PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5045399

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
CHARLOTTE FIELDHOUSE	07/21/2016
ANGELA GLEN	07/21/2016
STEPHANIE MAINE	07/21/2016
TATSUHIKO FUJIMOTO	08/18/2016
JOHN STEPHEN ROBINSON	08/04/2016

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15995586

CORRESPONDENCE DATA

Fax Number: (978)448-8721

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: 978-448-8720

Email: DOCKETING@DTWARDLAW.COM

Correspondent Name: DT WARD, PC

Address Line 1: 142A MAIN STREET

Address Line 4: GROTON, MASSACHUSETTS 01450

ATTORNEY DOCKET NUMBER: 2111.5001USCON

NAME OF SUBMITTER: JESSICA L. CHARLAND

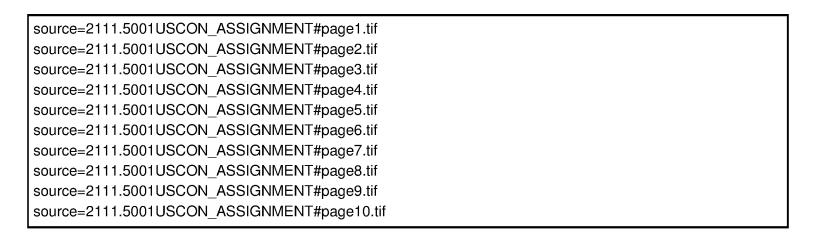
SIGNATURE: /Jessica L. Charland/

DATE SIGNED: 07/11/2018

Total Attachments: 10

PATENT REEL: 046320 FRAME: 0028

504998651



	Attorney Docket No.: 69125,255930(VESH.P0091US)		
COMBINE	D DECLARATION AND ASSIGNMENT		
Title of Invention: 1.2-Substituted Cyclon	entanes as Orexin Receptor Antagonists		
This declaration and assignment is directed to:	The attached or filed herewith application of (list of named inventors),		
or			
	The United States application or PCT international application number PCT/GB2015/050480 filed on February 19, 2015.		
Declaration	•		
As the below named inventor, I hereby de	clare that:		
The above-identified application ("Applic	ation") was made or authorized by me.		
I believe that I am the original inventor or	r an original inventor of a claimed invention or discovery in the Application.		
I have reviewed and understood the cominformation which is material to patentability as of this Application in the United States of America.	tents of the Application, including the claims, and I acknowledge the duty to disclose defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of		
I hereby acknowledge that any willful fa imprisonment of not more than five (5) years, or b	lse statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or oth for filings of this Application in the United States of America.		
Assignment			
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) which is hereby conformed for recordation in the US Patent Office.			
or			
sectioned and transferred to:	the sufficiency of which is acknowledged, I hereby assign and transfer and/or have		
To The state of th	akeda Pharmaccutical Company Limited 1-1, Doshomachi 4-chome		
	Chuo-Ku, Osaka-Shi		
	Osaka, Japan 541-0045		
Acc	orporation of the state or country of <u>JAPAN</u>		
(hereinafter designated as the "Assignee"), my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.			
Office, any other patent offices, and under the P	n with the Application in the United States Patent and Trademark Office, European Patent cooperation Treaty, and any continuing, divisional, or reissue applications thereof, and any patent term extensions or supplementary protection certificates of any such patents in connection with such applications as the Assignee may deem necessary or protection.		
	1		

I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or reissue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection certificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall 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.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignce or its nominees, in the United States, by the European Patent Office and in all other countries where Assignce may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any reexamination of any of such applications, to Assignee, and (ii) covenant that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

