PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
TAKAHIRO TERADA	02/19/2018
SHIGUMA KATO	02/16/2018
SHINYA HIGASHI	02/16/2018
MASAYUKI TANAKA	02/20/2018
TAKUYA MATSUDA	02/19/2018

RECEIVING PARTY DATA

Name:	KABUSHIKI KAISHA TOSHIBA
Street Address:	1-1, SHIBAURA 1-CHOME, MINATO-KU
City:	TOKYO
State/Country:	JAPAN
Postal Code:	105-8001

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15757382

CORRESPONDENCE DATA

Fax Number: (703)413-2220

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: (703) 413-3000
Email: chiatt@oblon.com
Correspondent Name: OBLON, ET AL.
Address Line 1: 1940 DUKE STREET

Address Line 4: ALEXANDRIA, VIRGINIA 22314

ATTORNEY DOCKET NUMBER:	511799US
NAME OF SUBMITTER:	COLLEEN K. HIATT
SIGNATURE:	/Colleen K. Hiatt/
DATE SIGNED:	03/05/2018

Total Attachments: 5

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PATENT REEL: 045102 FRAME: 0150

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Title of Invention FLOW PASSAGE STRUCTURE AND PROCESSING APPARATUS	· ·
As the below named inventor, I hereby declare that:	·
This declaration [] The attached application, or	
is directed to: United States application or PCT international application number PCT/JP2017/02344 filed on June 26, 2017	12
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	ı.
WHEREAS, Kabushiki Kaisha Toshiba (hereinafter referred to as "ASSIGNEE") having places of business at: 1-1, Shibaura 1-chome, Minato-k 105-8001 Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in a Letters Patent that may be granted therefore in the United States and its territorial possessions and in an foreign countries;	nd to any
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transaid ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial poand in all foreign countries (including the right to claim priority under the terms of the International Convectories to the relevant International Treaties and Arrangements from the aforesaid application) and the entire right interest in and to any and all Letters Patent which may be granted therefor in the United States and its possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuously in the continuous substitutions and renewals thereof.	sfer unto ssessions ntion and title and territorial
I hereby authorize and request the Patent Office Officials in the United States and its territorial posses any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNI assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIC (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as entirely as the same would have been held by me had this Assignment and sale not been made.	EE as the NEE, its
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all decontinuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do expossible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection invention in the United States and its territorial possessions and in any and all foreign countries.	ivisional, any and verything
I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S by fine or imprisonment of not more than five (5) years, or both.	S.C. 1001
LEGAL NAME OF INVENTOR	
Inventor: Takahiro TERADA Date: 19 14eb. 20/8	
Signature: Taka his Torada	

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Title of Invention	FLOW PASSAGE STRUCTURE AND PROCESSING APPARATUS
As the below name	d inventor, I hereby declare that:
This declaration	The attached application, or
is directed to:	United States application or PCT international application number PCT/JP2017/023442 filed on June 26, 2017
The above-identifie	ed application was made or authorized to be made by me.
I believe that I am t	he original inventor or an original joint inventor of a claimed invention in the application.
(hereinafter referred 105-8001 Japan, is	d to as "ASSIGNEE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo desirous of acquiring the entire right, title and interest in and to said invention and in and to any may be granted therefore in the United States and its territorial possessions and in any and all
acknowledged, and said ASSIGNEE, the and in all foreign co other relevant Inter interest in and to a	FORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby for other good and valuable consideration, I, by these presents do sell, assign and transfer unto ne full and exclusive right to the said invention in the United States and its territorial possessions ountries (including the right to claim priority under the terms of the International Convention and national Treaties and Arrangements from the aforesaid application) and the entire right, title and my and all Letters Patent which may be granted therefor in the United States and its territorial any and all foreign countries and in and to any and all divisions, reissues, continuations, newals thereof.
any and all foreign assignee of my enti (his) successors and	ze and request the Patent Office Officials in the United States and its territorial possessions and countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the ire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its d assigns, to the full end of the term for which said Letters Patent may be granted, as fully and a would have been held by me had this Assignment and sale not been made.
respecting said in continuation, substi- all of said Letters possible to aid said	that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me vention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, tute, renewal and reissue applications, execute all necessary assignment papers to cause any and Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything I ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said ited States and its territorial possessions and in any and all foreign countries.
by fine or imprison	ledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 ment of not more than five (5) years, or both.
LEGAL NAME OF	
Inventor: Shigum	a KATO Date: <u>/6, Fcb , 2018</u>
Signature: Shig	une, kato

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET
ALEXANDRIA, VIRGINIA 22314

