505713199 10/08/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5760009

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
MASAKI OGINO	01/22/2019
EIJI KIMURA	07/11/2019
SHINKICHI SUZUKI	07/11/2019
KOUJI FUJI	07/11/2019
TOMOHIRO OHASHI	07/11/2019
MAKOTO FUSHIMI	07/11/2019
KEI MASUDA	08/04/2019
TATSUKI KOIKE	07/11/2019
TAKESHI WAKABAYASHI	07/11/2019
JINICHI YONEMORI	07/18/2019
MASAMI YAMADA	01/25/2019

RECEIVING PARTY DATA

Name:	TAKEDA PHARMACEUTICAL COMPANY LIMITED
Street Address:	1-1, DOSHOMACHI 4-CHOME, CHUO-KU
City:	OSAKA-SHI, OSAKA
State/Country:	JAPAN
Postal Code:	541-0045

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16083295

CORRESPONDENCE DATA

Fax Number: (612)455-3801

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.

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Email: pkerkhove@hsml.com

Correspondent Name: HAMRE, SCHUMANN, MUELLER & LARSON, P.C.

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Address Line 2: SUITE 2700

Address Line 4: MINNEAPOLIS, MINNESOTA 55402

ATTORNEY DOCKET NUMBER:	20039.0098USWO
NAME OF SUBMITTER:	DOUGLAS P. MUELLER
SIGNATURE:	/dpmueller/
DATE SIGNED:	10/08/2019

Total Attachments: 30

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ASSIGNMENT OF PATENT APPLICATION

WHEREAS,

- 1. Masaki OGINO residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 2. Eiji KIMURA residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 3. Shinkichi SUZUKI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 4. Kouji FUJI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 5. Tomohiro OHASHI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 6. Makoto FUSHIMI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 7. Kei MASUDA residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 8. Tatsuki KOIKE residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 9. Takeshi WAKABAYASHI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 10. Jinichi YONEMORI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan, and

(hereinafter called "THE UNDERSIGNED") have made an invention and have executed an application for Letters Patent of the United States for this invention which was filed on , entitled AROMATIC RING COMPOUND, and which has been given application serial number ;

and

WHEREAS TAKEDA PHARMACEUTICAL COMPANY LIMITED (hereinafter "ASSIGNEE") a corporation organized under the laws of Japan and having an office and place of business at 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0045 Japan wishes to acquire the entire right, title and interest in and to said invention and patent application and any Letters Patent to be obtained therefor;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, THE UNDERSIGNED hereby sell, assign, and transfer to the ASSIGNEE, its successors, legal representative and assigns, the entire right, title and interest for the United States in and to the invention disclosed in said application, and in and to said application, as well as to all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and THE UNDERSIGNED hereby authorize and request the Commissioner of Patents of the United States to issue all Letters Patent for said invention to the ASSIGNEE of the entire right, title and interest in and to the same, in accordance with the terms of this instrument.

THE UNDERSIGNED hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to the UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, it successors or assigns, the entire right, title and interest in and to the said invention, patent applications, Letters Patent, rights, titles, benefits, privileges, and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represent and agree with said ASSIGNEE, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by the UNDERSIGNED.

Masales	Olgino	January 22, 201 Date
1. Signature	Ogino Masaki OGINO	Date
Witness:		Date
Witness:		Date
2. Signature	Eiji KIMURA	Date
Witness:		Date
Witness:		Date
3. Signature	Shinkichi SUZUKI	Date
Witness:		Date
Witness:		Date
4. Signature	Kouji FUJI	Date
Witness:		Date
Witness:		Date

5. Signature	Tomohiro OHASHI	Date
Witness:	ACCUSATION OF THE PROPERTY OF	Date
Witness:		Date
6. Signature	Makoto FUSHIMI	Date
Witness:		Date
Witness:		Date
7. Signature	Kei MASUDA	Date
Witness:		Date
Witness:		Date
8. Signature	Tatsuki KOIKE	Date
Witness:		Date
Witness:		Date

9. Signature Takeshi WAKABAYASHI	Date
Witness:	Date
Witness:	Date
10. Signature Jinichi YONEMORI	Date
Witness:	Date
Witness:	Date
11. Signature Masami YAMADA	Date
Witness:	Date
Witness:	Date

ASSIGNMENT OF PATENT APPLICATION

WHEREAS,

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1. Signature	Masaki OGINO	Date
Witness:		Date
Witness:		Date
Eiji K 2. Signature the tag Witness: Yaich: K	imuva Eiji KIMURA	July 11, 2019 Date July 11, 2019 Date
Yoshitern It. Witness: Yoshiteru	lto	July 11, 2019 Date
Shinkichi Si 3. Signature Sh Yoshitem Ito Witness: Yoshiteru	ninkichi SUZUKI	July 11, 2019 Date July 11, 2019 Date
Northe Total Witness: Northito To.	•	July 11, 2019 Date
4. Signature	Kouji FUJI	Date
Witness:		Date
Witness:		Date