lotte Fieldhouse		
	 21.07.16	
ture	 Date	
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		Attorney Docket No.; 69125.255930(VESH.P0091US)		
	COMBINED DECLARATION AND ASSIGNMENT			
Ti	Title of Invention: 1.2-Substituted Cyclopentanes as Orexin Receptor Antagonists			
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	or			
		The United States application or PCT international application number PCT/GB2015/050480 filed on February 19, 2015.		
D	eclaration			
	As the below named inventor, I hereby de	clare that:		
	The above-identified application ("Applic	ation") was made or authorized by me.		
	I believe that I am the original inventor or	an original inventor of a claimed invention or discovery in the Application.		
in	I have reviewed and understood the cont formation which is material to patentability as d is Application in the United States of America.	cents of the Application, including the claims, and I acknowledge the duty to disclose lefined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of		
in	I hereby acknowledge that any willful fal aprisonment of not more than five (5) years, or be	lse statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or oth for filings of this Application in the United States of America.		
A	ssignment			
þ	I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) which is hereby conformed for recordation in the US Patent Office.			
01	r			
E at	ssigned and transferred to:	he sufficiency of which is acknowledged, I hereby assign and transfer and/or have		
	To	akeda Pharmaceutical Company Limited 1-1, Doshomachi 4-chome		
Ì		Chuo-Ku, Osaka-Shi Osaka, Japan 541-0045		
	A	reporation of the state or country of <u>JAPAN</u>		
fi a ii p d a a	(hereinafter designated as the "Assignee"), my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made. I shall execute all papers necessary in connection with the Application in the United States Patent and Trademark Office, European Patent Office any other retest offices, and under the Patent Conversition Treaty, and any continuing, divisional, or reissue applications thereof			
8	any regressination of any of such applications	and any patent term extensions or supplementary protection cartificates of any such aments in connection with such applications as the Assignee may deem necessary or		
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I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or reissue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection cartificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall 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.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any reexamination of any of such applications, to Assignee, and (ii) covenant that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

igela Glen	la Con	<u>, </u>	21 1464 2016.
mature	la Goen	- Date	

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	Attorney Docket No.: 69125.255930(VESH.P0091US)				
COMBINE	COMBINED DECLARATION AND ASSIGNMENT				
Title of Invention: 1.2-Substituted Cyclon	Title of Invention: 1.2-Substituted Cyclopentanes as Orexin Receptor Autagonists				
This declaration and assignment is directed to:	The attached or filed herewith application of (list of named inventors),				
or					
⊠	The United States application or PCT international application number PCT/GB2015/050480 filed on February 19, 2015.				
Declaration					
As the below named inventor, I hereby de	clare that:				
The above-identified application ("Application ("Applicati	cation") was made or authorized by me.				
I believe that I am the original inventor or	an original inventor of a claimed invention or discovery in the Application.				
I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of this Application in the United States of America.					
I hereby acknowledge that any wiliful fa imprisonment of not more than five (5) years, or b	lse statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or oth for filings of this Application in the United States of America.				
Assignment	·				
I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) which is hereby conformed for recordation in the US Patent Office.					
or					
assigned and transferred to:	assigned and transferred to:				
T	akeda Pharmaceutical Company Limited 1-1, Doshomachi 4-chome				
	Chuo-Ku, Osaka-Shi Osaka, Japan 541-0045				
A	exporation of the state or country of <u>JAPAN</u>				
(hereinafter designated as the "Assignee"), my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full end of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made. I shall execute all papers necessary in connection with the Application in the United States Patent and Trademark Office, European Patent Office, any other patent offices, and under the Patent Cooperation Treaty, and any continuing, divisional, or reissue applications thereof, any reexamination of any of such applications, and any patent term extensions or supplementary protection certificates of any such applications and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or					
expedient.	1				

I shall execute all papers necessary in connection with any litigation or any other judicial proceeding in the United States or other country, or any administrative proceeding in the United States Patent and Trademark Office, European Patent Office, any other patent office, or under the Patent Cooperation Treaty concerning the Application(s) or any continuation, divisional, or reissue applications thereof, or any reexamination of any such applications, or any Letters Patent issued therefrom or any patent term extensions or supplementary protection certificates of any such applications and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such litigation or proceeding.

I shall 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.

I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by Assignee and to vest and confirm in Assignee or its nominees the full and complete legal and equitable title to all such Letters Patent.

I hereby (i) authorize and request the Commissioner of Patents to issue any and all Letters Patent of the United States resulting from the Application or any divisional, continuation, or reissue applications thereof, and any reexamination of any of such applications, to Assignee, and (ii) covenant that I have full right to convey the interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

