

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>Martin BOLLI</td> <td>03/10/2009</td> </tr> <tr> <td>David LEHMANN</td> <td>03/10/2009</td> </tr> <tr> <td>Boris MATHYS</td> <td>03/10/2009</td> </tr> <tr> <td>Claus MUELLER</td> <td>03/10/2009</td> </tr> <tr> <td>Oliver NAYLER</td> <td>03/10/2009</td> </tr> <tr> <td>Beat STEINER</td> <td>03/10/2009</td> </tr> <tr> <td>Joerg VELKER</td> <td>03/10/2009</td> </tr> </tbody> </table> | | Name | Execution Date | Martin BOLLI | 03/10/2009 | David LEHMANN | 03/10/2009 | Boris MATHYS | 03/10/2009 | Claus MUELLER | 03/10/2009 | Oliver NAYLER | 03/10/2009 | Beat STEINER | 03/10/2009 | Joerg VELKER | 03/10/2009 |
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| Oliver NAYLER | 03/10/2009 | | | | | | | | | | | | | | | | |
| Beat STEINER | 03/10/2009 | | | | | | | | | | | | | | | | |
| Joerg VELKER | 03/10/2009 | | | | | | | | | | | | | | | | |
| 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>12310762</td> </tr> </tbody> </table> | | Property Type | Number | Application Number: | 12310762 | | | | | | | | | | | | |
| Property Type | Number | | | | | | | | | | | | | | | | |
| Application Number: | 12310762 | | | | | | | | | | | | | | | | |
| CORRESPONDENCE DATA | | | | | | | | | | | | | | | | | |
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| Phone: | (973)912-5232 | | | | | | | | | | | | | | | | |
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| <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 | | | | | | | | | | | | | | | | |
| Address Line 2: | Suite 301 | | | | | | | | | | | | | | | | |
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| ATTORNEY DOCKET NUMBER: | AC-70-US |
| NAME OF SUBMITTER: | Brittany LA |
| Total Attachments: 3 source=AC-70-US ASSIGNMENT#page1.tif source=AC-70-US ASSIGNMENT#page2.tif source=AC-70-US ASSIGNMENT#page3.tif | |

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) Martin BOLLI, Beat STEINER, & David LEHMANN, Jorg VELKER Boris MATHYS, Claus MUELLER, OLIVER NAYLER, Additional name(s) of conveying party(ies) attached? <input type="checkbox"/> Yes <input type="checkbox"/> No | | 2. Name and address of receiving party(ies) Name: <u>Actelion Pharmaceuticals Ltd</u> Internal Address: _____ Street Address: <u>Gewerbestrasse 16</u> <u>CH-4123</u> City: <u>Allschwil</u> State: _____ Country: <u>SWITZERLAND</u> Zip: _____ Additional name(s) & address(es) attached? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| 3. Nature of conveyance/Execution Date(s): Execution Date(s) <u>March 10, 2009</u> <input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Merger <input type="checkbox"/> Security Agreement <input type="checkbox"/> Change of Name <input type="checkbox"/> Joint Research Agreement <input type="checkbox"/> Government Interest Assignment <input type="checkbox"/> Executive Order 9424, Confirmatory License <input type="checkbox"/> Other _____ | | 4. Application or patent number(s): <input type="checkbox"/> This document is being filed together with a new application. A. Patent Application No.(s) <u>12/310,762</u> B. Patent No.(s) _____ Additional numbers attached? <input type="checkbox"/> Yes <input type="checkbox"/> No | |
| 5. Name and address to whom correspondence concerning document should be mailed: Name: <u>Hoxie & Associates LLC</u> Internal Address: _____ Street Address: <u>75 Main Street, Suite 301</u> City: <u>Millburn</u> State: <u>New Jersey</u> Zip: <u>07041</u> Phone Number: <u>(973)912-5232</u> Fax Number: <u>(973)912-5236</u> Email Address: <u>file@hoxpat.com</u> | | 6. Total number of applications and patents involved: _____ 7. Total fee (37 CFR 1.21(h) & 3.41) \$ <u>40.00</u> <input type="checkbox"/> Authorized to be charged to deposit account <input checked="" type="checkbox"/> Enclosed <input type="checkbox"/> None required (government interest not affecting title) | |
| 9. Signature: <u></u> Signature _____ Name of Person Signing <u>Brittany LA</u> | | 8. Payment Information Deposit Account Number <u>50-4259</u> Authorized User Name <u>Brittany La</u> Total number of pages including cover sheet, attachments, and documents: <u>3</u> | |

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:

THIOPHENE DERIVATIVES AS S1P1/EDG1 RECEPTOR AGONISTS

having PCT International Application number: PCT/IB2007/052742

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 10th day of March, 2009, 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:



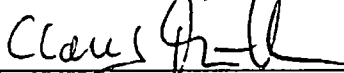
NAME: BOHL, Martin



NAME: LEHMANN, David



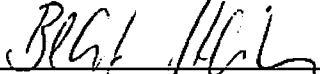
NAME: MATHYS, Boris



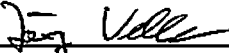
NAME: MUELLER, Claus



NAME: NAYLER, Oliver



NAME: STEINER, Beat



NAME: VELKER, Jörg