PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5191151

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YUKIKO ENYA	10/04/2017
YUICHIRO TONE	10/04/2017
SHIN'ICHI TAKEDA	10/18/2017
YOSHITSUGU AOKI	10/18/2017

RECEIVING PARTY DATA

Name:	NIPPON SHINYAKU CO., LTD.
Street Address:	14, KISSHOIN NISHINOSHO MONGUCHICHO, MINAMI-KU
City:	KYOTO-SHI, KYOTO
State/Country:	JAPAN
Postal Code:	601-8550
Name:	NATIONAL CENTER OF NEUROLOGY AND PSYCHIATRY
Street Address:	1-1, OGAWAHIGASHI-CHO 4-CHOME
City:	KODAIRA-SHI, TOKYO
State/Country:	JAPAN
Postal Code:	187-8551

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16161946

CORRESPONDENCE DATA

Fax Number: (202)842-8465

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: 202-842-8800

margit.phillips@dbr.com, DBRIPDocket@dbr.com Email:

DRINKER BIDDLE & REATH (DC) **Correspondent Name:**

Address Line 1: 1500 K STREET, N.W.

Address Line 2: **SUITE 1100**

Address Line 4: WASHINGTON, D.C. 20005-1209

ATTORNEY DOCKET NUMBER: 209658-0005-01-US-581494

> **PATENT** REEL: 047185 FRAME: 0862

505144385

NAME OF SUBMITTER:	ZHENGYU FENG	
SIGNATURE:	NATURE: /Zhengyu Feng/	
DATE SIGNED:	10/16/2018	
This document serves as an Oath/Declaration (37 CFR 1.63).		
Total Attachments: 6 source=209658-0005-01 declaration	inventors 1 and 2#page1.tif	

source=209658-0005-01 declaration inventors 1 and 2#page1.tif source=209658-0005-01 declaration inventors 1 and 2#page2.tif source=209658-0005-01 declaration inventors 1 and 2#page3.tif source=209658-0005-01 declaration inventors 3 and 4#page1.tif source=209658-0005-01 declaration inventors 3 and 4#page2.tif source=209658-0005-01 declaration inventors 3 and 4#page3.tif

PATENT REEL: 047185 FRAME: 0863

ATTORNEY DOCKET NO.: 209658-0005-00-US SOLE/JOINT INVENTION (U.S. Rights Only) Page 1 of 3

COMBINED DECLARATION AND ASSIGNMENT

WHEREAS I/WE, the below-named inventor(s) – hereinafter referred to as Assignor(s) – have made an invention entitled:

ANTISENSE NUCLEIC ACIDS

for which I/WE are filing an application for United States Letters Patent, the application being the one identified in the Declaration set forth below: and

WHEREAS, NIPPON SHINYAKU CO., LTD., a corporation of Japan, whose post office address is 14, Kisshoin Nishinosho Monguchicho, Minami-ku, Kyoto-shi, Kyoto 601-8550 Japan and NATIONAL CENTER OF NEUROLOGY AND PSYCHIATRY, a coporation of Japan, whose post office address is 1-1, Ogawahigashi-cho 4-chome, Kodaira-shi, Tokyo 187-8551 Japan (hereinafter referred to as Assignees), are desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration, the receipt of which from Assignee is hereby acknowledged, I/WE, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisionals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and I/WE hereby authorize and request the United States Patent and Trademark Office to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, and all rights to claim priority on the basis of such applications, make all rightful oaths or the like, and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s) in the appropriate space below.

ATTORNEY DOCKET NO.: 209658-0005-00-US SOLE/JOINT INVENTION (U.S. Rights Only) Page 2 of 3

AS A DECLARATION UNDER 37 CFR 1.63, for a utility or design application using an Application Data Sheet (37 CFR 1.76), each below-named inventor for which a signature has been provided hereby declares that:

	This Declaration is directed to (please check one of the following two boxes):
	The attached application, or
⊠ <u>Septem</u>	United States application or PCT international application number <u>PCT/JP2016/077305</u> filed on <u>ober 15, 2016</u> .
	The above-identified application was made or authorized to be made by me.
applica	I believe that I am the original inventor or an original joint inventor of a claimed invention in the tion.
	I have reviewed and understand the contents of the application, including the claims.
patenta	I am aware of the duty to disclose to the Office all information known to me to be material to bility as defined in 37 C.F.R. § 1.56.
U.S.C.	I hereby acknowledge that any willful false statement made in this Declaration is punishable under 18 1001 by fine or imprisonment of not more than five (5) years, or both.

Note: An application data sheet (PTO/AIA/14 or equivalent) naming the entire inventive entity must accompany this form if not submitted previously.

