### PATENT ASSIGNMENT

# Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT LIMITED	11/03/2010

### **RECEIVING PARTY DATA**

Name:	GLAXO GROUP LIMITED
Street Address:	GLAXO WELLCOME HOUSE
Internal Address:	BERKELEY AVENUE
City:	GREENFORD, MIDDLESEX, ENGLAND
State/Country:	UNITED KINGDOM
Postal Code:	UB6 0NN

## PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13808243

### **CORRESPONDENCE DATA**

**Fax Number**: 8587926773

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

Phone: 858-847-6700

Email: djones-beasley@foley.com

Correspondent Name: Gerald F. Swiss

Address Line 1: Foley & Lardner LLP

Address Line 2: P.O. Box 80278

Address Line 4: San Diego, CALIFORNIA 92138-0278

ATTORNEY DOCKET NUMBER:	101212-0800
NAME OF SUBMITTER:	Gerald F. Swiss
Signature:	/Brian S. Sun/ 64,694 for Gerald Swiss
Date:	05/10/2013
	PATENT

502344157 REEL: 030398 FRAME: 0157

OP \$40.00 13808243

## Total Attachments: 24 source=101212-0800\_Assignment\_InventorsToGSK#page1.tif source=101212-0800\_Assignment\_InventorsToGSK#page2.tif source=101212-0800\_Assignment\_InventorsToGSK#page3.tif source=101212-0800\_Assignment\_InventorsToGSK#page4.tif source=101212-0800\_Assignment\_InventorsToGSK#page5.tif source=101212-0800 Assignment InventorsToGSK#page6.tif source=101212-0800\_Assignment\_InventorsToGSK#page7.tif source=101212-0800\_Assignment\_InventorsToGSK#page8.tif source=101212-0800 Assignment InventorsToGSK#page9.tif source=101212-0800 Assignment InventorsToGSK#page10.tif source=101212-0800\_Assignment\_InventorsToGSK#page11.tif source=101212-0800\_Assignment\_InventorsToGSK#page12.tif source=101212-0800 Assignment InventorsToGSK#page13.tif source=101212-0800\_Assignment\_InventorsToGSK#page14.tif source=101212-0800\_Assignment\_InventorsToGSK#page15.tif source=101212-0800\_Assignment\_InventorsToGSK#page16.tif source=101212-0800 Assignment InventorsToGSK#page17.tif source=101212-0800\_Assignment\_InventorsToGSK#page18.tif source=101212-0800\_Assignment\_InventorsToGSK#page19.tif source=101212-0800\_Assignment\_InventorsToGSK#page20.tif source=101212-0800 Assignment InventorsToGSK#page21.tif source=101212-0800\_Assignment\_InventorsToGSK#page22.tif source=101212-0800\_Assignment\_InventorsToGSK#page23.tif source=101212-0800 Assignment InventorsToGSK#page24.tif

PB64288P

**ASSIGNMENT** 

WHEREAS I/WE, Paul John BESWICK, Robert James GLEAVE, Shuji

HACHISU, Sadie VILE, Nicolas BERTHELEME, Simon E WARD, all of Harlow,

Essex, GB (hereinafter called "the inventor(s)") have invented or discovered

**NOVEL COMPOUNDS** (hereinafter called "the invention") for which a provisional

application under 35 U.S.C. §111(b) was filed in the United States of America on

09-Jul-2010 under application number 61/362712.

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;

NOW, THEREFORE, to all whom it may concern be it known that I/we, the

inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE SERVICES

**UNLIMITED** 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 the United Kingdom), 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 SERVICES UNLIMITED. GLAXOSMITHKLINE SERVICES UNLIMITED in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT 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 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.

IN WITNESS whereof and with effect from the *09-Jul-2010*, the inventor(s) and Peter John GIDDINGS as Attorney of GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED by virtue of a Powers of Attorney granted by GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXO GROUP LIMITEDhave hereunto set their respective hands.

SIGNED by Paul John BESWICK:	
Date:	
SIGNED by Robert James GLEAVE:	
Date:	
SIGNED by Shuji HACHISU:	
Date:	
SIGNED by Sadie VILE:	
Date:	
SIGNED by Nicolas BERTHELEME:	Bull
Date: <u>08/10/10</u>	

SIGNED by Simon E WARD:	
Date:	
SIGNED by Peter John GIDDINGS as the RESEARCH AND DEVELOPMENT and UNLIMITED and GLAXO GROUP LIMITED	•
Name: Peter John GIDDINGS Attorney and Authorised Official	-3 NOV 2010 Date:

### **ASSIGNMENT**

WHEREAS I/WE, Paul John BESWICK, Robert James GLEAVE, Shuji HACHISU, Sadie VILE, Nicolas BERTHELEME, Simon E WARD, all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered NOVEL COMPOUNDS (hereinafter called "the invention") for which a provisional application under 35 U.S.C. §111(b) was filed in the United States of America on 09-Jul-2010 under application number 61/362712.

