

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
Stylesheet Version v1.2

EPAS ID: PAT5775050

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
SHINOBU SASAKI	10/02/2019
MASAKI SETO	10/03/2019
KAZUAKI TAKAMI	10/03/2019
HARUHI ANDO	10/03/2019
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TAKEDA PHARMACEUTICAL COMPANY LIMITED
<b>Street Address:</b>	1-1, DOSHOMACHI 4-CHOME, CHUO-KU
<b>City:</b>	OSAKA-SHI, OSAKA
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	541-0045
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	16606043
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(612)455-3801
<i>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.</i>	
<b>Phone:</b>	612-455-3800
<b>Email:</b>	pkerkhove@hsml.com
<b>Correspondent Name:</b>	HAMRE, SCHUMANN, MUELLER & LARSON, P.C.
<b>Address Line 1:</b>	45 SOUTH SEVENTH STREET
<b>Address Line 2:</b>	SUITE 2700
<b>Address Line 4:</b>	MINNEAPOLIS, MINNESOTA 55402-1683
<b>ATTORNEY DOCKET NUMBER:</b>	20039.0101USWO
<b>NAME OF SUBMITTER:</b>	DOUGLAS P. MUELLER
<b>SIGNATURE:</b>	/dpmueller/
<b>DATE SIGNED:</b>	10/17/2019
<b>Total Attachments: 9</b>	
source=Assignment_0101#page1.tif	
source=Assignment_0101#page2.tif	

source=Assignment\_0101#page3.tif  
source=Assignment\_0101#page4.tif  
source=Assignment\_0101#page5.tif  
source=Assignment\_0101#page6.tif  
source=Assignment\_0101#page7.tif  
source=Assignment\_0101#page8.tif  
source=Assignment\_0101#page9.tif

Docket No.

## ASSIGNMENT OF PATENT APPLICATION

WHEREAS,

1. Shinobu SASAKI 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. Masaki SETO 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. Kazuaki TAKAMI 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

4. Haruhi ANDO 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,

(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 HETEROCYCLIC COMPOUNDS USEFUL AS MODULATORS OF ACETYLCHOLINE RECEPTORS, 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, its 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.

IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below.

Shinobu Sasaki  
1. Signature                      Shinobu SASAKI

October 02, 2019  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
2. Signature                      Masaki SETO

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

3. Signature      Kazuaki TAKAMI      Date

Witness:      Date

Witness:      Date

4. Signature      Haruhi ANDO      Date

Witness:      Date

Witness:      Date

Docket No.

**ASSIGNMENT OF PATENT APPLICATION**

WHEREAS,

1. Shinobu SASAKI 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. Masaki SETO 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. Kazuaki TAKAMI 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
4. Haruhi ANDO 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,

(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 HETEROCYCLIC COMPOUNDS USEFUL AS MODULATORS OF ACETYLCHOLINE RECEPTORS, 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, its 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.

IN TESTIMONY WHEREOF, THE UNDERSIGNED have hereunto set their hand on the dates indicated below.

1. Signature Shinobu SASAKI Date \_\_\_\_\_

Witness: \_\_\_\_\_ Date \_\_\_\_\_

Witness: \_\_\_\_\_ Date \_\_\_\_\_

Masaki Seto October 3, 2019  
2. Signature Masaki SETO Date

Keisuke Imamura October 3, 2019  
Witness: KEISUKE IMAMURA Date

Michiyo Mochizuki October 3, 2019  
Witness: Michiyo MOCHIZUKI Date

Kazuaki Takami  
3. Signature      Kazuaki TAKAMI

October 3, 2019  
Date

Shinji Nakamura  
Witness:      Shinji Nakamura

October 3, 2019  
Date

Shinji Morimoto  
Witness:      Shinji Morimoto

October 3, 2019  
Date

\_\_\_\_\_  
4. Signature      Haruhi ANDO

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date



Docket No.

## ASSIGNMENT OF PATENT APPLICATION

WHEREAS,

1. Shinobu SASAKI 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. Masaki SETO 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. Kazuaki TAKAMI 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

4. Haruhi ANDO 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,

(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 HETEROCYCLIC COMPOUNDS USEFUL AS MODULATORS OF ACETYLCHOLINE RECEPTORS, 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.



3. Signature      Kazuaki TAKAMI

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

*Haruhi Ando*  
4. Signature      Haruhi ANDO

*2019, 10, 3*  
\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date

\_\_\_\_\_  
Witness:

\_\_\_\_\_  
Date