PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Colin David Eldred	05/22/2009
Thomas Daniel Heightman	05/20/2009
Jag Paul Heer	05/19/2009
John Skidmore	05/26/2009
Hailong Wang	08/20/2009

RECEIVING PARTY DATA

Name:	Glaxo Group Limited
Street Address:	Berkeley Avenue
City:	Greenford, Middlesex
State/Country:	UNITED KINGDOM
Postal Code:	UB6 0NN

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	12989700

CORRESPONDENCE DATA

502065587

6102705253 Fax Number:

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 610-270-5019

US_CIPKOP@GSK.com Email:

Correspondent Name: GlaxoSmithKline Address Line 1: 709 Swedeland Road

Address Line 2: **CIP UW2220**

Address Line 4: King of Prussia, PENNSYLVANIA 19406

NAME OF SUBMITTER:	da E. Hall

REEL: 028976 FRAME: 0080

PATENT

Total Attachments: 15 source=PB62982_Assignment#page1.tif source=PB62982_Assignment#page2.tif source=PB62982_Assignment#page3.tif source=PB62982_Assignment#page4.tif source=PB62982_Assignment#page5.tif source=PB62982_Assignment#page6.tif source=PB62982_Assignment#page7.tif source=PB62982_Assignment#page8.tif source=PB62982_Assignment#page9.tif source=PB62982_Assignment#page10.tif source=PB62982_Assignment#page11.tif source=PB62982_Assignment#page12.tif source=PB62982_Assignment#page12.tif source=PB62982_Assignment#page13.tif

source=PB62982_Assignment#page14.tif source=PB62982_Assignment#page15.tif

WHEREAS I/WE, Colin David ELDRED of Stevenage, Hertfordshire GB and I/WE Jag Paul HEER, Thomas Daniel HEIGHTMAN and John SKIDMORE all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered "Compounds" (hereinafter called "the invention") for which an application for Letters Patent in the *United Kingdom* was filed on 30-Apr-2008 under application number 0807910.5, and for which a PCT international application is now being filed designating the United States of America. I/We hereby authorize and request that the filing date and PCT International application number, when known, be inserted here in parentheses;

(PCT Application No PCT/EP2009/055193, filed 29-Apr-2009)

WHEREAS the invention, being made in the course of my employment, belongs to my/our employer at that time, namely GLAXOSMITHKLINE SERVICES UNLIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, and

WHEREAS GLAXOSMITHKLINE SERVICES UNLIMITED has authorised and requested our making the application, 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 SERVICES UNLIMITED the whole right, title and interest in and to the invention and in and to the application, and

WHEREAS GLAXO GROUP LIMITED a company incorporated in England whose registered address is Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex, UB6 0NN, England, is desirous of acquiring the whole right, title and interest in and to the invention and in and to any applications for the invention and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXO GROUP 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 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 SERVICES UNLIMITED 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 GLAXO GROUP 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 GLAXO GROUP 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 GLAXO GROUP LIMITED, its successors and assigns, the whole right, title and interest in and to the invention and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

SIGNED by Colin David ELDRED:	C. I Odbil
Date: 22nd May 2009	
SIGNED by Jag Paul HEER:	· · · · · · · · · · · · · · · · · · ·
Date:	
SIGNED by Thomas Daniel HEIGHT	ΓMAN:
Date:	
SIGNED by John SKIDMORE:	
Date:	
SIGNED by Peter John GIDDINGS a	as the Attorney of GLAXOSMITHKLINE RESEARCH
-	MITHKLINE SERVICES UNLIMITED
	Date: 29 MAY 2009,

WHEREAS I/WE, Colin David ELDRED of Stevenage, Hertfordshire GB and I/WE Jag Paul HEER, Thomas Daniel HEIGHTMAN and John SKIDMORE all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered "Compounds" (hereinafter called "the invention") for which an application for Letters Patent in the *United Kingdom* was filed on 30-Apr-2008 under application number 0807910.5, and for which a PCT international application is now being filed designating the United States of America. I/We hereby authorize and request that the filing date and PCT International application number, when known, be inserted here in parentheses;

(PCT Application No PCT/EP2009/055193, filed 29-Apr-2009)

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WHEREAS GLAXOSMITHKLINE SERVICES UNLIMITED has authorised and requested our making the application, 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 SERVICES UNLIMITED the whole right, title and interest in and to the invention and in and to the application, and

