PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

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

CONVEYING PARTY DATA

| Name | Execution Date |
|--------------------|----------------|
| Takahiko TANIGUCHI | 08/22/2011 |
| Masato YOSHIKAWA | 08/09/2011 |
| Kasei MIURA | 08/10/2011 |
| Tomoaki HASUI | 08/10/2011 |
| Eiji HONDA | 08/10/2011 |
| Keisuke IMAMURA | 08/10/2011 |
| Makoto KAMATA | 08/10/2011 |
| Haruhi KAMISAKI | 08/10/2011 |
| John F. QUINN | 08/24/2011 |
| Joseph RAKER | 08/25/2011 |
| Fatoumata CAMARA | 08/24/2011 |
| Yi WANG | 08/23/2011 |

RECEIVING PARTY DATA

| Name: | TAKEDA PHARMACEUTICAL COMPANY LIMITED | |
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| City: | Osaka | |
| State/Country: | JAPAN | |
| Postal Code: | 541-0045 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 13166212 |

CORRESPONDENCE DATA

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PATENT REEL: 026865 FRAME: 0981 DP \$40,00 13166212

501649992

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NAME OF SUBMITTER: Donna King

Total Attachments: 6

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PATENT REEL: 026865 FRAME: 0982

ASSIGNMENT

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned

Insert Name(s) of Inventor(s)

Takahiko TANIGUCHI, Masato YOSHIKAWA, Kasei MIURA, Tomoaki HASUI,

Eiji HONDA, Keisuke IMAMURA, Makoto KAMATA, Haruhi KAMISAKI,

John F. QUINN, Joseph RAKER, Fatoumata CAMARA and Yi WANG

the undersigned hereby sell(s) and assign(s) to

Insert Name(s) of Assignee(s)

Address

Takeda Pharmaceutical Company Limited

of 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0045 Japan

(hereinafter designated as the Assignee) the entire right, title and interest for the United States as defined in 35 USC 100, in the invention known as

Title of Invention

FUSED HETEROCYCLIC COMPOUNDS

for which an application for patent in the United States has been executed by the undersigned

Date of Signing of Application

August 9, 2011, August 10, 2011 and August 22, 2011

The undersigned agree(s) to execute all papers necessary in connection with this application and any continuing, divisional or reissue applications thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

The undersigned agree(s) to execute all papers necessary in connection with any interference which may be declared concerning this application or continuation, division or reissue thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned agree(s) to execute all papers and documents and perform any act which may be necessary in connection with claims or provisions of the International Convention for Protection of Industrial Property or similar agreements.

The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States patent to the Assignee.

The undersigned hereby authorize(s) and request(s) the Commissioner of Patents to issue any and all Letters Patents of the United States resulting from said application or any division or divisions or continuing or reissue applications thereof to the said Assignee, as Assignee of the entire interest, and hereby covenants that he has (they have) full right to convey the entire interest herein assigned, and that he has (they have) not executed, and will not execute, any agreement in conflict herewith.

The undersigned hereby grant(s) the firm of WENDEROTH, LIND & PONACK, L.L.P., 1030 15th Street, N.W., Suite 400 East, Washington, D.C. 20005-1503, the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent Office for recordation of this document.

| | | by the undersigned on | the date(s) opposite the undersigned |
|--------|--|--|---|
| name | | | |
| Date . | send August, 2019 | Name of the Inventor | Takahiko TANIGUCHI |
| Date_ | August 9, 2011, | Name of the Inventor | mt Aphina Masato YOSHIKAWA |
| Date . | August 10, 2011, | Name of the Inventor | Kasei MIURA |
| Date . | Anguse 10,2011. | Name of the Inventor | Tomoaki Masmi Tomoaki HASUI |
| Date . | August, 18. 2011 | Name of the Inventor | Confliction Eiji HONDA |
| Date . | August 10,2011, | Name of the Inventor | Ceisuke Inahara Keisuke IMAMURA |
| Date . | August 10, 2011 | Name of the Inventor | Mahote Kamata Makoto KAMATA |
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| Date | | Name of the Inventor | John F. QUINN |
| Data | | Name of the Inventor | |
| Date. | | Traine of the inventor | Joseph RAKER |
| Date . | · : | Name of the Inventor | Fatoumata CAMARA |
| Date | | Name of the Inventor | Yi WANG |
| | | | Yi WANG |
| | | • | |
| then | (This assignment should pre the execution by the Inventor(s | ferably be acknowledge s) should be witnessed | ed before a United States Consul. If not, by at least two witnesses who sign here. |
| | Witness Tak | ina tevery | · . |
| | | | Takashi MIKI |
| | Witness Reg | ina tereign | |
| | | • | Regina LEVESQUE |

Title of Invention _

ASSIGNMENT

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<u>Eiji HONDA, Keisuke IMAMURA, Makoto KAMATA, Haruhi KAMISAKI,</u>

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Takeda Pharmaceutical Company Limited

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| пате(| In witness whereof, e.s). | xecuted by the undersigned on | the date(s) opposite the undersigned |
|---------|--|---------------------------------|--|
| Date_ | | , Name of the Inventor _ | |
| | | | Takahiko TANIGUCHI |
| Date _ | | , Name of the Inventor _ | |
| _ | • | | Masato YOSHIKAWA |
| Date _ | | , Name of the Inventor | Vani Mura |
| Dote | | N- CV | Kasei MIURA |
| Date | | , Name of the Inventor | Tomoaki HASUI |
| Date | | , Name of the Inventor | |
| | | , remic of the inventor | Eiji HONDA |
| Date _ | | , Name of the Inventor | • |
| | | | Keisuke IMAMURA |
| Date _ | | , Name of the Inventor | |
| | | | Makoto KAMATA |
| Date | *************************************** | , Name of the Inventor | |
| | | | Haruhi KAMISAKI |
| Date | 5-24-2011 | , Name of the Inventor | July J |
| | -1CA /. | | John F. QUINN |
| Jate | as Aug 11 | , Name of the Inventor | |
|)ata | 8 124 1201 | , Name of the Inventor | Joseph RAKER |
| | | | Fatoumata CAMADA |
| Date | 8/23/11 | , Name of the Inventor | IV |
| | · · · · · · · · · · · · · · · · · · · | , wante of the inventor | Yi WANG |
| | | | |
| hen the | This assignment shou | ld preferably be acknowledged b | pefore a United States Consul. If not, |
| | <u>. </u> | <i></i> . | at least two witnesses who sign here.) |
| | . Witness | duns | FOR YI WANG |
| | | 1.01 | The strong |
| | 2. Witness | Sallink |) |
| | | | |
| | 1 100 4000 | us church | JIHN F. QUINN |
| | 1. Withe ss | James | - L FOR FATOUMATA CAMAR |
| | | Christin Buy | FATOUMATA CAMAR |
| | 2. Witness | Christian 1345 | _) |
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| | 1. 0014 035 | 7 remains 12 | For Joseph Raker |
| | 2 Witness | Theward Lane Walher | , i |
| | - , JO J | | PATENT |

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