Towohiro Ohashi 5. Signature Tomohiro OHASHI FEI-11 1	July 11, 2019 Date July 11, 2019 Date July 11, 2019 Date
6. Signature Makoto FUSHIMI	Date
Witness:	Date
Witness:	Date
7. Signature Kei MASUDA	Date
Witness:	Date
Witness:	Date
Tatsuki Kolke 8. Signature Tatsuki KOIKE The take — Witness: Yaichi Kajita	July 11, 2019 Date July 11, 2019 Date
Yoshiteru Ito Witness: Yoshiteru Ito	July 11, 2019 Date

0 1	
Takeshi Wahabayashi	July 11, 2019
9. Signature Takeshi WAKABAYASHI	Date
Vitness: SHinichi Masada	July 11, 2019
大製、紀在 Witness: NORIO Oyaby	July 11, 20
Witness: NORTO Oyaby	Date
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10. Signature Jinichi YONEMORI	Date
Witness:	Date
Witness:	Date
11. Signature Masami YAMADA	Date
11. Signature Masami TAMADA	Date
XXII.	
Witness:	Date

Witness:	Date

ASSIGNMENT OF PATENT APPLICATION

WHEREAS,

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1. Signature	Masaki OGINO	Date
Witness:		Date
Witness:	······································	Date
2. Signature	Eiji KIMURA	Date
Witness:		Date
Witness:		Date
3. Signature	Shinkichi SUZUKI	Date
Witness:	,	Date
Witness:	· · · · · · · · · · · · · · · · · · ·	Date
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4. Signature	Kouji FUJI	Date
Witness:		Date
Witness:		Date

5. Signature Tom	ohiro OHASHI	Date
Witness:		Date
Witness:		Date
长見 6. Signature N	Makoto FUSHIMI	July 11, 2019 Date
Witness: Hideyul	ki IGAWA	July 11, 2019 Date July 11, 2019 Date July 11, 2019 Date
Witness: Paisuke	Tomita	July /1 , 2019 Date
7. Signature	Kei MASUDA	Date
Witness:		Date
Witness:		Date
8. Signature	Tatsuki KOIKE	Date
Witness:		Date
Witness:		Date

9. Signature Takesh	i WAKABAYASHI	Date	
Witness:		Date	
Witness:		Date	
10. Signature Jin	nichi YONEMORI	Date	
Witness:		Date	
Witness:		Date	-
11. Signature	Masami YAMADA	Date	
Witness:		Date	-
Witness:		Date	

ASSIGNMENT OF PATENT APPLICATION

WHEREAS.

- 1. Masaki OGINO residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
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1. Signature	Masaki OGINO	Date	
Witness:		Date	
Witness:		Date	
2. Signature	Eiji KIMURA	Date	
Witness:		Date	
Witness:		Date	
3. Signature Si	hinkichi SUZUKI	Date	
Witness:		Date	
Witness:	<u>.</u>	Date	
4. Signature	Houji FUJI	Date Date	19
Witness:		Date	
Witness:		Date .	

5. Signature	Tomohiro OHASHI	Date
Witness:		Date
Witness:		Date
6. Signature	Makoto FUSHIMI	Date
Witness:		Date
Witness:		Date
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Witness:		Date
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8. Signature	Tatsuki KOIKE	Date
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Witness:		Date

9. Signature Takeshi WAKABAYASHI	Date
Witness:	Date
Witness:	Date
10 Circuture Lividi VONEMORI	
10. Signature Jinichi YONEMORI	Date
Witness:	Date
Witness:	Date
mun Junch	Jennery 25, 2019
11. Signature Masami YAMADA	Date Date
Witness:	Date
Witness	Data

ASSIGNMENT OF PATENT APPLICATION

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(hereinafter called "THE UNDERSIGNED") have made an invention and have executed an application for Letters Patent of the United States for this invention which was filed on , entitled AROMATIC RING COMPOUND, and which has been given application serial number ;

and

WHEREAS TAKEDA PHARMACEUTICAL COMPANY LIMITED (hereinafter "ASSIGNEE") a corporation organized under the laws of Japan and having an office and place of business at 1-1, Doshomachi 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0045 Japan wishes to acquire the entire right, title and interest in and to said invention and patent application and any Letters Patent to be obtained therefor;

NOW, THEREFORE, for and in consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, THE UNDERSIGNED hereby sell, assign, and transfer to the ASSIGNEE, its successors, legal representative and assigns, the entire right, title and interest for the United States in and to the invention disclosed in said application, and in and to said application, as well as to all divisions, continuations, or renewals thereof, all Letters Patent which may be granted therefrom, and all reissues or extensions of such patents, and THE UNDERSIGNED hereby authorize and request the Commissioner of Patents of the United States to issue all Letters Patent for said invention to the ASSIGNEE of the entire right, title and interest in and to the same, in accordance with the terms of this instrument.

