Form PTO-1595 (Rev. 06-12)
OMB No. 0651-0027 (exp. 04/30/2015)

U.S. DEPARTMENT OF COMMERCE United States Patent and Trademark Office

RECORDATION FO	ORM COVER SHEET					
PATENT	TS 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)	2. Name and address of receiving party(ies) Name: Theravance Biopharma R&D IP, LLC					
Theravance, Inc.	Internal Address:					
Additional name(s) of conveying party(les) attached? Yes No.						
3. Nature of conveyance/Execution Date(s): Execution Date(s) June 1, 2014	Street Address: 901 Gateway Boulevard					
Assignment Merger Security Agreement Change of Name	City: South San Francisco					
☐ Joint Research Agreement	State: California					
Government Interest Assignment Executive Order 9424, Confirmatory License	Country: USA Zip: 94080					
Other	Additional name(s) & address(es) attached? Yes No					
4. Application or patent number(s): A. Patent Application No.(s)	document serves as an Oath/Declaration (37 CFR 1.63). B. Patent No.(s)					
61423180 and 14050733	8586536					
Additional numbers atta	ached? Yes No					
concerning document should be mailed:	6. Total number of applications and patents involved: 3					
Name: Jeffrey A. Hagenah Internal Address: Patent Department	7. Total fee (37 CFR 1.21(h) & 3.41) \$ 120					
Theravance Biopharma US, Inc.	Authorized to be charged to deposit account					
Street Address: 901 Gateway Boulevard	Enclosed					
City: South San Francisco	None required (government interest not affecting title) 8. Payment Information					
State: California Zip: 94080	o. i aymont information					
Phone Number: (650) 808-6406						
Docket Number: P-274	Deposit Account Number 500344					
Email Address: patent@theravance.com	Authorized User Name Jeffrey A. Hagenah					
9. Signature: Skully Eurle	June 4, 2014					
7 Signature	Date					
Shelley Eberle, Reg. No. 31,411 Name of Person Signing	Total number of pages including cover sheet, attachments, and documents:					
Documents to be recorded (including cover sheet) s Mail Stop Assignment Recordation Services, Director of the	should be faxed to (571) 273-0140, or mailed to: he USPTO, P.O.Box 1450, Alexandria, V.A. 22313-1450					

PATENT REEL: 033123 FRAME: 0540

Attorney Docket No. P-274

Patent Assignment

WHEREAS, Theravance, Inc., a corporation duly organized under and pursuant to the laws of Delaware and having its principal place of business at 951 Gateway Boulevard, South San Francisco, California 94080 (the "Assignor"), is the sole owner of the patents and patent applications listed in EXHIBIT A (such patents and patent applications and the inventions set forth therein are collectively the "Assigned Patents");

WHEREAS, Theravance Biopharma R&D IP, LLC, a limited liability company duly organized under and pursuant to the laws of Delaware and having its principal place of business at 901 Gateway Boulevard, South San Francisco, California 94080 (the "Assignee"), is desirous of acquiring Assignor's entire right, title and interest in and to the Assigned Patents, and in and to any subsequent patent applications and patents filed or granted thereon or therefrom, and Assignor is willing to assign its rights, title, and interest with respect thereto to the Assignee on the terms hereinafter set forth;

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and sufficient consideration, the receipt of which is hereby acknowledged, the Assignor does hereby sell, assign, transfer, set over and relinquishes exclusively unto the Assignee, its successors, legal representatives and assigns, Assignor's entire right, title and interest in and to: the Assigned Patents including, to the extent of Assignor's rights, the right to file patent applications on inventions set forth in the Assigned Patents; the right to claim priority to any of the Assigned Patents; the entire right, title and interest in and to any subsequent U.S. and foreign patent applications and patents claiming priority to any of the Assigned Patents, and in and to any U.S. and foreign patent applications and patents that claim priority to a patent application or patent arising from the Assigned Patents; any U.S. and foreign patents that may be granted on and from any of the Assigned Patents; any applications, divisionals, continuations, continuations-in-part, reexaminations, reissues, registrations, renewals, revalidations, substitutions, utility models, petty patents, extensions, and supplementary protection certificates that may be filed or granted on or for any of the Assigned Patents; all accrued causes of action for infringement of any of the foregoing; and all rights to and for the Assigned Patents under the Paris Convention for the Protection of Industrial Property; the same to be held and enjoyed by the Assignee, for its own use and behalf and for the use and behalf of its successors, legal representatives and assigns, to the full end of the term of the Assigned Patents and any such patents that may be granted thereon or therefrom as fully and entirely as if the same would have been held and enjoyed by the Assignor had this sale and assignment not been made.

