspondence concerning document should be mailed:
Name: Hoxie & Associates LLC
Internal Address: _____
Street Address: 75 Main Street, Suite 301
City: Millburn
State: New Jersey Zip: 07041
Phone Number: (973)912-5232
Docket Number: AC-101-US
Email Address: file@hoxpat.com

6. Total number of applications and patents involved: _____
7. Total fee (37 CFR 1.21(h) & 3.41) \$ 40.00
 Authorized to be charged to deposit account
 Enclosed
 None required (government interest not affecting title)

8. Payment Information
Deposit Account Number _____
Authorized User Name Brittany LA

9. Signature:  June 29, 2012
Signature Date

Brittany LA
Name of Person Signing
Total number of pages including cover sheet, attachments, and documents: 2

Documents to be recorded (including cover sheet) should be faxed to (571) 273-0140, or mailed to:
Mail Stop Assignment Recordation Services, Director of the USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450

ASSIGNMENT

Whereas the undersigned, hereinafter referred to as "ASSIGNOR(s)", have invented certain novel and useful subject matter (the Invention) as disclosed in an application pursuant to the Patent Cooperation Treaty (PCT) entitled:

2-AZA-BICYCLO[2.2.1]HEPTANE DERIVATIVES

having PCT International Application number: PCT/IB2009/050689

and designating the United States of America.

Whereas, Actelion Pharmaceuticals Ltd. having an address of Gewerbestraße 16, CH-4123 Allschwil, Switzerland (hereafter referred to as "ASSIGNEE") is desirous of acquiring the entire right, title and interest in and to the Invention for the United States of America;

Now, therefore, as of the 4th day of August, 2010, for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, ASSIGNOR(s) do hereby sell, assign, transfer and set over to ASSIGNEE their entire right, title and interest in and to the Invention for the United States of America, together with all right, title and interest in and to all United States patent applications claiming priority from, or based on, or claiming the same invention as the above-referenced PCT application, including applications pursuant to 35 U.S.C. §371, divisional applications and continuation applications, and all United States Letters Patents which may be granted on any of these, and all reissues, reexaminations and extensions thereof, and ASSIGNOR(s) do hereby authorize and request the United States Commissioner of Patents to issue all such patents to ASSIGNEE in accordance with the terms of this Assignment. ASSIGNOR(s) further agree to provide such assistance and execute such other and further documents as may be reasonably required by ASSIGNEE to obtain and enforce patent protection for the Invention and to perfect the title granted herein.

Signed, sealed and delivered by:

Aissaoui Hamed

NAME: AISSAOUI, Hamed

Christoph Boss

NAME: BOSS, Christoph

Ralf Koberstein

NAME: KOBERSTEIN, Ralf

SIFFERLEN THIERRY

NAME: SIFFERLEN, Thierry

Trachsel Daniel

NAME: TRACHSEL, Daniel