ATTORNEY DOCKET NO.: 209658-0005-00-US SOLE/JOINT INVENTION (U.S. Rights Only)
Page 3 of 3

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

Legal Name of Sole/First Assignor/Inventor	Assignor/Inventor Signature	Date
Yukiko ENYA	Yukiko Enya	October 4, 2017
Legal Name of Second Assignor/Inventor	Assignor/Inventor Signature	Date
Yuichiro TONE	quichire Tone	October 4, 2017
Legal Name of Third Assignor/Inventor Shin'ichi TAKEDA	Assignor/Inventor Signature	Date
Legal Name of Fourth Assignor/Inventor Yoshitsugu AOKI	Assignor/Inventor Signature	Date
Legal Name of Fifth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Sixth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Seventh Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Eighth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Ninth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Tenth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Eleventh Assignor/Inventor	Assignor/Inventor Signature	Date

Name(s) of additional Assignor(s)/Inventor(s) attached: Yes No

90023587.1

PATENT REEL: 047185 FRAME: 0866

ATTORNEY DOCKET NO.: 209658-0005-00-US SOLE/JOINT INVENTION
(U.S. Rights Only)
Page 1 of 3

COMBINED DECLARATION AND ASSIGNMENT

WHEREAS I/WE, the below-named inventor(s) – hereinafter referred to as Assignor(s) – have made an invention entitled:

ANTISENSE NUCLEIC ACIDS

for which I/WE are filing an application for United States Letters Patent, the application being the one identified in the Declaration set forth below; and

WHEREAS, <u>MIPPON SHINYAKU CO.</u>, LTD., a corporation of <u>Japan</u>, whose post office address is <u>14</u>, <u>Kisshoin Nishinosho Monguchicho</u>, <u>Minami-ku</u>, <u>Kyoto-shi</u>, <u>Kyoto 601-8550 Japan</u> and <u>NATIONAL CENTER OF NEUROLOGY AND PSYCHIATRY</u>, a coporation of <u>Japan</u>, whose post office address is <u>1-1</u>, <u>Ogawahigashi-cho 4-chome</u>, <u>Kodaira-shi</u>, <u>Tokyo 187-8551 Japan</u> (hereinafter referred to as Assignees), are desirous of securing the entire right, title, and interest in and to this invention, the application for United States Letters Patent on this invention and the Letters Patent to issue upon this application;

NOW THEREFORE, be it known that, for good and valuable consideration, the receipt of which from Assignee is hereby acknowledged, I/WE, as Assignor(s), have sold, assigned, transferred, and set over, and do hereby sell, assign, transfer, and set over unto the Assignee, its lawful successors and assigns, MY/OUR entire right, title, and interest in and to this invention and this application, and all divisionals, and continuations thereof, and all Letters Patent of the United States which may be granted thereon, and all reissues thereof, and I/WE hereby authorize and request the United States Patent and Trademark Office to issue all Letters Patent for this invention to Assignee, its successors and assigns, in accordance with the terms of this Assignment;

AND, I/WE HEREBY covenant that I/WE have the full right to convey the interest assigned by this Assignment, and I/WE have not executed and will not execute any agreement in conflict with this Assignment;

AND, I/WE HEREBY further covenant and agree that I/WE will, without further consideration, communicate with Assignee, its successors and assigns, any facts known to ME/US respecting this invention and testify in any legal proceeding, sign all lawful papers when called upon to do so, execute and deliver all papers that may be necessary or desirable to perfect the title to this invention in said Assignee, its successors and assigns, execute all divisional, continuation, and reissue applications, and all rights to claim priority on the basis of such applications, make all rightful oaths or the like, and generally do everything possible to aid Assignee, its successors and assigns, to obtain and enforce proper patent protection for this invention in the United States, it being understood that any expense incident to the execution of such papers shall be borne by the Assignee, its successors and assigns;

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s) in the appropriate space below.

ATTORNEY DOCKET NO.: 209658-0005-00-US SOLE/JOINT INVENTION (U.S. Rights Only) Page 2 of 3

AS A DECLARATION UNDER 37 CFR 1.63, for a utility or design application using an Application Data Sheet (37 CFR 1.76), each below-named inventor for which a signature has been provided hereby declares that:

This Declaration is directed to (please check one of the following two boxes):

The attached application, or

United States application or PCT international application number PCT/JP2016/077305 filed on September 15, 2016.

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

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

I have reviewed and understand the contents of the application, including the claims.

I am aware of the duty to disclose to the Office all information known to me to be material to

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.

Note: An application data sheet (PTO/AIA/14 or equivalent) naming the entire inventive entity must accompany this form if not submitted previously.

patentability as defined in 37 C.F.R. § 1.56.

ATTORNEY DOCKET NO.: 209658-0005-00-US SOLE/JOINT INVENTION (U.S. Rights Only)
Page 3 of 3

IN TESTIMONY WHEREOF, I/WE have hereunto set our hand(s).

Legal Name of Sole/First Assignor/Inventor Yukiko ENYA	Assignor/Inventor Signature	Date
Legal Name of Second Assignor/Inventor Yuichiro TONE	Assignor/Inventor Signature	Date
Legal Name of Third Assignor/Inventor Shin'ichi TAKEDA	Assignor/Inventor Signature Shinich Telepole	Date 18/10/2017
Legal Name of Fourth Assignor/Inventor Yoshitsugu AOKI	Assignor/Inventor Signature Yosh: Tsusu Aok:	Date 18/10/2017 Date 18/10/2017
Legal Name of Fifth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Sixth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Seventh Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Eighth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Ninth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Tenth Assignor/Inventor	Assignor/Inventor Signature	Date
Legal Name of Eleventh Assignor/Inventor	Assignor/Inventor Signature	Date
Name(s) of additional Assignor(s).	/Inventor(s) attached; Yes	

90023587.1

RECORDED: 10/16/2018

PATENT REEL: 047185 FRAME: 0869