505122088 10/02/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5168849

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ADAM K. CHARNLEY	03/15/2017
XIAOYANG DONG	03/15/2017
JASON W. DODSON	03/15/2017
JOSHI M. RAMANJULU	03/15/2017
MICHAEL G. DARCY	03/15/2017
JIANXING KANG	03/15/2017
LARA K LEISTER	03/16/2017
NEYSA NEVINS	03/17/2017
TERRY V. HUGHES	03/23/2017
JOHN F. MEHLMANN	03/15/2017
JOSEPH J. ROMANO	03/15/2017
YIQIAN LIAN	03/15/2017
YUE LI	03/16/2017
GREN Z. WANG	03/16/2017
GUOSEN YE	03/15/2017
DAOHUA ZHANG	03/15/2017

RECEIVING PARTY DATA

Name:	GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED	
Street Address:	980 GREAT WEST ROAD	
City:	BRENTFORD, MIDDLESEX	
State/Country:	UNITED KINGDOM	
Postal Code:	TW8 9GS	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15730664

CORRESPONDENCE DATA

Fax Number: (610)917-6934

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent

PATENT

505122088 REEL: 047036 FRAME: 0265

using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Phone: 6109177817

Email: US_cipkop@gsk.com

Correspondent Name: GLAXOSMITHKLINE GLOBAL PATENTS
Address Line 1: 1250 SOUTH COLLEGEVILLE ROAD

Address Line 2: UP4110

Address Line 4: COLLEGEVILLE, PENNSYLVANIA 19426

ATTORNEY DOCKET NUMBER:	PU66085T
NAME OF SUBMITTER:	MINDY L. SMITH
SIGNATURE:	/Mindy L. Smith/
DATE SIGNED:	10/02/2018

Total Attachments: 9

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NOTARIAL CERTIFICATION

I, Theresa Papale Munro, a Notary Public commissioned in the Commonwealth of Pennsylvania, County of Montgomery, do hereby certify that annexed hereto is a true and correct copy of the executed assignment pursuant to International Application No. PCT/IB2017/051945 filed April 5, 2017, entitled: "HETEROCYCLIC AMIDES USEFUL AS PROTEIN MODULATORS," which claim priority to applications: US 62/461975 filed February 22, 2017; US 62/461301 filed February 21, 2017; and 62/319358 filed April 7, 2016.

Date: 11 April 2017

Upper Merion Twp., Montgomery County My Commission Expires April 29, 2017

COMMONWEALTH OF PENNSYLVANIA

Notarial Seal

Theresa Papale Munro, Notary Public Upper Merion Twp., Montgomery County My Commission Expires April 29, 2017 MEMBER, PENNSYLVANIA ASSOCIATION OF NOTAXIES

ASSIGNMENT

WHEREAS I/WE, Adam K. Charnley, Xiaoyang Dong, Jason W. Dodson, Joshi M. Ramanjulu, Michael G. Darcy, Jianxing Kang, Lara K. Leister, Neysa Nevins, John F. Mehlmann, Joseph J. Romano, Gren Z. Wang; and Guosen Ys, all of Collegeville, Pennsylvania, United States of America, all citizens of United States of America, Terry V. Hughes, of Blue Bell, Pennsylvania, a citizen of the United States of America, Yiqian Lian, Yue Li and Daohua Zhang, of Collegeville, Pennsylvania, United States of America, citizens of P.R. China; (hereinafter called "the inventor(s)") have invented or discovered certain improvements in "HETEROCYCLIC AMIDES USEFUL AS PROTEIN MODULATORS" (hereinafter referred to as "the invention and improvements") for which priority applications US 62/461975 was filed on 22 February 2017, US 62/461301 was filed on 21 February 2017; and US 62/319368 was filed on 07 April 2016, in the United States of America, and for which a PCT international application is now being filed. I/We hereby authorize and request that the filling date and application number of said PCT application, when known be inserted in parentheses below.