Invention	FLOW PASSAGE STRUCTURE AND PRO	CESSING APPARATUS
As the below name	d inventor, I hereby declare that:	
This declaration [The attached application, or	
is directed to:	United States application or PCT international app filed on <u>June 26, 2017</u>	lication number <u>PCT/JP2017/023442</u>
The above-identifie	ed application was made or authorized to be made by	me.
I believe that I am t	he original inventor or an original joint inventor of a	claimed invention in the application.
(hereinafter referred 105-8001 Japan, is	d to as "ASSIGNEE") having places of business at desirous of acquiring the entire right, title and intermay be granted therefore in the United States and	est in and to said invention and in and to any
acknowledged, and said ASSIGNEE, the and in all foreign co- other relevant Inter- interest in and to a	FORE, in consideration of the sum of FIVE DOLL for other good and valuable consideration, I, by the full and exclusive right to the said invention in thountries (including the right to claim priority under to national Treaties and Arrangements from the afores my and all Letters Patent which may be granted the any and all foreign countries and in and to any newals thereof.	ese presents do sell, assign and transfer unto e United States and its territorial possessions he terms of the International Convention and aid application) and the entire right, title and erefor in the United States and its territorial
any and all foreign assignee of my enti (his) successors and	ze and request the Patent Office Officials in the Un countries to issue any and all of said Letters Pater re right, title and interest in and to the same, for the d assigns, to the full end of the term for which said would have been held by me had this Assignment a	nt, when granted, to said ASSIGNEE as the sole use and behoof of said ASSIGNEE, its Letters Patent may be granted, as fully and
respecting said inv continuation, substi all of said Letters possible to aid said	that I will communicate to said ASSIGNEE or its vention, and testify in any legal proceeding, sign tute, renewal and reissue applications, execute all n Patent to be issued to said ASSIGNEE, make all ASSIGNEE, its (his) successors and assigns, to o ited States and its territorial possessions and in any a	a all lawful papers, execute all divisional, ecessary assignment papers to cause any and rightful oaths, and, generally do everything btain and enforce proper protection for said
	ledge that any willful false statement made in this dement of not more than five (5) years, or both.	claration is punishable under 18 U.S.C. 1001
LEGAL NAME OF	INVENTOR	
Inventor: Shinya l	HIGASHI	Date: Feb. / b. 20/8
Signature: 5h8	nya Higashi	

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.
ATTORNEYS AT LAW
1940 DUKE STREET

ALEXANDRIA, VIRGINIA 22314

Title of Invention FLOW PASSAGE STRUCTURE AND PROCESSING APPARATUS
As the below named inventor, I hereby declare that:
This declaration The attached application, or
is directed to: United States application or PCT international application number PCT/JP2017/023442 filed on June 26, 2017
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.
WHEREAS, Kabushiki Kaisha Toshiba (hereinafter referred to as "ASSIGNEE") having places of business at: 1-1, Shibaura 1-chome, Minato-ku, Tokyo 105-8001 Japan, is desirous of acquiring the entire right, title and interest in and to said invention and in and to any Letters Patent that may be granted therefore in the United States and its territorial possessions and in any and all foreign countries;
NOW, THEREFORE, in consideration of the sum of FIVE DOLLARS (\$5.00), the receipt whereof is hereby acknowledged, and for other good and valuable consideration, I, by these presents do sell, assign and transfer unto said ASSIGNEE, the full and exclusive right to the said invention in the United States and its territorial possessions and in all foreign countries (including the right to claim priority under the terms of the International Convention and other relevant International Treaties and Arrangements from the aforesaid application) and the entire right, title and interest in and to any and all Letters Patent which may be granted therefor in the United States and its territorial possessions and in any and all foreign countries and in and to any and all divisions, reissues, continuations, substitutions and renewals thereof.
I hereby authorize and request the Patent Office Officials in the United States and its territorial possessions and any and all foreign countries to issue any and all of said Letters Patent, when granted, to said ASSIGNEE as the assignee of my entire right, title and interest in and to the same, for the sole use and behoof of said ASSIGNEE, its (his) successors and assigns, to the full end of the term for which said Letters Patent may be granted, as fully and entirely as the same would have been held by me had this Assignment and sale not been made.
Further, I agree that I will communicate to said ASSIGNEE or its (his) representatives any facts known to me respecting said invention, and testify in any legal proceeding, sign all lawful papers, execute all divisional, continuation, substitute, renewal and reissue applications, execute all necessary assignment papers to cause any and all of said Letters Patent to be issued to said ASSIGNEE, make all rightful oaths, and, generally do everything possible to aid said ASSIGNEE, its (his) successors and assigns, to obtain and enforce proper protection for said invention in the United States and its territorial possessions and in any and all foreign countries.
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.
LEGAL NAME OF INVENTOR
Inventor: Masayuki TANAKA Date: 20th, Feb, 2018
Signature: Marcazhi Janake

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P. ATTORNEYS AT LAW

1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

Title of FLOW PASSAGE STRUCTURE AND PROCESSING APPARATUS
ARI V CIREZOIR
As the below named inventor, I hereby declare that:
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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.
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LEGAL NAME OF INVENTOR
Inventor: Takuya MATSUDA Date: /9, Feb., 20/8
Simulana. Dehicia Waterale

OBLON, McCLELLAND, MAIER & NEUSTADT, L.L.P.

ATTORNEYS AT LAW 1940 DUKE STREET ALEXANDRIA, VIRGINIA 22314

> PATENT REEL: 045102 FRAME: 0156

RECORDED: 03/05/2018