

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT3030401

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
MICHAEL FOULKES	01/16/2014
GIANCARLO FRANCESE	12/19/2013
DOMINIQUE GRIMLER	11/21/2013
ERNST KUESTERS	11/22/2013
KURT LAUMEN	11/21/2013
THOMAS RUCH	11/25/2013
RECEIVING PARTY DATA	
Name:	NOVARTIS PHARMA AG
Street Address:	POSTFACH
City:	BASEL
State/Country:	SWITZERLAND
Postal Code:	4002
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	14384233
CORRESPONDENCE DATA	
Fax Number:	
<i>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.</i>	
Phone:	8627780705
Email:	cindy.klepacky@novartis.com
Correspondent Name:	CINDY KLEPACKY
Address Line 1:	ONE HEALTH PLAZA
Address Line 4:	EAST HANOVER, NEW JERSEY 07936
NAME OF SUBMITTER:	CINDY KLEPACKY
SIGNATURE:	/Cindy Klepacky/
DATE SIGNED:	09/19/2014
Total Attachments: 42	
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ASSIGNMENT

This Assignment Agreement is entered into by and between

Michael FOULKES	citizen of United Kingdom	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Giancarlo FRANCESE	citizen of Italy	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Doménique GRIMLER	citizen of France	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Ernst KUESTERS	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Kurt LAUMEN	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Thomas RUCH	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND

(hereinafter "Inventor(s)"), and Novartis Pharma AG, Postfach, 4002 Basel, Switzerland, a company organized under the laws of Switzerland.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, Novartis Pharma AG is the true and

lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Pharma AG and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

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and filed at the State Intellectual Property Office of the People's Republic of China as a PCT International Application on 23 March 2012 and accorded Application Number PCT/CN2012/000359 and/or filed as a PCT International Application on 22 March 2013 and accorded International Patent Application Number PCT/EP2013/056170.

(2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

(5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and

divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;

(6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect.

The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the laws of Switzerland.

This Assignment is effective as from the earliest priority date as stated above.

Executed this 16 day of January, 2013. 2014

M. Foulkes L.S.
Michael FOULKES

P. Heinz
Witness
Print Name: Thomas Heinz

K. Schaefer
Witness
Print Name: Karl Schaefer

Executed this _____ day of _____, 2013.

L.S.
Giancarlo FRANCESE

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Dominique GRIMLER

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Ernst KUESTERS

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

_____, L.S.
Kurt LAUMEN

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

_____, L.S.
Thomas RUCH

Witness
Print Name:

Witness
Print Name:

Executed this 7 day of May, 2014

Acceptance of Company
Novartis Pharma AG

BY: [Signature] L.S.

James Sturtle

Authorized signatory

BY: [Signature] L.S.

Elke Blab-Rotzinger

Authorized signatory

S. Bosch
Witness
Print Name: Sanja Bosch Authorized signatory

Authorized signatory
Tanja Vogel

[Signature]
Witness
Print Name:

ASSIGNMENT

This Assignment Agreement is entered into by and between

Michael FOULKES	citizen of United Kingdom	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Giancarlo FRANCESE	citizen of Italy	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Dominique GRIMLER	citizen of France	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Ernst KUESTERS	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Kurt LAUMEN	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Thomas RUCH	citizen of Croatia	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND

(hereinafter "Inventor(s)"), and Novartis Pharma AG, Postfach, 4002 Basel, Switzerland, a company organized under the laws of Switzerland.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, Novartis Pharma AG is the true and

lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Pharma AG and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

**CHEMICAL PROCESS FOR PREPARING SPIROINDOLONES AND
INTERMEDIATES THEREOF**

and filed at the State Intellectual Property Office of the People's Republic of China as a PCT International Application on 23 March 2012 and accorded Application Number PCT/CN2012/000359 and/or filed as a PCT International Application on 22 March 2013 and accorded International Patent Application Number PCT/EP2013/056170.

(2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

(5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and

divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;

(6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

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This Assignment shall be governed by the laws of Switzerland.

This Assignment is effective as from the earliest priority date as stated above.


Executed this _____ day of _____, 2013.

L.S.
Michael FOULKES


Witness
Print Name:

Witness
Print Name:

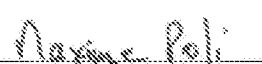
Executed this 19 day of December, 2013.



L.S.
Giancarlo FRANCESE



Witness
Print Name: **PAUL ALIU**



Witness
Print Name:

Executed this _____ day of _____, 2013.

