

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT5088910

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
AKIFUMI YAO	06/27/2018
KOHEI OOYA	06/26/2018
YUTA TAKEDA	06/29/2018
JUN ETO	07/03/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	CENTRAL GLASS COMPANY, LIMITED
<b>Street Address:</b>	5253, OAZA OKIUBE
<b>City:</b>	UBE-SHI, YAMAGUCHI
<b>State/Country:</b>	JAPAN
<b>Postal Code:</b>	755-0001
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	16076536
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(202)628-8844
<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>	202-624-2500
<b>Email:</b>	edocket@crowell.com
<b>Correspondent Name:</b>	CROWELL & MORING LLP
<b>Address Line 1:</b>	P.O. BOX 14300
<b>Address Line 4:</b>	WASHINGTON, D.C. 20044-4300
<b>ATTORNEY DOCKET NUMBER:</b>	038788.PB453US
<b>NAME OF SUBMITTER:</b>	MICHAEL H. JACOBS
<b>SIGNATURE:</b>	/Michael H. Jacobs/
<b>DATE SIGNED:</b>	08/08/2018
This document serves as an Oath/Declaration (37 CFR 1.63).	
<b>Total Attachments: 4</b>	
source=PB453US_CombinedDecandAssignment#page1.tif	

source=PB453US\_CombinedDecandAssignment#page2.tif

source=PB453US\_CombinedDecandAssignment#page3.tif

source=PB453US\_CombinedDecandAssignment#page4.tif

**PATENT**

**REEL: 046588 FRAME: 0240**

Attorney Docket No.: \_\_\_\_\_

U.S. Rights

**ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. 1.63****Title of Invention:****METHOD FOR PURIFYING FLUORINE COMPOUND GAS**

This assignment and declaration are directed to (check one):

- ☐ the attached application;  
☐ the application identified by the attorney docket no. and title of invention given above;  
☒ United States Application or PCT International Application No. PCT/JP2017/002853 filed January 27, 2017.

**ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:

**Name of Assignee: CENTRAL GLASS COMPANY, LIMITED****Address of Assignee: 5253, Oaza Okiube, Ube-shi  
Yamaguchi 755-0001 Japan**

(hereinafter ASSIGNEE) all my right, title and interest for the United States, its territories and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith.

I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.

I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefore or thereon, including reissues or extensions, in said ASSIGNEE, its successors or assigns, or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention.

**DECLARATION**

As a below named inventor, I hereby declare that:

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 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.

Signature:  
Inventor:

*Akifumi Yao*  
Akifumi YAO

*06/27/2018*  
DATE

**ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. 1.63****Title of Invention:****METHOD FOR PURIFYING FLUORINE COMPOUND GAS**

This assignment and declaration are directed to (check one):

- ☐ the attached application;  
☐ the application identified by the attorney docket no. and title of invention given above;  
☒ United States Application or PCT International Application No. PCT/JP2017/002853 filed January 27, 2017.

**ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:

**Name of Assignee: CENTRAL GLASS COMPANY, LIMITED****Address of Assignee: 5253, Oaza Okiube, Ube-shi  
Yamaguchi 755-0001 Japan**

(hereinafter ASSIGNEE) all my right, title and interest for the United States, its territories and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith.

I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.

I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefore or thereon, including reissues or extensions, in said ASSIGNEE, its successors or assigns, or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention.

**DECLARATION**

As a below named inventor, I hereby declare that:

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 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.

Signature:  
Inventor:

Kohei Ooya  
Kohei OOYA

06/26/2018  
DATE

**ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. 1.63****Title of Invention:****METHOD FOR PURIFYING FLUORINE COMPOUND GAS**

This assignment and declaration are directed to (check one):

- ☐ the attached application;  
☐ the application identified by the attorney docket no. and title of invention given above;  
☒ United States Application or PCT International Application No. PCT/JP2017/002853 filed January 27, 2017.

**ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:

**Name of Assignee: CENTRAL GLASS COMPANY, LIMITED****Address of Assignee: 5253, Oaza Okiube, Ube-shi  
Yamaguchi 755-0001 Japan**

(hereinafter ASSIGNEE) all my right, title and interest for the United States, its territories and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith.

I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.

I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefore or thereon, including reissues or extensions, in said ASSIGNEE, its successors or assigns, or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention.

**DECLARATION**

As a below named inventor, I hereby declare that:

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 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.

Signature:

Inventor:

*Yuta Takeda*  
Yuta TAKEDA

06/29/2018  
DATE

**ASSIGNMENT AND DECLARATION UNDER 37 C.F.R. 1.63****Title of Invention:****METHOD FOR PURIFYING FLUORINE COMPOUND GAS**

This assignment and declaration are directed to (check one):

- ☐ the attached application;  
☐ the application identified by the attorney docket no. and title of invention given above;  
☒ United States Application or PCT International Application No. PCT/JP2017/002853 filed January 27, 2017.

**ASSIGNMENT**

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, as a below named inventor I have sold and assigned, and by these presents hereby sell and assign, unto:

**Name of Assignee: CENTRAL GLASS COMPANY, LIMITED****Address of Assignee: 5253, Oaza Okiube, Ube-shi  
Yamaguchi 755-0001 Japan**

(hereinafter ASSIGNEE) all my right, title and interest for the United States, its territories and possessions in and to the above-identified invention and United States patent application, including any and all divisions or continuations thereof, and in and to any and all Letters Patent of the United States which may issue on any such application or for said invention, including any and all reissues or extensions thereof, to be held and enjoyed by said ASSIGNEE, its successors or assigns to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by me had this Assignment not been made.

I hereby authorize and request the Director of the U.S. Patent and Trademark Office to issue any and all such Letters Patent to said ASSIGNEE, its successors or assigns in accordance herewith.

I warrant and covenant that I have the full and unencumbered right to sell and assign the interests herein sold and assigned and that I have not executed and will not execute any document or instrument in conflict herewith.

I further covenant and agree that I will communicate to said ASSIGNEE, its successors, legal representatives or assigns all information known to me relating to said invention or patent application and that I will execute and deliver any papers, make all rightful oaths, testify in any legal proceedings and perform all other lawful acts deemed necessary or desirable by said ASSIGNEE, its successors, legal representatives or assigns to perfect title to said invention, to said application including divisions and continuations thereof and to any and all Letters Patent which may be granted therefore or thereon, including reissues or extensions, in said ASSIGNEE, its successors or assigns, or to assist said ASSIGNEE, its successors, legal representatives or assigns in obtaining, reissuing or enforcing Letters Patent of the United States for said invention.

**DECLARATION**

As a below named inventor, I hereby declare that:

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 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.

Signature:

Inventor:

Jun Eto  
Jun ETO

07 / 03 / 2018  
DATE