(PCT/IB2017/ 051945 filed 05 April 2017)

WHEREAS, GLAXOSMITHKLINE LLC, a company incorporated in the State of Delaware, USA, whose registered address is 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, United States of America, is desirous of acquiring the whole right, title and interest in and to said invention and improvements, and in and to any applications for said invention and improvements, including the right to claim priority, and in and to and any Letters Patent to be obtained therefor, in all countries, including the United States, its territories and possessions, and

WHEREAS GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring from GLAXOSMITHKLINE LLC the whole right, title and interest in and to the invention and improvements and in and to the application, and

WHEREAS GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring the whole right, title and interest in and to the invention and improvements and in and to any applications for the invention and improvements and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

NOW, THEREFORE, to all whom it may concern, be it known that I/we, the inventors, for good and valuable consideration unto me/us moving, the receipt whereof is hereby acknowledged, have sold, assigned

and transferred, and by these presents do sell, assign and transfer my/our whole right, title and interest in and to said invention and improvements to said GLAXOSMITHKLINE LLC, throughout the United States of America, its territories and possessions, and in and to said application, and any extensions, reissues, continuations in-part, and any divisions thereof, and in and to any and all Letters Patent of the United States of America, including any priority rights under the International Convention

AND, my/our whole right, title and interest in and to said invention and improvements to GLAXOSMITHKLINE LLC, in all other countries throughout the world, and in and to any applications in said other countries, and continuations-in-part, patents of addition, revalidation patents, patents of importation, registrations, and any renewals, extensions and divisions thereof, and in and to any and all Letters Patent of said all other countries which may be granted on said invention and improvements including any priority rights under the International Convention.

GLAXOSMITHIKLINE LLC in turn hereby assigns and transfers to GLAXOSMITHIKLINE RESEARCH AND DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof, and GLAXOSMITHICINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXOSMITHICINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof

AND I/we the inventor(s) and GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby authorise and request any patent arising therefrom, in all countries, including the United States of America, its territories and possessions, be issued to GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED;

AND GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby, and I/we the inventor(s) for myself/curselves and my/our respective executors and legal representatives hereby, agree at the request and cost of GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED to provide information and make execute and deliver any and all other instruments in writing, and any and all further acts, applications, papers, affidavits, assignments and other documents which may be possible and are necessary or desirable to more effectually

secure to and vest in GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED, its successors and assigns, the whole right, title and interest in and to the invention and improvements and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

IN WITNESS whereof and with effect from the **07** April **2016**, the inventor(s) and the Attorney & Authorised Official of GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED have hereunto set their respective hands.

Man Chil	Date: 3/15/2017
Adam K. Chamley	4
My 19	Date: <u>3/05/2017</u>
Xiaoyahg Dong	·
	Date:
Jason W. Dodson	
7224 m. 22	Date: 3/15/2012
Joshi W. Ramanjulu	K
	Date:
Michael G. Darcy	
<u> </u>	Date: 3/15/2017
Jianxing Kang 1	Y
Lara K. Leister	Date: <u>3-16-2017</u>
Laray Leister 11 11 11 11 11 11 11 11 11 11 11 11 1	Date: 3-17-2017
Neysa Nevins	
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	PU660
012ML	Date: 3-15-17
John F. Mehlmann	
J. J	Date: 3-15-17
Aldrian Lian	Date: 3/15/2017
Liqian Lian	
Yue Li	Date:
Ten want	Date: 3/16/2-017
Gren Z. Wang	
	Date:
Guosen Ye	
	Date: 3/15/2017
Daohua Zhang	
SIGNED by EDWARD & GIHALI	as the Attorney & Authorised Official of
GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE	RESEARCH AND DEVELOPMENT LIMITED and
GLAXOSMITHKLINE INTELLECTUAL PROPERTY I	DEVELOPMENT LIMITED:

ASSIGNMENT

WHEREAS I/WE, Adam K. Charnley, Xiaoyang Dong, Jason W. Dodson, Joshi M. Ramanjulu, Michael G. Darcy, Jianxing Kang, Lara K. Leister, Neysa Nevins, John F. Mehlmann, Joseph J. Romano, Gren Z. Wang; and Guosen Ye, all of Collegeville, Pennsylvania, United States of America, all citizens of United States of America, Terry V. Hughes, of Blue Bell, Pennsylvania, a citizen of the United States of America, Yiqian Lian, Yus Li and Daohua Zhang, of Collegeville, Pennsylvania, United States of America, citizens of P.R. China; (hereinafter called "the inventor(s)") have invented or discovered certain improvements in "HETEROCYCLIC AMIDES USEFUL AS PROTEIN MODULATORS" (hereinafter referred to as "the invention and improvements") for which priority applications US 62/461975 was filed on 22 February 2017, US 62/461301 was filed on 21 February 2017; and US 62/319358 was filed on 67 April 2016, in the United States of America, and for which a PCT international application is now being filed. I/We hereby authorize and request that the filling date and application number of said PCT application, when known be inserted in parentheses below.