_____, L.S.
Dominique GRIMLER

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

_____, L.S.
Ernst KUESTERS

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Kurt LAUMEN

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Thomas RUCH

Witness
Print Name:

Witness
Print Name:

Executed this 7 day of May, 2014

Acceptance of Company
Novartis Pharma AG

BY: [Signature] L.S. James Stuffle
Authorized signatory

BY: Elke Blab-Rotzinger L.S. Elke Blab-Rotzinger
Authorized signatory

S Bosch Authorized signatory

Witness
Print Name: Sonya Bosch

[Signature]
Witness
Print Name:

Authorized signatory
Tanja Vogel

ASSIGNMENT

This Assignment Agreement is entered into by and between

Michael FOULKES	citizen of United Kingdom	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Giancarlo FRANCESE	citizen of Italy	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Dominique GRIMLER	citizen of France	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Ernst KUESTERS	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Kurt LAUMEN	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Thomas RUCH	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND

(hereinafter "Inventor(s)"), and Novartis Pharma AG, Postfach, 4002 Basel, Switzerland, a company organized under the laws of Switzerland.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, Novartis Pharma AG is the true and

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If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Pharma AG and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

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(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

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(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

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This Assignment shall be governed by the laws of Switzerland.

This Assignment is effective as from the earliest priority date as stated above.

Executed this _____ day of _____, 2013.

L.S.
Michael FOULKES

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Giancarlo FRANCESE

Witness
Print Name:

Witness
Print Name:

Executed this 11 day of November, 2013.

D. Grimler L.S.
Dominique GRIMLER

Stephan Knoch
Witness
Print Name: **STEPHAN KNOCH**

Hänggi Ziedi
Witness
Print Name: **Hänggi Ziedi**

Executed this _____ day of _____, 2013.

L.S.
Ernst KUESTERS

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

_____. L.S.
Kurt LAUMEN

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

_____. L.S.
Thomas RUCH

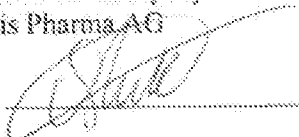
Witness
Print Name:

Witness
Print Name:

Executed this 7 day of May, 2014

Acceptance of Company
Novartis Pharma AG

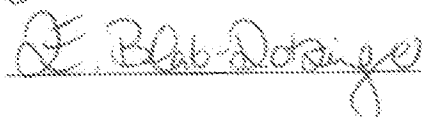
BY:



L.S.

James Stuttle
Authorized signatory

BY:



L.S.

Elke Blab-Rotzinger
Authorized signatory

Witness

Print Name:

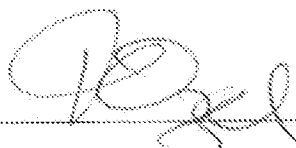
Sonja Bösch

Authorized signatory

Authorized signatory
Tanja Vogel

Witness

Print Name:



ASSIGNMENT

This Assignment Agreement is entered into by and between

Michael FOULKES	citizen of United Kingdom	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Giancarlo FRANCESE	citizen of Italy	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Dominique GRIMLER	citizen of France	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Ernst KUESTERS	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Kurt LAUMEN	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Thomas RUCH	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND

(hereinafter "Inventor(s)"), and Novartis Pharma AG, Postfach, 4002 Basel, Switzerland, a company organized under the laws of Switzerland.

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, I/We the Inventor(s) do hereby confirm and agree that, by operation of law and/or contract, and/or by the fulfillment of any and all legal requirements regarding the transfer of employee inventions in my/our country of employment, Novartis Pharma AG is the true and

lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Pharma AG and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

**CHEMICAL PROCESS FOR PREPARING SPIROINDOLONES AND
INTERMEDIATES THEREOF**

and filed at the State Intellectual Property Office of the People's Republic of China as a PCT International Application on 23 March 2012 and accorded Application Number PCT/CN2012/000359 and/or filed as a PCT International Application on 22 March 2013 and accorded International Patent Application Number PCT/EP2013/056170.

(2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

(5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and

divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;

(6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

I/We the Inventor(s) hereby authorize ASSIGNEE and their representatives to insert in paragraph (1) of this Assignment the filing date(s) and Application Number(s) of said patent, utility model, or other application(s) when notified thereof.

I/We the Inventor(s) hereby covenant and agree that I/We will, at any time, (i) upon the request, but at the expense, of ASSIGNEE, execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, applications, patents, utility models, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates, and applications within the scope of (7) and (8), in ASSIGNEE, including the execution and procurement of all further documents evidencing this sale, assignment and transfer as may be necessary or desirable for recording the same in the patent office or other intellectual property office, agency or the like of any country or region, (ii) upon the request, but at the expense, of ASSIGNEE execute all additional applications within the scope of paragraphs (1) through (6) and all applications within the scope of (7) or (8), and (iii) make all rightful oaths and declarations and do all lawful acts requisite for procuring the same or for aiding therein, without further compensation, but at the expense of ASSIGNEE.

