502955032 08/28/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT3001631

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

CONVEYING PARTY DATA

| Name | Execution Date |
|----------------------------|----------------|
| DR. GERD KLEEFELD | 06/07/2014 |
| DR. ROBRECHT FROYMAN | 06/08/2014 |
| DR. JULIA CHARLOTTE DÖRNER | 06/01/2014 |
| DR. CAROLIN LUDWIG | 07/24/2014 |
| DR. SATOSHI OMURA | 07/08/2014 |
| SUNAZUKA TOSHIAKI | 07/07/2014 |
| HIROSE TOMOYASU | 07/07/2014 |
| SUGAWARA AKIHIRO | 07/07/2014 |
| SHIOMI KAZURO | 07/04/2014 |

RECEIVING PARTY DATA

| Name: | BAYER INTELLECTUAL PROPERTY GMBH |
|-----------------|----------------------------------|
| Street Address: | ALFRED-NOBEL-STR. 10 |
| City: | MONHEIM |
| State/Country: | GERMANY |
| Postal Code: | 40789 |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 14360713 |

CORRESPONDENCE DATA

Fax Number:

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: 862-404-6942

Email: latoya.dawkins@bayer.com
Correspondent Name: BAYER CORPORATION
Address Line 1: 100 BAYER BOULEVARD
Address Line 2: ATTN: BARBARA SHIMEI

Address Line 4: WHIPPANY, NEW JERSEY 07981

| ATTORNEY DOCKET NUMBER: | BHC111052 PCT US |
|-------------------------|------------------|
| NAME OF SUBMITTER: | LATOYA DAWKINS |

| SIGNATURE: /Latoya Dawkins/ | | | | |
|---|----------------|--|--|--|
| DATE SIGNED: | 08/28/2014 | | | |
| Total Attachments: 14 | | | | |
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ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, 1. THE KITASATO INSTITUTE

- 2. BAYER INTELLECTUAL PROPERTY GMBH of
- 1. 9-1, Shirokane 5-Chome, Minato-ku, Tokyo 108-8641, JP
- 2. Alfred-Nobel-Str. 10, 40789 Monheim am Rhein, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including reviewed, and I/we request the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. rights of priority under the International Convention set §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set §119, and I/we hereby agree that the assignee may apply for foreign Letters Patent on the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the upon to do so b

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

DECLARATION

| Description of PCT International Application | As a belo | ow named inventor, I hereby | decla | re tha | t this assignment with declaration is directed to: |
|--|-----------|-----------------------------|-------|----------|---|
| | | | | ∇ | United States Application or PCT International Application Number PCT/EP2012/073277 filed on 2012-11-21 (Confirmation No. |

PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled:

ANTIBACTERIAL TYLOSIN DERIVATIVES AND METHODS FOR THEIR PREPARATION

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POST-AIA

The above identified application was made or was authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization To Permit Access To Application by Participating Office

☐ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application-as-filed with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 1. Dr. Gerd KLEEFELD 41468 Neuss, DE Franziskusstr.27, 41468 Neuss, DE DE DE DA. Well Ulufeld Vains, 7/6/4 |
|--|---|
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 2. Dr. Robrecht FROYMAN 40789 Monheim, DE Heerweg 112, 40789 Monheim, DE BE |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 3. Dr. Julia Charlotte DÖRNER 51429 Bergisch Gladbach, DE Am Rabenhorst 2, 51429 Bergisch Gladbach, DE DE |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 4. Dr. Carolin LUDWIG 40668 Meerbusch, DE Fischelner Str. 67, 40668 Meerbusch, DE DE |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 5. Prof. Dr. Satoshi OMURA 157-0076 Tokyo, Japan 3-12, Okamoto 3-chome, 157-0076 Tokyo, Japan JP |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 6. Sunazuka TOSHIAKI 273-0043 Chiba, JP 353-6-405, Gyoda-cho, Funabashi-shi, Chiba, 273-0043, JP JP |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 7. Hirose TOMOYASU 215-0003 Kanagawa, JP 44-12-2, Takaishi 2-chome, Asao-ku, Kawasaki-shi, Kanagawa, 215-0003, JP JP |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: | Sugawara AKIHIRO 177-0044 Tokyo, JP 4-20-303, Kamishakujii 2-Chome, Nerimku, Tokyo 177-0044, JP JP |

SIGNATURE / DATE

FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE

Shiomi KAZURO
 150-0014 Tokyo, JP
 23-7-202, Ebisu 1-Chome, Shibuya-ku, Tokyo 150-0013, JP
 JP