(PCT/IB2017/_051945 filed_05_April 2017)

WHEREAS, GLAXOSMITHKLINE LLC, a company incorporated in the State of Delaware, USA, whose registered address is 2711 Centerville Road, Suite 400, Wilmington, Delaware 19808, United States of America, is desirous of acquiring the whole right, title and interest in and to said invention and improvements, and in and to any applications for said invention and improvements, including the right to claim priority, and in and to and any Letters Patent to be obtained therefor, in all countries, including the United States, its territories and possessions, and

WHEREAS GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED, a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring from GLAXOSMITHKLINE LLC the whole right, title and interest in and to the invention and improvements and in and to the application, and

WHEREAS GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, is desirous of acquiring the whole right, title and interest in and to the invention and improvements and in and to any applications for the invention and improvements and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

NOW, THEREFORE, to all whom it may concern, be it known that I/we, the inventors, for good and valuable consideration unto me/us moving, the receipt whereof is hereby acknowledged, have sold, assigned

and transferred, and by these presents do sell, assign and transfer my/our whole right, title and interest in and to said invention and improvements to said GLAXOSMITHKLINE LLC, throughout the United States of America, its territories and possessions, and in and to said application, and any extensions, reissues, continuations, continuations-in-part, and any divisions thereof, and in and to any and all Letters Patent of the United States of America, including any priority rights under the International Convention

AND, my/our whole right, title and interest in and to said invention and improvements to GLAXOSMITHKLINE LLC, in all other countries throughout the world, and in and to any applications in said other countries, and continuations-in-part, patents of addition, revalidation patents, patents of importation, registrations, and any renewals, extensions and divisions thereof, and in and to any and all Letters Patent of said all other countries which may be granted on said invention and improvements including any priority rights under the international Convention.

GLAXOSMITHKLINE LLC in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof, and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED its whole right, title and interest in all countries, including the United States of America, its territories and possessions in and to the invention and improvements and in and to the application including the right to claim priority from the application in respect of any subsequent applications, and in and to any divisional application, continuation or continuation in part application thereof, and in and to any Supplementary Protection Certificate, extension or re-issue thereof

AND I/we the inventor(s) and GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby authorise and request any patent arising therefrom, in all countries, including the United States of America, its territories and possessions, be issued to GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED;

AND GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED hereby, and I/we the inventor(s) for myself/ourselves and my/our respective executors and legal representatives hereby, agree at the request and cost of GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED to provide information and make execute and deliver any and all other instruments in writing, and any and all further acts, applications, papers, afficavits, assignments and other documents which may be possible and are necessary or desirable to more effectually

secure to and vest in GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED, its successors and assigns, the whole right, title and interest in and to the invention and improvements and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

IN WITNESS whereof and with effect from the **07 April 2016**, the inventor(s) and the Attorney & Authorised Official of GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED and GLAXOSMITHKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIMITED have hereunto set their respective hands.

	Date:
Adam K. Charnley	
	Date:
Xiaoyang Dong	Date: 15 MARCH 2017-
Jason W. Dodson	
	Dates
Joshi M. Ramanjulu	
hichal 6 Day	Date: 15 March 2017
Michael G. Darcy	
	Date:
Jianxing Kang	
√	Date:
Lara K. Leister	
	Date:
Neysa Nevins	
	Date:
Tarry V Humbae	

	Date:
John F. Wehlmann	
	Date:
Joseph J. Romano	
	Date:
Yiqian Lian	
452	Date: 03/15/17
Nue M	
	Date:
Gren Z. Wang	
a Ye	Date: 03/15/2017
'Guosen Ye	
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Daohua Zhang	vate:
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SIGNED by EDWINGS R. GILMET	as the Attorney & Authorised Official of
GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE F	RESEARCH AND DEVELOPMENT LIMITED and
GLAXOSMITHKLINE INTELLECTUAL PROPERTY D	EVELOPMENT LIMITED:
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	Date: 3/27/2014
Signature	