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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JUNYA QU	05/09/2019
JOHN F. MEHLMANN	11/02/2018
ANGEL I. MORALES-RAMOS	11/02/2018
GEORGE SCOTT PESIRIDIS	11/02/2018
JOSHI M. RAMANJULU	11/02/2018
JOSEPH J. ROMANO	11/02/2018
STUART PAUL ROMERIL	11/05/2018
MARK J. SCHULZ	11/02/2018
HUIQIANG ZHOU	11/02/2018
DAVID T. FOSBENNER	11/02/2018
TODD L. GRAYBILL	11/02/2018
JIANXING KANG	11/02/2018
BRYAN W. KING	11/02/2018
YUNFENG LAN	11/05/2018
LARA KATHRYN LEISTER	11/05/2018
MUKESH K. MAHAJAN	11/05/2018

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:	16652221

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
REEL: 052261 FRAME: 0249

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

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Email: US_cipkop@gsk.com

Correspondent Name: GLAXOSMITHKLINE GLOBAL PATENTS UP4110

Address Line 1: 1250 SOUTH COLLEGEVILLE ROAD COLLEGEVILLE, PENNSYLVANIA 19426

ATTORNEY DOCKET NUMBER:	PU66420
NAME OF SUBMITTER:	MINDY L. SMITH
SIGNATURE:	/Mindy L. Smith/
DATE SIGNED:	03/30/2020

Total Attachments: 7

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ASSIGNMENT

WHEREAS, I/WE, **Junya QU**, a citizen of the United States of America, having an address at Collegeville, Pennsylvania, United States of America (hereinafter called "the inventor(s)") have invented or discovered certain improvements in **NOVEL COMPOUNDS** (hereinafter referred to as "the invention and improvements") for which a PCT international application **PCT/IB2018/057726** was filed on **04 October 2018**, designating the United States of America.

WHEREAS, GLAXOSMITHKLINE LLC, a company incorporated in the State of Delaware, United States of America, whose registered address is 251 Little Falls Drive, 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, **Junya QU**, 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;

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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, 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.

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IN WITNESS whereof and with effect from the **04 October 2018**, 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.

Inventor Name	Signature		Date	
Junya QU:	Junya	Du	May 92	<u> 2019</u>
SIGNED by <u>Edwar</u> Official of GLAXOSMITH		THKLINE RESEAR	As the Attorney & Aut	
and GLAXOSMITHKLINI	E INTELLECTUAL PROPER	TY DEVELOPMEN	T LIMITED:	
Signatüya		Date: · · · · · · · · · · · · · · · · · · ·	y 9,200	

ASSIGNMENT

WHEREAS, I/WE, David T. FOSBENNER, a citizen of the United States of America; Todd L. GRAYBILL, a citizen of the United States of America; Jianxing KANG, a citizen of the United States of America; Bryan W. KING, a citizen of the United States of America; Yunfeng LAN, a citizen of China; Lara Kathryn LEISTER, a citizen of the United States of America; Mukesh K. MAHAJAN, a citizen of the United States of America; John F. MEHLMANN, a citizen of the United States of America; Angel I. MORALES-RAMOS, a citizen of the United States of America; Joseph J. ROMANO, a citizen of the United States of America; Joseph J. ROMANO, a citizen of the United States of America; Stuart Paul ROMERIL, a citizen of the United Kingdom; Mark J. SCHULZ, a citizen of the United States of America; and Huiqiang ZHOU, a citizen of the United States of America; all having an address at Collegeville, Pennsylvania, United States of America (hereinafter called "the inventor(s)") have invented or discovered certain improvements in NOVEL COMPOUNDS (hereinafter referred to as "the invention and improvements") for which priority application 62/568420 was filed on 05 October 2017 in the United States of America, and for which a PCT international application PCT/IB2018/057726 was filed on 04 October 2018, designating the United States of America.

WHEREAS, GLAXOSMITHKLINE LLC, a company incorporated in the State of Delaware, United States of America, whose registered address is 251 Little Falls Drive, 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, David T. FOSBENNER, Todd L. GRAYBILL, Jianxing KANG, Bryan W. KING, Yunfeng LAN, Lara Kathryn LEISTER, Mukesh K. MAHAJAN, John F. MEHLMANN, Angel I. MORALES-RAMOS, George Scott PESIRIDIS, Joshi M. RAMANJULU, Joseph J. ROMANO, Stuart Paul ROMERIL, Mark J. SCHULZ and Huiqiang ZHOU 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,

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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, 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 **05 October 2017**, 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.

Inventor Name	Signature	Date
David T. FOSBENNER:	Mellelle-	03-100 <u>041866-301</u> 8
Todd L. GRAYBILL:	MLAN	Nov 2, 2018
Jianxing KANG:	Jaly-	NoJ Z , 2018
Bryan W. KING:	3- Wal-	Nov 2, 2018
Yunfeng LAN:		Nov 5, 2018
Lara Kathryn LEISTER:	Lara Karhryn Leister	Nov 5, 2018
Mukesh K. MAHAJAN:	Mill	NOV 5, 2018

John F. MEHLMANN: 7/2 M 11-3	2 ~ 2 ∞ }8		
Angel I. MORALES-RAMOS 9 119 /	-2-2018		
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Joseph J. ROMANO: Jo 1/1 1/2			
Stuart Paul ROMERIL 3//// // // // // // // // // // // //	sth, 7@18		
Mark J. SCHULZ: 4 11-2	- 3018		
Hulqiang ZHOU: Hu, Eh. 11/2,	18		
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SIGNED by Edward ammi	As the Attorney & Authorised		
Official of GLAXOSMITHKLINE LLC and GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED			
and GLAXOSMITAKLINE INTELLECTUAL PROPERTY DEVELOPMENT LIM	ITED:		
Date: 11/3/26	<u>) (\$</u>		
Signature			