THE UNDERSIGNED hereby agree that THE UNDERSIGNED, their executors and legal representatives will make, execute and deliver (without charge but at the expense of the ASSIGNEE) any and all other instruments in writing including any and all further application papers, affidavits, assignments and other documents, and will communicate to said ASSIGNEE, its successors and representatives all facts known to the UNDERSIGNED relating to said invention and the history thereof and will testify in all legal proceedings and generally do all things which may be necessary or desirable to vest the ASSIGNEE, it successors or assigns, the entire right, title and interest in and to the said invention, patent applications, Letters Patent, rights, titles, benefits, privileges, and advantages hereby sold, assigned and conveyed, or intended so to be.

THE UNDERSIGNED represent and agree with said ASSIGNEE, its successors and assigns, that no assignment, grant, mortgage, license or other agreement affecting the rights and property herein conveyed has been or will be made to others by the UNDERSIGNED, and that full right to convey the same as herein expressed is possessed by the UNDERSIGNED.

1. Signature	Masaki OGINO	Date
Witness:	<u></u>	Date
Witness:	:	Date
2. Signature	Eiji KIMURA	Date
Witness:		Date
Witness:		Date
3. Signature	Shinkichi SUZUKI	Date
Witness:		Date
Witness:		Date
4. Signature	Kouji FUJI	Date
Witness:		Date
Witness:		Date

5. Signature	Tomohiro OHASHI	Date
Witness:		Date
Witness:		Date
6. Signature	Makoto FUSHIMI	Date
Witness:		Date
Witness:		Date
7. Signature	Kei MASUDA	Date
Witness:		Date
Witness:		Date
8. Signature	Tatsuki KOIKE	Date
Witness:		Date
Witness:		Date

9. Signature Takeshi WAKABAYASHI	Date
Witness:	Date
Witness:	Date
Juich Journe Jinichi YONEMORI	July 18,2019
Witness:	Date
Witness:	Date
11. Signature Masami YAMADA	Date
Witness:	Date
Witness	Data

ASSIGNMENT OF PATENT APPLICATION

WHEREAS.

- 1. Masaki OGINO residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 2. Eiji KIMURA residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 3. Shinkichi SUZUKI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 4. Kouji FUJI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 5. Tomohiro OHASHI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 6. Makoto FUSHIMI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 7. Kei MASUDA residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 8. Tatsuki KOIKE residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 9. Takeshi WAKABAYASHI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan,
- 10. Jinichi YONEMORI residing at c/o TAKEDA PHARMACEUTICAL COMPANY LIMITED, 26-1, Muraoka-Higashi 2-chome, Fujisawa-shi, Kanagawa 251-0012 Japan and a citizen of Japan, and

(hereinafter called "THE UNDERSIGNED") have made an invention and have executed an application for Letters Patent of the United States for this invention which was filed on , entitled AROMATIC RING COMPOUND, and which has been given application serial number ;

and

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1. Signature	Masaki OGINO	Date
Witness:	<u> </u>	Date
Witness:	•	Date
2. Signature	Eiji KIMURA	Date
Witness:		Date
Witness:	·	Date
3. Signature	Shinkichi SUZUKI	Date
Witness:	·	Date
Witness:	<u>. </u>	Date
4. Signature	Kouji FUJI	Date
Witness:	. <u> </u>	Date
Witness:		Date

5. Signature	Tomohiro OHASHI	Date
T T *		
Witness:		Date
Witness:		Date
6. Signature	Makoto FUSHIMI	Date
Witness:		Date
Witness:		Date
Kei	Manda	Aug 4, 2019
7. Signature	Kei MASUDA	Date
Witness:	<u> </u>	Date
Witness:		Date
8. Signature	Tatsuki KOIKE	Date
Witness:		Date
Witness:		Date

9. Signature Takeshi WAKABAYASHI	Date
Witness:	Date
Witness:	Date
10. Signature Jinichi YONEMORI	Date
Witness:	Date
Witness:	Date
11. Signature Masami YAMADA	Date
Witness:	Date
Witness:	Date

RECORDED: 10/08/2019