

PATENT ASSIGNMENT

Electronic Version v1.1

Stylesheet Version v1.1

| | |
|-----------------------|----------------|
| SUBMISSION TYPE: | NEW ASSIGNMENT |
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------|----------------|
| Fabrizio Gasparini | 11/10/2009 |
| Yves Auberson | 11/12/2009 |
| Silvio Ofner | 11/11/2009 |
| Kaspar Zimmermann | 11/19/2009 |
| Terance William Hart | 07/14/2009 |

RECEIVING PARTY DATA

| | |
|-----------------|-----------------|
| Name: | Novartis AG |
| Street Address: | Lichtstrasse 35 |
| City: | Basel |
| State/Country: | SWITZERLAND |
| Postal Code: | 4056 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13239467 |

CORRESPONDENCE DATA

Fax Number: 9737818064

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

Phone: 862-778-7821

Email: andrea.jacquin@novartis.com

Correspondent Name: Andrea Jacquin

Address Line 1: One Health Plaza

Address Line 4: East Hanover, NEW JERSEY 07936

CH \$40.00 13239467

| | |
|-------------------------|------------------|
| ATTORNEY DOCKET NUMBER: | 32141-US-CNT02 |
| NAME OF SUBMITTER: | Andrea Jacquin |
| Signature: | /Andrea Jacquin/ |

PATENT

REEL: 030768 FRAME: 0094

502413943

| | |
|-------|------------|
| Date: | 07/10/2013 |
|-------|------------|

Total Attachments: 7

source=32141-US-CNT02 Assignment#page1.tif

source=32141-US-CNT02 Assignment#page2.tif

source=32141-US-CNT02 Assignment#page3.tif

source=32141-US-CNT02 Assignment#page4.tif

source=32141-US-CNT02 Assignment#page5.tif

source=32141-US-CNT02 Assignment#page6.tif

source=32141-US-CNT02 Assignment#page7.tif

ASSIGNMENT

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we

(1) Fabrizio Gasparini, (2) Yves Auberson, (3) Silvio Oiner, (4) Terance William Hart, (5) Kaspar Zimniemann, respectively residing at

(1) Weiherhofstrasse 10, 4415 Lausen, Switzerland

(2) Traubenzweg 7, 4123 Altschwil, Switzerland

(3) Hauptstr. 1, 4142 Muenchenstein, Switzerland

(4) 12 Perry Court, Clerk Maxwell Road, Cambridge, CB3 0RS, Great Britain

(5) Am Chatzebach 4, 4104 Oberwil BL, Switzerland

(

do hereby sell, assign and transfer to Novartis AG, a company organized under the laws of the Swiss Confederation, of Lichtstrasse 35, 4056 Basel, Switzerland, (hereinafter referred to as the "ASSIGNEE") and its successors, assigns and legal representatives, all of my right, title and interest for all countries of the world in and to (1) all of my inventions and discoveries described in the patent application(s) titled

ACETYLENE DERIVATIVES HAVING MGLUR 5 ANTAGONIST ACTIVITY

and filed in the United States Patent and Trademark Office on _____, 20____ and accorded Application Number _____ * and/or filed in the RO/EP on 03 December 2002 and accorded International Patent Application Number PCT/EP02/13670 *. (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the European Patent Office on 04 December 2001 and accorded Application Number 0123996, 6 (5) for all patent applications, all rights of priority based upon the United States patent application identified in (4) in all countries and regions under the Paris Convention for the Protection of Industrial Property, 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 identified in (4) is a provisional patent application, under 35 USC 119(e) (including the right to file patent applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our names, at their election and in accordance with applicable law in all countries and regions); (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) and (6) hereinafter referred to collectively as "patent applications"), (7) all patents that are granted on any of said patent applications, (8) all registrations and confirmations of, and importation certificates based upon, one or more of said patents and applications for such registrations, confirmations and importation certificates and (9) all reissues, renewals and extensions of said patents, 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 and their successors, assigns and legal representatives to the full ends of the terms for which said patents, 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 us if this sale, assignment and transfer had not been made.

*We hereby authorize ASSIGNEE and their representatives to insert in this Assignment the filing date(s) and Application Number(s) of said patent application(s) when notified thereof.

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of ASSIGNEE or their successors, assigns or legal representatives execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates and applications within the scope of (8) and (9) in ASSIGNEE or their successors, assigns or legal representatives, 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 or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) 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 or their successors, assigns or legal representatives.

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

Executed this 16 day of November, 2009

Fabrizio Gasparini L.S.
Fabrizio Gasparini

Executed this 17 day of November, 2009

Yves Auberson L.S.
Yves Auberson

Executed this 11 day of November, 2009

Silvio Ofner L.S.
Silvio Ofner

Executed this _____ day of _____, 20_____

L.S.
Terance William Hart

Executed this 18 day of November, 2009

Kaspar Zimmermann L.S.
Kaspar Zimmermann

ASSIGNMENT

For good and valuable consideration, the receipt and adequacy of which are hereby acknowledged, we

(1) Fabrizio Gasparini, (2) Yves Auberson, (3) Silvio Ofner, (4) Terance William Hart, (5) Kaspar Zimmermann, respectively residing at