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5. Prof. Dr. Satoshi OMURA RESIDENCE: 157-0076 Tokyo, Japan POST OFFICE ADDRESS: 3-12, Okamoto 3-chome, 157-0076 Tokyo, Japan CITIZENSHIP: SIGNATURE / DATE FULL NAME OF INVENTOR: 6. Sunazuka TOSHIAKI RESIDENCE: 273-0043 Chiba, JP POST OFFICE ADDRESS: 353-6-405, Gyoda-cho, Funabashi-shi, Chiba, 273-0043, JP CITIZENSHIP: SIGNATURE / DATE FULL NAME OF INVENTOR: 7. Hirose TOMOYASU RESIDENCE: 215-0003 Kanagawa, JP POST OFFICE ADDRESS: 44-12-2, Takaishi 2-chome, Asao-ku, Kawasaki-shi, Kanagawa,

215-0003, JP

8. Sugawara AKIHIRO

177-0044 Tokyo, JP

4-20-303, Kamishakujii 2-Chome, Nerimku, Tokyo 177-0044, JP

JP

CITIZENSHIP:

RESIDENCE:

CITIZENSHIP: SIGNATURE / DATE

SIGNATURE / DATE

FULL NAME OF INVENTOR:

POST OFFICE ADDRESS:

FULL NAME OF INVENTOR:
RESIDENCE:
POST OFFICE ADDRESS:
CITIZENSHIP:
SIGNATURE / DATE

9. Shiomi KAZURO 150-0014 Tokyo, JP 23-7-202, Ebisu 1-Chome, Shibuya-ku, Tokyo 150-0013, JP JP

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

ASSIGNMENT

Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

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- 1. 9-1, Shirokane 5-Chome, Minato-ku, Tokyo 108-8641, JP
- 2. Alfred-Nobel-Str. 10, 40789 Monheim am Rhein, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby seil, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

DECLARATION

| As a below named inventor, I hereby declare that this assignment with declaration is directed to: | | | | | |
|---|---------------------------|----|---|---|--|
| | The attached application, | OR | Ø | United States Application or PCT International Application Number PCT/FP2012/073277 filed on 2012-11-21 (Confirmation No. | |

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| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 6. Sunazuka TOSHIAKI 273-0043 Chiba, JP 353-6-405, Gyoda-cho, Funabashi-shi, Chiba, 273-0043, JP JP Limit Lonka 2. July 20/4 |
| FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 7. Hirose TOMOYASU 215-0003 Kanagawa, JP 44-12-2, Takaishi 2-chome, Asao-ku, Kawasaki-shi, Kanagawa, 215-0003, JP JP Jerose Janepson 7. July, 2014 |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 8. Sugawara AKIHIRO 177-0044 Tokyo, JP 4-20-303, Kamishakujii 2-Chome, Nerimku, Tokyo 177-0044, JI |

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9. Shiomi KAZURO 150-0014 Tokyo, JP

23-7-202, Ebisu 1-Chome, Shibuya-ku, Tokyo 150-0013, JP

4. July, 2014

PATENT

REEL: 033631 FRAME: 0892

Docket No.:

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DECLARATION

| As a belo | ow named inventor, I hereby | decla | re that | this assignment with declaration is directed to: |
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| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 5. Prof. Dr. Satoshi OMURA 157-0076 Tokyo, Japan 3-12, Okamoto 3-chome, 157-0076 Tokyo, Japan JP |
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Shiomi KAZURO
 150-0014 Tokyo, JP
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Whereas, I/We, the undersigned inventor(s) hereinafter called assignor(s), have invented certain improvements described in the application identified below; and

Whereas, 1. THE KITASATO INSTITUTE

- 2. BAYER INTELLECTUAL PROPERTY GMBH of
- 1. 9-1, Shirokane 5-Chome, Minato-ku, Tokyo 108-8641, JP
- 2. Alfred-Nobel-Str. 10, 40789 Monheim am Rhein, DE, (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

I/We, the above named assignor(s), hereby sell, assign and transfer to the above named assignee, its successors, legal representatives, and assigns, my/our entire right, title and interest, if any, in the invention and the application for the United States of America, including all direct and indirect divisions, continuations, and continuations-in-part thereof, and all original, extended, reissued, reviewed, and reexamined Letters Patent of the United States, and all countries foreign thereto, that may be granted thereon, including rights of priority under the International Convention of Paris (1883) as amended, including the right to claim priority under 35 U.S.C. §119, and I/we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and I/we hereby agree that the assignee may apply for foreign Letters Patent on the invention and I/we will without further consideration, communicate all facts know to me/us and execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee, its successors, legal representatives, or assigns. I/We further represent and warrant that I/We have the full right to convey the interest assigned by this assignment, and that I/We have not granted any rights inconsistent with the rights granted herein. I/We further acknowledge an obligation of assignment of this invention to assignee at the time the invention was made.