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;

NOW, THEREFORE, to all whom it may concern be it known that I/we, the inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE SERVICES UNLIMITED 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 part expression

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 the United Kingdom), 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 **SERVICES** UNLIMITED. **GLAXOSMITHKLINE** SERVICES UNLIMITED in turn hereby assigns and transfers GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT 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 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.

PATENT

IN WITNESS whereof and with effect from the *09-Jul-2010*, the inventor(s) and Peter John GIDDINGS as Attorney of GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED by virtue of a Powers of Attorney granted by GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXO GROUP LIMITEDhave hereunto set their respective hands.

SIGNED by Paul John BESWICK:	
Date:	
SIGNED by Robert James GLEAVE:	
Date:	
SIGNED by Shuji HACHISU:	
Date:	
SIGNED by Sadie VILE:	5. Ll
Date: 4H - Oct - 2010	
SIGNED by Nicolas BERTHELEME:	
Date:	

SIGNED by Simon E WARD:	
Date:	
SIGNED by Peter John GIDDINGS as the	Attorney of GLAXOSMITHKLINE
RESEARCH AND DEVELOPMENT and	GLAXOSMITHKLINE SERVICES
UNLIMITED and GLAXO GROUP LIMITED	
	-3 NOV 2010
- Hand	Date:
Name: Peter John GIDDINGS	
Attorney and Authorised Official	

### **ASSIGNMENT**

WHEREAS I/WE, Paul John BESWICK, Robert James GLEAVE, Shuji HACHISU, Sadie VILE, Nicolas BERTHELEME, Simon E WARD, all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered NOVEL COMPOUNDS (hereinafter called "the invention") for which a provisional application under 35 U.S.C. §111(b) was filed in the United States of America on 09-Jul-2010 under application number 61/362712.

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;

NOW, THEREFORE, to all whom it may concern be it known that I/we, the inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE SERVICES

UNLIMITED of the invention and the application by operation of law and, if under PATENT the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the inventor(s) have several to the law of the United States of America I/we the I/we have several to the I/we have

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 the United Kingdom), 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 SERVICES** UNLIMITED. GLAXOSMITHKLINE **SERVICES** UNLIMITED in turn hereby assigns and transfers GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT 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 **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, incrediffents United States of America, its territories and possessions.

IN WITNESS whereof and with effect from the 09-Jul-2010, the inventor(s) and Peter John GIDDINGS as Attorney of GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED by virtue of a Powers of Attorney granted by GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXO GROUP LIMITED have hereunto set their respective hands.

SIGNED by Paul John BESWICK:	
Date:	
SIGNED by Robert James GLEAVE:	
Date:	
SIGNED by Shuji HACHISU:  Date: 2 October 2010	Muzhochm
SIGNED by Sadie VILE:	
Date:	
SIGNED by Nicolas BERTHELEME:	·
Date:	

SIGNED by Simon E WARD:	
Date:	
SIGNED by Peter John GIDDINGS as the	Attorney of GLAXOSMITHKLINE
RESEARCH AND DEVELOPMENT and	•
UNLIMITED and GLAXO GROUP LIMITED	
	-3 NOV 2010 Date:
Name: Peter John GIDDINGS	
Attorney and Authorised Official	

### **ASSIGNMENT**

WHEREAS I/WE, Paul John BESWICK, Robert James GLEAVE, Shuji HACHISU, Sadie VILE, Nicolas BERTHELEME, Simon E WARD, all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered NOVEL COMPOUNDS (hereinafter called "the invention") for which a provisional application under 35 U.S.C. §111(b) was filed in the United States of America on 09-Jul-2010 under application number 61/362712.

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;

NOW, THEREFORE, to all whom it may concern be it known that I/we, the inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE SERVICES UNLIMITED 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 PATENT

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 the United Kingdom), 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 SERVICES UNLIMITED. GLAXOSMITHKLINE SERVICES UNLIMITED in turn hereby assigns and transfers GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT 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 **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.

IN WITNESS whereof and with effect from the *09-Jul-2010*, the inventor(s) and Peter John GIDDINGS as Attorney of GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED by virtue of a Powers of Attorney granted by GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXO GROUP LIMITEDhave hereunto set their respective hands.