(1) Weiherhofstrasse 10, 4415 Lausen, Switzerland

(2) Traubenzweg 7, 4123 Altschwil, Switzerland

(3) Hauptstr. 1, 4142 Muenchenstein, Switzerland

(4) 12 Perry Court, Clerk Maxwell Road, Cambridge, CB3 0RS, Great Britain

(5) Am Chatzebach 4, 4104 Oberwil BL, Switzerland

(

do hereby sell, assign and transfer to Novartis AG, a company organized under the laws of the Swiss Confederation, of Lichtstrasse 35, 4056 Basel, Switzerland, (hereinafter referred to as the "ASSIGNEE") and its successors, assigns and legal representatives, all of my right, title and interest for all countries of the world in and to (1) all of my inventions and discoveries described in the patent application(s) titled

ACETYLENE DERIVATIVES HAVING MGLUR 5 ANTAGONIST ACTIVITY

and filed in the United States Patent and Trademark Office on _____, 20____ and accorded Application Number _____ * and/or filed in the RO/EP on 03 December 2002 and accorded International Patent Application Number PCT/EP02/13670 *, (2) the patent application(s) identified in (1), (3) all national stages of any international patent application identified in (1), (4) all other patent applications in all countries and regions claiming the priority of the provisional or non-provisional patent application filed in the European Patent Office on 04 December 2001 and accorded Application Number 0128996, 6 (5) for all patent applications, all rights of priority based upon the United States patent application identified in (4) in all countries and regions under the Paris Convention for the Protection of Industrial Property, 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 identified in (4) is a provisional patent application, under 35 USC 119(e) (including the right to file patent applications on said inventions and discoveries in the names of ASSIGNEE or their designees or in our names, at their election and in accordance with applicable law in all countries and regions), (6) all continuations and divisions of any United States patent application or international patent application designating the United States identified in (1), any national stages of any international application identified in (1) and any patent applications within the scope of (4) (including further continuations and divisions such as, but not limited to, continuations of continuations and continuations of divisions), ((2)-(4) and (6) hereinafter referred to collectively as "patent applications"), (7) all patents that are granted on any of said patent applications, (8) all registrations and confirmations of, and importation certificates based upon, one or more of said patents and applications for such registrations, confirmations and importation certificates and (9) all reissues, renewals and extensions of said patents, 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 and their successors, assigns and legal representatives to the full ends of the terms for which said patents, 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 us if this sale, assignment and transfer had not been made.

*We hereby authorize ASSIGNEE and their representatives to insert in this Assignment the filing date(s) and Application Number(s) of said patent application(s) when notified thereof.

And we hereby covenant and agree that we will, at any time, (i) upon the request, but at the expense, of ASSIGNEE or their successors, assigns or legal representatives execute and deliver all documents that may be necessary or desirable to perfect the title to the foregoing inventions and discoveries, patent applications, patents, registrations, confirmations, importation certificates, reissues, renewals, extensions, reexamination certificates, supplementary protection certificates and applications within the scope of (8) and (9) in ASSIGNEE or their successors, assigns or legal representatives, 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 or their successors, assigns or legal representatives execute all additional patent applications within the scope of (3), (4) and (6) and all applications within the scope of (8) or (9) 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 or their successors, assigns or legal representatives.

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

Executed this _____ day of _____, 20____.

L.S.

Fabrizio Gasparini

ACKNOWLEDGEMENT

State of _____)
) s.s.:
County of _____)

On this _____ day of _____, 20____, personally appeared before me _____ to me known and known by me to be the same person described in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her) own free will for the purpose set forth.

(Seal)

Notary Public

Executed this _____ day of _____, 20____.

..... L.S.

Yves Auberson

ACKNOWLEDGEMENT

State of)
) s.s.:
County of)

On this _____ day of _____, 20____, personally appeared before me
_____ to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)

..... Notary Public

Executed this _____ day of _____, 20____.

..... L.S.

Silvio Ofner

ACKNOWLEDGEMENT

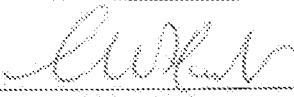
State of)
) s.s.:
County of)

On this _____ day of _____, 20____, personally appeared before me
_____ to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)

..... Notary Public

Executed this 14th day of JULY, 2001

 L.S.

Terance William Hart

ACKNOWLEDGEMENT

State of _____)
) s.s.
County of _____)

On this _____ day of _____, 20_____, personally appeared before me
to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)

Notary Public

Executed this _____ day of _____, 20_____.
L.S.

Kasper Zimmermann

ACKNOWLEDGEMENT

State of _____)
) s.s.
County of _____)

On this _____ day of _____, 20_____, personally appeared before me
to me known and known by me to be the same person described
in and who executed the foregoing Assignment and acknowledged that (s)he executed the same of his (her)
own free will for the purpose set forth.

(Seal)

Notary Public

Attestation

I, the undersigned, notary public of Basel, Switzerland, Dr. Matthias Staehelin, certify herewith the authenticity of the signatures attached heretofore of Mr. Terance W. Hart, British citizen, residing in Cambridge/United Kingdom.

The authenticity of the signature was established by means of comparison.

BASEL (SWITZERLAND), this 14th (fourteenth) day of August 2009 (two thousand and nine)



Dr. M. Staehelin
Notar in Basel

Leg.Prot.Nr. 2263/2009