(Legalization not required for recording but is prima facie evidence of execution under 35 U.S.C. §261)

DECLARATION

| As a below named inventor, I hereby declare that this assignment with declaration is directed to: | | | | | | |
|---|---------------------------|----|--|---|--|--|
| | The attached application, | OR | | United States Application or PCT International Application Number PCT/EP2012/073277 filed on 2012-11-21 (Confirmation No | | |
| | | | | | | |

PRE-AIA

My residence, mailing address, and citizenship are as stated below next to my name.

I believe the inventor(s) named below to be the original and first inventor(s) of the subject matter which is claimed and for which a patent is sought on the invention titled:

ANTIBACTERIAL TYLOSIN DERIVATIVES AND METHODS FOR THEIR PREPARATION

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims, as amended by any amendment specifically referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR 1.56, including for continuation-in-part applications, material information which became available between the filing date of the prior application and the national or PCT international filing date of the continuation-in-part application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

POST-AIA

The above identified application was made or was authorized to be made by me.

I believe I am the original inventor or an original joint inventor of a claimed invention in the application.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

Authorization To Permit Access To Application by Participating Office

☐ If checked, the undersigned hereby grants the USPTO authority to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the World Intellectual Property Office (WIPO), and any other intellectual property offices in which a foreign application claiming priority to the above-identified application is filed access to the above-identified patent application. See 37 CFR 1.14(c) and (h). This box should not be checked if the applicant does not wish the EPO, JPO, KIPO, or other intellectual property office in which a foreign application claiming priority to the above-identified application is filed to have access to the application.

In accordance with 37 CFR 1.14(h)(3), access will be provided to a copy of the application-as-filed with respect to: 1) the above-identified patent application-as-filed, 2) any foreign application to which the above-identified application claims priority under 35 USC 119(a)-(d) if a copy of the foreign application that satisfies the certified copy requirement of 37 CFR 1.55 has been filed in the above-identified patent application, and 3) any U.S. application-as-filed from which benefit is sought in the above-identified patent application.

In accordance with 37 CFR 1.14(c), access may be provided to information concerning the date of filing the Authorization to Permit Access to Application by Participating Office.

| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 1. Dr. Gerd KLEEFELD 41468 Neuss, DE Franziskusstr.27, 41468 Neuss, DE DE |
|--|--|
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 2. Dr. Robrecht FROYMAN 40789 Monheim, DE Heerweg 112, 40789 Monheim, DE BE |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 3. Dr. Julia Charlotte DÖRNER 51429 Bergisch Gladbach, DE Am Rabenhorst 2, 51429 Bergisch Gladbach, DE DE Ol. Julie Zol 4 |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 4. Dr. Carolin LUDWIG 40668 Meerbusch, DE Fischelner Str. 67, 40668 Meerbusch, DE DE |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 5. Prof. Dr. Satoshi OMURA 157-0076 Tokyo, Japan 3-12, Okamoto 3-chome, 157-0076 Tokyo, Japan JP |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 6. Sunazuka TOSHIAKI 273-0043 Chiba, JP 353-6-405, Gyoda-cho, Funabashi-shi, Chiba, 273-0043, JP JP |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE | 7. Hirose TOMOYASU 215-0003 Kanagawa, JP 44-12-2, Takaishi 2-chome, Asao-ku, Kawasaki-shi, Kanagawa, 215-0003, JP JP |
| FULL NAME OF INVENTOR: RESIDENCE: POST OFFICE ADDRESS: CITIZENSHIP: | 8. Sugawara AKIHIRO 177-0044 Tokyo, JP 4-20-303, Kamishakujii 2-Chome, Nerimku, Tokyo 177-0044, JP |

SIGNATURE / DATE

FULL NAME OF INVENTOR: RESIDENCE; POST OFFICE ADDRESS: CITIZENSHIP: SIGNATURE / DATE

Shiomi KAZURO
 150-0014 Tokyo, JP
 23-7-202, Ebisu 1-Chome, Shibuya-ku, Tokyo 150-0013, JP
 JP

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