Should any provision of this Assignment be deemed invalid or unenforceable by reason of any law, statute, regulation or judgment, existing now or in the future in any jurisdiction, such provision shall be modified in such jurisdiction so as to nearly approximate the intent of the Parties. If this cannot be done, such invalid or unenforceable provision shall be divisible and be deleted in any such jurisdiction, and all other provisions shall remain in full force and effect.

The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the laws of Switzerland.

This Assignment is effective as from the earliest priority date as stated above.

Executed this _____ day of _____, 2013.

L.S.
Michael FOULKES

Witness

Print Name:

Witness

Print Name:

Executed this _____ day of _____, 2013.

L.S.
Giancarlo FRANCESE

Witness

Print Name:

Witness

Print Name:

Executed this _____ day of _____, 2013.

L.S.
Dominique GRIMLER

Witness
Print Name:

Witness
Print Name:

Executed this 22 day of November, 2013.

Ernst Kuesters
L.S.
Ernst KUESTERS

M. Meisenbach
Witness
Print Name: Mark Meisenbach

Guido Jordine
Witness
Print Name: Guido Jordine

Executed this _____ day of _____, 2013.

Kurt LAUMEN L.S.

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

Thomas RUCH L.S.

Witness
Print Name:

Witness
Print Name:

Executed this 7 day of May, 2014

Acceptance of Company
Novartis Pharma AG

BY: [Signature] L.S.

James Stuttle

Authorized signatory

BY: [Signature] L.S.

Elke Blab-Rotzinger

Authorized signatory

S. Bosch

Witness

Print Name: Sonya Bosch

Authorized signatory

[Signature]

Witness

Print Name:

Authorized signatory
Tanja Vogel

ASSIGNMENT

This Assignment Agreement is entered into by and between

Michael FOULKES	citizen of United Kingdom	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Giancarlo FRANCESE	citizen of Italy	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Doménique GRIMLER	citizen of France	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Ernst KUESTERS	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Kurt LAUMEN	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Thomas RUCH	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND

(hereinafter "Inventor(s)"), and Novartis Pharma AG, Postfach, 4002 Basel, Switzerland, a company organized under the laws of Switzerland.

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lawful owner of all right, title and interest in all inventions, discoveries, patents/utility models, applications, and rights described in paragraphs (1) through (8) below.

If, however, under the laws of any country, I/We the Inventor(s) nevertheless have any ownership right, title or interest in any of the items described herein (which I/We do not believe to be the case and make no claim in or to), for good and valuable consideration, the receipt and adequacy of which is hereby acknowledged, I/We the Inventor(s) do hereby sell, assign and transfer to Novartis Pharma AG and its successors, assigns and legal representatives (hereinafter referred to collectively as the "ASSIGNEE"), all of our right, title and interest for all countries of the world in and to

(1) all of our inventions and discoveries described in the provisional or non-provisional patent, utility model, or other application(s) entitled

**CHEMICAL PROCESS FOR PREPARING SPIROINDOLONES AND
INTERMEDIATES THEREOF**

and filed at the State Intellectual Property Office of the People's Republic of China as a PCT International Application on 23 March 2012 and accorded Application Number PCT/CN2012/000359 and/or filed as a PCT International Application on 22 March 2013 and accorded International Patent Application Number PCT/EP2013/056170.

(2) the application(s) identified in paragraph (1), and all applications claiming priority from such application(s), directly or indirectly, including all national stages of any international patent application(s);

(3) the right to file patent, utility model, or other applications on any invention or discovery disclosed in any of the applications identified in paragraphs (1) and (2), including the right to file such applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our/my name, at ASSIGNEE's election and in accordance with applicable law in all countries and regions; and the right to file all patent, utility model, or other applications in all countries and regions claiming the priority of any of the provisional or non-provisional application(s) identified in paragraphs (1) or (2);

(4) all rights to claim priority from any of the applications referred to in paragraphs (1), (2), and (3) or from any application from which any of the applications referred to in paragraphs (1), (2) and (3) claim priority in all countries and regions under the Paris Convention for the Protection of Industrial Property, the WTO GATT TRIPS Agreement, the Inter-American Convention relating to Inventions, Patents, Designs, and Industrial Models and all other international agreements to which the United States now is or hereafter becomes a signatory and, if the United States patent application is a provisional patent application, under 35 USC 119(e);

(5) all continuations, continuations-in-part, and divisionals of any United States patent application(s) or international patent application(s) designating the United States, any national stages of any international application(s), and any other patent application(s) described in paragraphs (1) through (4) hereof, including further continuations, continuations-in-part, and

divisionals such as, but not limited to, continuations of continuations and continuations of divisionals;