WHEREAS GLAXO GROUP LIMITED a company incorporated in England whose registered address is Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex, UB6 0NN, England, is desirous of acquiring the whole right, title and interest in and to the invention and in and to any applications for the invention and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXO GROUP 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 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 SERVICES UNLIMITED 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 GLAXO GROUP 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 GLAXO GROUP 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 GLAXO GROUP LIMITED, its successors and assigns, the whole right, title and interest in and to the invention and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

SIGNED by Colin David ELDRED:	
Date:	
SIGNED by Jag Paul HEER:	
Date:	
SIGNED by Thomas Daniel HEIGHTMAN:	ID Herthu
Date: 20th My 200)	
SIGNED by John SKIDMORE:	
Date:	
SIGNED by Peter John GIDDINGS as the Att AND DEVELOPMENT and GLAXOSMITHKL	•
1 (/ / /) (2 6 MAY 2009 Date:
19/200	•

WHEREAS I/WE, Colin David ELDRED of Stevenage, Hertfordshire GB and I/WE Jag Paul HEER, Thomas Daniel HEIGHTMAN and John SKIDMORE all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered "Compounds" (hereinafter called "the invention") for which an application for Letters Patent in the *United Kingdom* was filed on 30-Apr-2008 under application number 0807910.5, and for which a PCT international application is now being filed designating the United States of America. I/We hereby authorize and request that the filing date and PCT International application number, when known, be inserted here in parentheses;

(PCT Application No PCT/EP2009/055193, filed 29-Apr-2009)

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WHEREAS GLAXOSMITHKLINE SERVICES UNLIMITED has authorised and requested our making the application, 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 SERVICES UNLIMITED the whole right, title and interest in and to the invention and in and to the application, and

WHEREAS GLAXO GROUP LIMITED a company incorporated in England whose registered address is Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex, UB6 0NN, England, is desirous of acquiring the whole right, title and interest in and to the invention and in and to any applications for the invention and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions;

GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXO GROUP 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 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

SERVICES UNLIMITED 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 GLAXO GROUP

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 GLAXO GROUP 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 GLAXO GROUP LIMITED, its successors and assigns, the whole right, title and interest in and to the invention and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

SIGNED by Colin David ELDRED:	/
Date:	
SIGNED by Jag Paul HEER:	
Date: 19th May 2009	
SIGNED by Thomas Daniel HEIGHTMAN:	
Date:	
SIGNED by John SKIDMORE:	
Date:	
SIGNED by Peter John GIDDINGS as the Attorney of GLA AND DEVELOPMENT and GLAXOSMITHKLINE SERVICE	
W W(1) 1 1 1 1 1 K	2 6 MAY 2009
// ~v/	

WHEREAS I/WE, Colin David ELDRED of Stevenage, Hertfordshire GB and I/WE Jag Paul HEER, Thomas Daniel HEIGHTMAN and John SKIDMORE all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered "Compounds" (hereinafter called "the invention") for which an application for Letters Patent in the *United Kingdom* was filed on 30-Apr-2008 under application number 0807910.5, and for which a PCT international application is now being filed designating the United States of America. I/We hereby authorize and request that the filing date and PCT International application number, when known, be inserted here in parentheses;

(PCT Application No PCT/EP2009/055193, filed 29-Apr-2009)

WHEREAS the invention, being made in the course of my employment, belongs to my/our employer at that time, namely GLAXOSMITHKLINE SERVICES UNLIMITED a company incorporated in England whose registered address is 980 Great West Road, Brentford, Middlesex TW8 9GS, England, and

WHEREAS GLAXOSMITHKLINE SERVICES UNLIMITED has authorised and requested our making the application, 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 SERVICES UNLIMITED the whole right, title and interest in and to the invention and in and to the application, and

WHEREAS GLAXO GROUP LIMITED a company incorporated in England whose registered address is Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex, UB6 0NN, England, is desirous of acquiring the whole right, title and interest in and to the invention and in and to any applications for the invention and any Letters Patent to be obtained therefor, in all countries, including the United States of America, its territories and possessions:

GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXO GROUP 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 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 SERVICES UNLIMITED 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 GLAXO GROUP 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 GLAXO GROUP 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 GLAXO GROUP LIMITED, its successors and assigns, the whole right, title and interest in and to the invention and in and to the application hereby assigned and transferred in all countries, including the United States of America, its territories and possessions.

