505520097 06/11/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

SUBMISSION TYPE:

CORRECTIVE ASSIGNMENT

Corrective Assignment to correct the SPELLING OF THE RECEIVING PARTY, HOFFMANN-LA ROCHE INC. previously recorded on Reel 039979 Frame 0787. Assignor(s) hereby confirms the RECEIVING PARTY IS HOFFMANN-LA ROCHE INC..

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| DIPEN DESAI | 07/08/2010 |
| ZENAIDA GO | 07/08/2010 |
| RAMAN IYER | 07/08/2010 |
| HARPREET SANDHU | 07/08/2010 |
| NAVNIT SHAH | 07/08/2010 |
| RALPH DIODONE | 07/15/2010 |
| HANS-JUERGEN MAIER | 07/15/2010 |
| NICOLE WYTTENBACH | 07/15/2010 |

RECEIVING PARTY DATA

| Name: | HOFFMANN-LA ROCHE INC. | |
|-----------------|------------------------|--|
| Street Address: | 340 KINGSLAND STREET | |
| City: | NUTLEY | |
| State/Country: | NEW JERSEY | |
| Postal Code: | 07110 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15241773 |

CORRESPONDENCE DATA

Fax Number: (650)815-2601

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.

Phone: 6508152600

Email: CCARTER@SHEPPARDMULLIN.COM

Correspondent Name: SHEPPARD MULLIN RICHTER & HAMPTON LLP

Address Line 1: 379 LYTTON AVENUE LORNA L. TANNER

Address Line 4: PALO ALTO, CALIFORNIA 94301

ATTORNEY DOCKET NUMBER: | 37JF-191897-US2

505520097 REEL: 049440 FRAME: 0300

PATENT

EPAS ID: PAT5566902

| NAME OF SUBMITTER: | LORNA L. TANNER |
|---|-------------------|
| SIGNATURE: | /Lorna L. Tanner/ |
| DATE SIGNED: | 06/11/2019 |
| Total Attachments: 6 | |
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> PATENT REEL: 049440 FRAME: 0301

504043822 10/10/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4090483

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| DIPEN DESAI | 07/08/2010 |
| ZENAIDA GO | 07/08/2010 |
| RAMAN IYER | 07/08/2010 |
| HARPREET SANDHU | 07/08/2010 |
| NAVNIT SHAH | 07/08/2010 |
| RALPH DIODONE | 07/15/2010 |
| HANS-JUERGEN MAIER | 07/15/2010 |
| NICOLE WYTTENBACH | 07/15/2010 |

RECEIVING PARTY DATA

| Name: | HOFFMAN-LA ROCHE INC. | |
|-----------------|-----------------------|--|
| Street Address: | 340 KINGSLAND STREET | |
| City: | NUTLEY | |
| State/Country: | NEW JERSEY | |
| Postal Code: | 07110 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 15241773 |

CORRESPONDENCE DATA

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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.

Phone: 6508152600

Email: abaker@sheppardmullin.com

Correspondent Name: SHEPPARD MULLIN RICHTER & HAMPTON LLP

Address Line 1: 379 LYTTON AVENUE

Address Line 2: JOY LYNN BALA NEMIROW

Address Line 4: PALO ALTO, CALIFORNIA 94301

ATTORNEY DOCKET NUMBER: 37JF-191897-US2

NAME OF SUBMITTER: JOY LYNN BALA NEMIROW

| SIGNATURE: /Joy Lynn Bala Nemirow/

REEL: 039449 FRAME: 0382

PAIENI

504043822

| DATE SIGNED: | 10/10/2016 |
|---|-----------------|
| Total Attachments: 4 | |
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| source=191897-US2_DipenetaltoLaRocheInc#page2.tif | |
| source=191897-US2_DipenetaltoLaRocheInc#page3.tif | |
| source=191897-US2_DipenetaltoLaRocheInc#page4.tif | |

PATENT REEL: 039849 FRAME: 0388

ASSIGNMENT

WHEREAS, WE, Dipen Desai, Zenaida Go, Raman Iyer, Harpreet Sandhu and Navnit Shah together with Ralph Diodone, Hans-Juergen Maier, and Nicole Wyttenbach (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U. S. application 61/166,677, filed April 3, 2009 entitled