AND for the same consideration, the Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives and assigns, that the Assignor has not executed and will not execute any assignment, sale, agreement or encumbrance in conflict with this assignment.

AND for the same consideration, the Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives and assigns that, at the Assignee's expense and reasonable request, the Assignor will take action and execute documents necessary to perfect the interest assigned herein.

AND for the same consideration, the Assignor hereby covenants and agrees to and with the Assignee, its successors, legal representatives and assigns that whenever counsel for the Assignee, or the counsel for its successors, legal representatives and assigns, shall advise that any proceeding, filing or other legal action in connection with the Assigned Patents or any patent applications and patents resulting therefrom is lawful and desirable, Assignor will, to the extent reasonable, sign all papers and documents, take all lawful oaths, and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of the Assigned Patents and patent applications and patents resulting therefrom, without charge to the Assignor, its successors, legal representatives and assigns, but at the cost and expense of the Assignee, its successors, legal representatives and assigns.

AND the Assignor hereby requests the Director of the United States Patent and Trademark Office, and all foreign patent offices, to issue any and all patents resulting from the Assigned Patents or from any patent applications filed thereon or therefrom to the Assignee for the sole use and behalf of the Assignee, its successors, legal representatives and assigns.

IN WITNESS WHEREOF, the Assignor hereby has executed this assignment on this 15th day of 2014, at South San Francisco, California, USA.

Theravance, Inc. (Assignor)

effrey A. Hagenah

Vice Plesident & Chief Patent Counsel

& Assistant Secretary

Theravance, Inc. 951 Gateway Blvd. South San Francisco, CA 94080 USA

Attorney Docket No. P-274

CERTIFICATE OF ACKNOWLEDGEMENT OF NOTARY PUBLIC

STATE OF CALIFORNIA COUNTY OF SAN MATEO

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature Warra Churchy (Seal)

MARIA CHUAKAY
Commission # 2050270
Notary Public - California
San Mateo County
My Comm. Expires Dec 24, 2017

Attorney Docket No. P-274

EXHIBIT A

Docket No.	Country	Sub Case	Status	Application Number	Filing Date	Patent Number	Grant Date
P-274	AU	01	Pending	2011343899	12/14/2011		- Daw
P-274	BR	01	Pending	1120130165952	12/14/2011		
P-274	CA	01	Pending	2,817,368	12/14/2011		
P-274	CN	01	Pending	201180060335.7	12/14/2011		<u> </u>
P-274	со	01	Pending	13-140.628	12/14/2011	-	
P-274	EG	01	Pending	944/2013	12/14/2011		
P-274	EP	01	Pending	11 808 444.1	12/14/2011	<u> </u>	
P-274	нк	01	Pending	14 101 316.9	02/12/2014		
P-274	ID	01	Pending	W-00 2013 03222	12/14/2011		
P-274	IL	01	Pending	226327	12/14/2011		
P-274	IN	01	Pending	4382/DELNP/201 3	12/14/2011		***************************************
P-274	JP	01	Pending	2013-544730	12/14/2011		
P-274	KR	01	Pending	2013-7017560	12/14/2011	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
P-274	MX	01	Pending	MX/a/2013/0068 05	12/14/2011		
P-274	MY	01	Pending	PI 2013001624	12/14/2011		
P-274	NZ	01	Pending	610983	12/14/2011		
P-274	PH	01	Pending	1-2013-501240	12/14/2011		
P-274	RU	01	Pending	2013132533	12/14/2011		
P-274	SG	01	Pending	201304118-1	12/14/2011		
P-274	US	01	Granted	13/325,425	12/14/2011	8,586,536	11/19/2013
P-274	US	02	Pending	14/050,733	10/10/2013		,,,,
P-274	US	PR1	Expired	61/423,180	12/15/2010		
P-274	VN	01	Pending	1-2013-02196	12/14/2011		
P-274	wo		Nat Phase	PCT/US2011/064 829	12/14/2011		
P-274	ZA	01	Pending	2013/04205	12/14/2011		

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