SIGNED by Paul John BESWICK:	
Date:	
	0110
SIGNED by Robert James GLEAVE:	Mart Acro
Date: 6 October 2010	
SIGNED by Shuji HACHISU:	
Date:	
SIGNED by Sadie VILE:	
Date:	
SIGNED by Nicolas BERTHELEME:	
Date:	

SIGNED by Simon E WARD:	
Date:	
SIGNED by Peter John GIDDINGS as RESEARCH AND DEVELOPMENT a	nd GLAXOSMITHKLINE SERVICES
UNLIMITED and GLAXO GROUP LIMITE	-3 NOV 2010 Date:
Name: Peter John GIDDINGS	
Attorney and Authorised Official	

### ASSIGNMENT

WHEREAS I/WE, Paul John BESWICK, Robert James GLEAVE, Shuji HACHISU, Sadie VILE, Nicolas BERTHELEME, Simon E WARD, all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered NOVEL COMPOUNDS (hereinafter called "the invention") for which a provisional application under 35 U.S.C. §111(b) was filed in the United States of America on 09-Jul-2010 under application number 61/362712.

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WHEREAS GLAXOSMITHKLINE SERVICES UNLIMITED has authorised and requested our making the application, and

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NOW, THEREFORE, to all whom it may concern be it known that I/we, the inventor(s), hereby confirm the ownership by GLAXOSMITHKLINE SERVICES UNLIMITED 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 PATENT

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 the United Kingdom), 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** SERVICES UNLIMITED. **GLAXOSMITHKLINE** SERVICES UNLIMITED in turn hereby assigns and transfers GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT its whole right, title and interest in and to the invention and in and to the application.

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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.

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SIGNED by Paul John BESWICK:	P.S. Ke
Date: 15 00.0820 2010	
SIGNED by Robert James GLEAVE:	· · · · · · · · · · · · · · · · · · ·
Date:	
SIGNED by Shuji HACHISU:	
Date:	
SIGNED by Sadie VILE:	
Date:	
SIGNED by Nicolas BERTHELEME:	
Date:	

SIGNED by Simon E WARD:
Date:
SIGNED by Peter John GIDDINGS as the Attorney of GLAXOSMITHKLII
RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICE UNLIMITED and GLAXO GROUP LIMITED
Date:
Name: Peter John GIDDINGS
Attorney and Authorised Official

PB64288P

### ASSIGNMENT

WHEREAS I/WE, Paul John BESWICK, Robert James GLEAVE, Shuji HACHISU, Sadie VILE, Nicolas BERTHELEME, Simon E WARD, all of Harlow, Essex, GB (hereinafter called "the inventor(s)") have invented or discovered NOVEL COMPOUNDS (hereinafter called "the invention") for which a provisional application under 35 U.S.C. §111(b) was filed in the United States of America on 09-Jul-2010under application number 61/362712.

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;

**NOW, THEREFORE**, to all whom it may concern be it known that I/we, the inventor(s), hereby confirm the ownership by **GLAXOSMITHKLINE SERVICES UNLIMITED** 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 the United Kingdom), 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 SERVICES UNLIMITED. GLAXOSMITHKLINE GLAXOSMITHKLINE SERVICES UNLIMITED in turn hereby assigns and transfers to GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT 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 SERVICES UNLIMITED **GLAXOSMITHKLINE** and 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.

IN WITNESS whereof and with effect from the *09-Jul-2010*, the inventor(s) and Peter John GIDDINGS as Attorney of GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED by virtue of a Powers of Attorney granted by GLAXOSMITHKLINE RESEARCH AND DEVELOPMENT and GLAXOSMITHKLINE SERVICES UNLIMITED and GLAXO GROUP LIMITEDhave hereunto set their respective hands.

SIGNED by Paul John BESWICK:				
Date:				
SIGNED by Robert James GLEAVE:				
Date:				
SIGNED by Shuji HACHISU:				
Date:				
SIGNED by Sadie VILE:				
Date:				
SIGNED by Nicolas BERTHELEME:	<del></del>	······································	·	
Date:				

SIGNED by Simon E WARD:	<u>Lill</u>
Date: 7 Oct 2010	
SIGNED by Peter John GIDDINGS as the	Attorney of <b>GLAXOSMITHKLINI</b>
RESEARCH AND DEVELOPMENT and	GLAXOSMITHKLINE SERVICES
UNLIMITED and GLAXO GROUP LIMITED	- 3 NOV 2010
Name: Peter John GIDDINGS  Attorney and Authorised Official	Date:

**RECORDED: 05/10/2013**