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	Date	
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	Attorney Docket No.: 69125.255930(VESH.P0091US)		
	COMBINED DECLARATION AND ASSIGNMENT		
	Fitle of Invention: 1.2-Substituted Cyclopentanes as Orexin Receptor Antagonists		
	This declaration and assignment is directed to: The attached or filed herewith application of (list of named inventors)		
l	· or		
	The United States application or PCT international application number PCT/GB2015/050480 filed on February 19, 2015.		
l	Declaration -		
l	As the below named inventor, I hereby declare that:		
	The above-identified application ("Application") was made or authorized by me.		
١	I believe that I am the original inventor or an original inventor of a claimed invention or discovery in the Application.		
1	I have reviewed and understood the contents of the Application, including the claims, and I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of this Application in the United States of America.		
	I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. § 1001 by fine or imprisonment of not more than five (5) years, or both for filings of this Application in the United States of America.		
l	Assignment		
	I hereby acknowledge that I have assigned the above-identified invention by previous assignment (attached hereto) which is hereby conformed for recordation in the US Patent Office.		
l	or		
	For good and valuable consideration, the sufficiency of which is acknowledged, I hereby assign and transfer and/or have assigned and transferred to:		
۱	Takeda Phannaceutical Company Limited 1-1, Doshomachi 4-chome		
l	Chuo-Ku, Osaka-Shi Osaka, Japan 541-0045		
١	A corporation of the state or country of <u>JAPAN</u>		
	•		
	(hereinafter designated as the "Assignee"), my entire right, title, and interest in, to, and under the Application, including all priority rights for other countries arising therefrom and the right to claim priority to the Application, all inventions or discoveries therein disclosed, and any and all Letters Patent of the United States, European Patent Office and of all other countries, which may be granted for such inventions or discoveries, or any of them, all such inventions or discoveries and all rights in such Application including any and all provisionals, substitutions, divisions, and continuations thereof, and to all Letters Patent that may be granted for said inventions and discoveries, and in and to all extensions, supplementary protection certificates, reexaminations, renewals, and reissues thereof, to be held and enjoyed by Assignee for its own use and enjoyment to the full and of the term or terms for which such Letters Patent may be granted, as fully and entirely as the same would have been held and enjoyed by me had this assignment and sale not been made.		
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I shall do all other acts which, in the opinion of Assignee, may be necessary or desirable to secure the grant of Letters Patent to Assignee or its nominees, in the United States, by the European Patent Office and in all other countries where Assignee may desire to have such inventions or discoveries, or any of them, patented, with specifications and claims in such form as shall be approved by

Assignce and to vest and confirm in Assignce or its nominees the full and complete legal and equitable title to all such Leuars Pateut.				
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I hereby grant the attorney of record the power to insert on this assignment any further identification which may be necessary or desirable in order to obtain legal recordation of this document.				
Fatsuhiko Fujimoto				
Tatsubiles Fairmoto	August 18, 20/6			
Signature	Date !			
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	Attorney Docket No.: 69125.255930(VESH.P0091US)
COMBINEI	DECLARATION AND ASSIGNMENT
Title of Invention: 1.2-Substituted Cyclop This declaration and assignment is directed to:	entanes as Orexin Receptor Antagonists
	The attached or filed herewith application of (list of named inventors),
or	
	The United States application or PCT international application number PCT/GB2015/050480 filed on February 19, 2015.
Declaration	
As the below named inventor, I hereby de	clare that:
The above-identified application ("Application)	ation") was made or authorized by me.
I believe that I am the original inventer or	an original inventor of a claimed invention or discovery in the Application.
I have reviewed and understood the cont information which is material to patentability as d this Application in the United States of America.	ents of the Application, including the claims, and I acknowledge the duty to disclose efined in Title 37, the United States Code of Federal Regulations, §1.56 for filings of
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Assignment	
I hereby acknowledge that I have assign hereby conformed for recordation in the US Patent	ted the above-identified invention by previous assignment (attached hereto) which is Office.
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	Chuo-Ku, Osaka-Shi
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for other countries arising therefrom and the right any and all Letters Patent of the United States, inventions or discoveries, or any of them, all su provisionals, substitutions, divisions, and continu discoveries, and in and to all extensions, supplem and enjoyed by Assignee for its own use and enjoyed	ire right, title, and interest in, to, and under the Application, including all priority rights to claim priority to the Application, all inventions or discoveries therein disclosed, and European Patent Office and of all other countries, which may be granted for such ch inventions or discoveries and all rights in such Application including any and all rations thereof, and to all Letters Patent that may be granted for said inventions and entary protection certificates, reexaminations, renewals, and reissues thereof, to be held yment to the full end of the term or terms for which such Letters Patent may be granted, held and enjoyed by me had this assignment and sale not been made.
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04 08 2016 Date
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