SIGNED by Colin David ELDRED:			
Date:			
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SIGNED by Jag Paul HEER:			
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Date:			
SIGNED by Thomas Daniel HEIGHT	MAN:		
D-4			
Date:			
SIGNED by John SKIDMORE:	Mah	•	
	<i>V</i>	·····	
Date:26 May			•
SIGNED by Peter John GIDDINGS a			RESEARCH
AND DEVELOPMENT and GLAXOSI	MITHKLINE SER	VICES UNLIMITED	
		- 8 JUN 2009	
- Mary	Date:		***************************************

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ASSIGNMENT

WHEREAS I/WE, Hailong WANG, of Shanghai, China, (hereinafter called "the

inventor(s)") have invented or discovered "Compounds" (hereinafter called "the

invention") for which an application for Letters Patent in the United Kingdom was

filed on 30-Apr-2008 under application number 0807910.5, and for which a PCT

international application is now being filed designating the United States of

America. I/We hereby authorize and request that the filing date and PCT

International application number, when known, be inserted here in parentheses;

(PCT Application No PCT/EP2009/055193, filed 29-Apr-2009)

WHEREAS the invention, being made in the course of my employment, belongs

to my/our employer at that time, namely GLAXOSMITHKLINE (CHINA) R&D

COMPANY LIMITED a company incorporated in China whose registered address

is Building 3, 898 Halei Road Zhangjiang Hi-tech Park, Pudong, Shanghai

201203, China, and

WHEREAS GLAXOSMITHKLINE (CHINA) R&D COMPANY LIMITED has

authorised and requested our making the application, and

WHEREAS GLAXO WELLCOME MANUFACTURING PTE LTD, a company

organised and existing under the laws of Singpore and having its registered office

at 1 Pioneer Sector 1, Jurong, Singapore 68413 has acquired from

GLAXOSMITHKLINE (CHINA) R&D COMPANY LIMITED the rights in the

invention by virtue of an agreement dated 1 April 2008.

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

GLAXO WELLCOME MANUFACTURING PTE LTD the whole right, title and

interest in and to the invention and in and to the application, and

PATENT

REEL: 028976 FRAME: 0094

WHEREAS GLAXO GROUP LIMITED a company incorporated in England whose registered address is Glaxo Wellcome House, Berkeley Avenue, Greenford, Middlesex, UB6 0NN, England, is desirous of acquiring the whole right, title and interest in and to the invention and in and to any applications for the invention 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 inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE (CHINA) R&D COMPANY LIMITED of the invention and the application by operation of law and, if under the law of the United States of America I/we the inventor(s) have any ownership right, title and interest in and to the invention and the application, (which I/we do not believe to be the case and claim no ownership right, title or interest in and to the invention and to the application based on the law of China), I/we the inventor(s) nevertheless hereby assign and transfer such ownership right, title and interest in and to the invention and to the application, including the right to claim priority from the application in respect of any subsequent applications, to GLAXOSMITHKLINE (CHINA) R&D COMPANY LIMITED..

GLAXOSMITHKLINE (CHINA) R&D COMPANY LIMITED in turn hereby assigns and transfers to GLAXO WELLCOME MANUFACTURING PTE LTD its whole right, title and interest in and to the invention and GLAXO WELLCOME MANUFACTURING PTE LTD in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED its whole right, title and interest in and to the invention and in and to the application.

GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED in turn hereby assigns and transfers to GLAXO GROUP 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 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 (CHINA) R&D COMPANY LIMITED, GLAXO WELLCOME MANUFACTURING

PTE LTD 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 GLAXO GROUP LIMITED;

AND GLAXOSMITHKLINE (CHINA) R&D COMPANY LIMITED, GLAXO WELLCOME MANUFACTURING PTE LTD 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 GLAXO GROUP 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 GLAXO GROUP LIMITED, its successors and assigns, the whole right, title and interest in and to the invention 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 30 April 2008, the inventor(s) and Peter John GIDDINGS as the Attorney of GLAXOSMITHKLINE (CHINA) R&D COMPANY LIMITED, GLAXO WELLCOME MANUFACTURING PTE LTD, GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED, and GLAXO GROUP LIMITED have hereunto set their respective hands.

SIGNED by Hailong WANG

Hailorg Wang

Date: Aug 20, 2017

SIGNED by Peter John GIDDINGS

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Date: 25 AUGUST 2009

PATENT REEL: 028976 FRAME: 0096

RECORDED: 09/18/2012