504035316 10/04/2016

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ZENICHI IKEDA	09/09/2016
MINORU SASAKI	09/09/2016
KEIKO KAKEGAWA	09/09/2016
FUMIAKI KIKUCHI	09/09/2016
YOICHI NISHIKAWA	09/09/2016

RECEIVING PARTY DATA

Name:	TAKEDA PHARMACEUTICAL COMPANY LIMITED
Street Address:	1-1, DOSHOMACHI 4-CHOME
City:	CHUO-KU, OSAKA-SHI, OSAKA
State/Country:	JAPAN
Postal Code:	541-0045

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15117539

CORRESPONDENCE DATA

Fax Number: (202)672-5399

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: (202) 672-5300

Email: kstrawderman@foley.com, ipdocketing@foley.com

Correspondent Name: STEPHEN B. MAEBIUS Address Line 1: FOLEY & LARDNER LLP

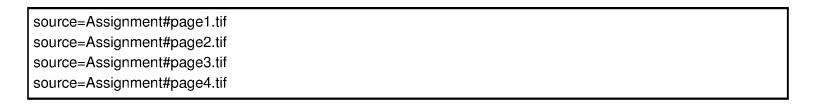
Address Line 2: 3000 K STREET N.W., SUITE 600

Address Line 4: WASHINGTON, D.C. 20007

ATTORNEY DOCKET NUMBER:	109100-0111
NAME OF SUBMITTER:	STEPHEN B. MAEBIUS
SIGNATURE:	/Stephen B. Maebius/
DATE SIGNED:	10/04/2016
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Total Attachments: 4

PATENT 504035316 REEL: 039933 FRAME: 0499



PATENT REEL: 039933 FRAME: 0500

ASSIGNMENT

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

Takeda Pharmaceutical Company Limited 1-1, Doshomachi 4-chome Chuo-ku, Osaka-shi, Osaka 541-0045 Japan

(hereinafter referred to as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions in and to this invention relating to

HETEROCYCLIC COMPOUND

s set forth	in this United State	s Patent Application		
Check one	executed or	oncurrently herewith		
	******	PCT/JP2015/000640	Filed	2/12/2015

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention and any other international agreement; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations,

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depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of Foley & Lardner LLP the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of Foley & Lardner LLP do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

NAME AND SIGNATURE OF INVENT	OR //	4	
Name: ZENICHI IKEDA	SIGNATURE Just Office Date	September 1, 2016	
NAME AND SIGNATURE OF WITNES			
Name: Misa KITOHARA	SIGNATURE Janua Tyokaa Date	Septento 9,2016	
Name: Yoko YONEYAMA	SIGNATURE The Francis Date	Squaret 9,2016	
NAME AND SIGNATURE OF INVENT	· · · · · · · · · · · · · · · · · · ·		
	SIGNATURE Minom Lasali Date	Can I & sall	
Name: MINORU SASAKI	SIGNATURE MILTON AND DATE	reflex por 1. 2 10	
NAME AND SIGNATURE OF WITNES	<u>sses</u>		
Name: Misa KIYOHARA	SIGNATURE Min Lyolau Date	September 9,2016	
Name: Yoko YONEYAMA	SIGNATURE The Tongy Date	Sytember 9, 2016	
		,	
NAME AND SIGNATURE OF INVENT	OR		
Name: KEIKO KAKEGAWA	SIGNATURE KUKE KARGAWA Date	Septemba-1220	
NAME AND SIGNATURE OF WITNES	SSES		
Name: MISA KIYOHARA	SIGNATURE his a del your Date	September 9, 2016	
Name: Yoko YONEYAMA	SIGNATURE The Myslus Date SIGNATURE The Mayou Date	Softember 9, 2016	
NAME AND SIGNATURE OF INVENTOR Name: FUMIAKI KIKUCHI SIGNATURE Firmingh Kikuchi Date Sestember 2 soil			
Name: FUMIAKI KIKUCHI	SIGNATURE time when hikachi Date	Sejtimbery 2016	

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NAME AND SIGNATURE OF WITNESSES

Name: Misa KIYOHARA

Name: Yoko YONEYAMA

SIGNATURE John Forey on Date September 9, 2016
SIGNATURE John Forey on Date September 9, 2016

Atty. Dkt. No. 109100-0111

NAME AND SIGNATURE OF INVENTOR

YOICHI NISHIKAWA Name:

SIGNATURE July Date September 9.2016

NAME AND SIGNATURE OF WITNESSES

Name: Misa KIYOHARA

Name:

Yoko YONEYAMA

SIGNATURE Julyolone Date Leptenber 9,20/6
SIGNATURE John Longera Date September 9,20/6

Note: Prima facie evidence of execution may optionally be obtained by execution before a U.S. Consul or before a local officer authorized to administer oaths whose authority is proved by a certificate from a U.S. Consul.

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RECORDED: 10/04/2016

PATENT REEL: 039933 FRAME: 0504