COMPOSITIONS AND USES THEREOF

WHEREAS, HOFFMANN-LA ROCHE INC., a corporation organized and existing under and by virtue of the laws of the State of New Jersey, and having its principal place of business at Nutley, New Jersey, is desirous of acquiring the entire interest in and to said invention, said application and the Patent to be obtained therefor;

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00) and other good and valuable consideration to us in hand paid, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said HOFFMANN-LA ROCHE INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as U. S. application 61/166,677, filed April 3, 2009 and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

UPON SAID CONSIDERATION, we do hereby covenant and agree with the said Assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining provisional, original, continuation, continuation-in-part, divisional, reissued, re-examined or extended Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, including but not limited to, giving testimony in any proceedings or transactions involving such applications or patents, and executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of all parties hereto.

PATENT REEL: 039940 FRAME: 0399 IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals this % day of 5.47, 2010.

Nutley, New Jersey, U.S.A.

Dipen Desai

Zenaida Go

Raman Iyer

Harpreet Sandhu

Navnit Shah

ACKNOWLEDGMENT

United States of America)
State of New Jersey
County of Essex

On July 8, 2010, before me personally appeared Dipen Desai, Zenaida Go, Raman Iyer, Harpreet Sandhu and Navnit Shah to me known to be the persons described in the foregoing Assignment, who acknowledged that they executed the foregoing Assignment of their own free will for the purposes therein set forth.

BETTYANN HEDEMUS Notary Public of New Jersey Commission Expires 9/25/2012

461489

ASSIGNMENT

WHEREAS, WE, Ralph Diodone, Hans-Juergen Maier, and Nicole Wyttenbach together with Dipen Desai, Zenaida Go, Raman Iyer, Harpreet Sandhu and Navnit Shah (Assignors) have invented certain new and useful improvements which are described and claimed in application for United States Patent and identified as U. S. application 61/166,677, filed April 3, 2009, entitled

COMPOSITIONS AND USES THEREOF

WHEREAS, HOFFMANN-LA ROCHE INC., a corporation organized and existing under and by virtue of the laws of the State of New Jersey, and having its principal place of business at Nutley, New Jersey, is desirous of acquiring the entire interest in and to said invention, said application and the Patent to be obtained therefor;

NOW, THEREFORE, for and in consideration of One Dollar (\$1.00) and other good and valuable consideration to us in hand paid, the receipt and sufficiency whereof are hereby acknowledged, we have sold, assigned, and set over, and by these presents do hereby sell, assign, and set over unto the said HOFFMANN-LA ROCHE INC. (Assignee), and said Assignee's legal representatives, successors, the entire right, title and interest, for the whole world, in and to said invention and said application, as well as any subsequent application which claims priority based upon the filing date of said application identified as 61/166,677, filed April 3, 2009 and the patents, both domestic and foreign, that may or shall result therefrom including the right to claim in respect of any subsequent United States and foreign patent applications and patents, the priority date of said application under any United States statute and international convention or treaty; and we do hereby authorize and request the issuance of said patents, domestic and foreign, conformably to the terms of this Agreement.

UPON SAID CONSIDERATION, we do hereby covenant and agree with the said Assignee that we will not execute any writing or do any act whatsoever conflicting with these presents, and that we will at any time upon request, without further or additional consideration, but at the expense of the said Assignee, execute such additional assignments and other writings and do such additional acts as said Assignee may deem necessary or desirable to perfect the Assignee's enjoyment of this grant, and render all necessary assistance in making application for and obtaining provisional, original, continuation, continuation-in-part, divisional, reissued, re-examined or extended Patent of the United States or of any and all foreign countries on said invention, and in enforcing any rights or chooses in action accruing as a result of such applications or patents, including but not limited to, giving testimony in any proceedings or transactions involving such applications or patents, and executing preliminary statements and other affidavits, it being understood that the foregoing covenant and agreement shall bind and inure to the benefit of the assigns and legal representatives of all parties hereto.

PATENT REEL: 039849 FRAME: 0396 IN WITNESS WHEREOF, we have hereunto set our hands and affixed our seals this 15 day of July , 2010.

Place of execution:

Basel, Switzerland

Ralph Diodone

Hans-Juergen Maier

Nicole Wyttenbach

461486