(6) all patents, utility models, or other grants that issue from any of the applications referred to herein and all rights and remedies associated therewith including the right to sue for and recover past damages and to recover under 35 U.S.C. § 154 (d) or any other law permitting remedies for infringement prior to issuance of the patent;

(7) all registrations and confirmations of, and importation certificates based upon, one or more of said patents, utility models, or other grants, and applications for such registrations, confirmations and importation certificates and;

(8) all reissues, renewals and extensions of said patents, utility models, registrations, confirmations and importation certificates, reexamination certificates issued for said patents and supplementary protection certificates based upon said patents and applications for such reissues, renewals, extensions, reexamination certificates and supplementary protection certificates, the same to be held and enjoyed by said ASSIGNEE to the full ends of the terms for which said patents, utility models, registrations, confirmations, importation certificates, reexamination certificates, supplementary protection certificates, reissues, renewals and extensions may be granted, as fully and entirely as the same would have been held and enjoyed by me/us if this sale, assignment and transfer had not been made.

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The modification or deletion of any provision in one jurisdiction shall have no effect on this Assignment in any other jurisdiction.

This Assignment shall be governed by the laws of Switzerland.

This Assignment is effective as from the earliest priority date as stated above.

Executed this _____ day of _____, 2013.

L.S.
Michael FOULKES

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Giancarlo FRANCESE

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Dominique GRIMLER

Witness
Print Name:

Witness
Print Name:

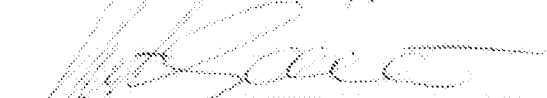
Executed this _____ day of _____, 2013.

L.S.
Ernst KUESTERS

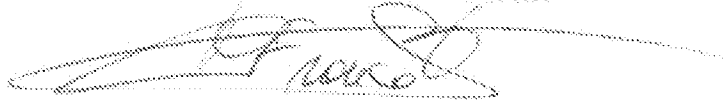
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Print Name:

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Print Name:

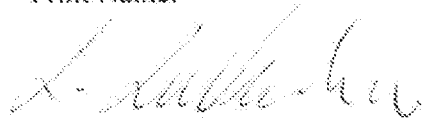
Executed this 21 day of November, 2013.


L.S.
Kurt LAUMEN

Witness
Print Name: **Dr. Eric Francotte**
Executive Director



Witness
Print Name: **Novartis Pharma AG**
Dr. Luigi La Vecchia
WKL - 136.5.93
☎ +41 61 696 16 32
Fax +41 61 696 87 57



Executed this _____ day of _____, 2013.

L.S.
Thomas RUCH

Witness
Print Name:

Witness
Print Name:

Executed this 7 day of May, 2014

Acceptance of Company
Novartis Pharma AG

BY: [Signature] L.S.

James Stuttle

Authorized signatory

BY: [Signature] L.S.

Elke Blab-Rotzingel

Authorized signatory

S. Bosch

Witness

Print Name: Sonya Bosch

Authorized signatory

[Signature]
Witness
Print Name:

Authorized signatory
Tanja Vogel

ASSIGNMENT

This Assignment Agreement is entered into by and between

Michael FOULKES	citizen of United Kingdom	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Giancarlo FRANCESE	citizen of Italy	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Dominique GRIMLER	citizen of France	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Ernst KUESTERS	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Kurt LAUMEN	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND
Thomas RUCH	citizen of Germany	c/o Novartis Pharma AG Postfach 4002 Basel SWITZERLAND

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CHEMICAL PROCESS FOR PREPARING SPIROINDOLONES AND INTERMEDIATES THEREOF

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Executed this _____ day of _____, 2013.

L.S.
Michael FOULKES

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Giancarlo FRANCESE

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Dominique GRIMLER

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Ernst KUESTERS

Witness
Print Name:

Witness
Print Name:

Executed this _____ day of _____, 2013.

L.S.
Kurt LAUMEN

Witness
Print Name:

Witness
Print Name:

Executed this 25 day of November, 2013.

Thomas Ruch
L.S.
Thomas RUCH

Ulrich Bentler
Witness
Print Name: Ulrich Bentler

Casper Vogel
Witness
Print Name: Casper Vogel

Executed this 7 day of May, 2014

Acceptance of Company
Novartis Pharma AG

BY: [Signature] L.S.

James Stuttle
Authorized signatory

BY: [Signature] L.S.

Elke Blab-Rotzinger
Authorized signatory

S. Bäsch
Witness
Print Name: Sonja Bäsch

Authorized signatory

Authorized signatory
Tanja Vogel

[Signature]
Witness
Print Name: