502580295 11/22/2013

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2626316

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
FUJIHIKO TOYOMASU	11/18/2013
TORU MARUYAMA	11/18/2013
MITSUNORI KOMATSU	11/18/2013

RECEIVING PARTY DATA

Name:	EBARA CORPORATION
Street Address:	11-1, HANEDA ASAHI-CHO
Internal Address:	OHTA-KU
City:	токуо
State/Country:	JAPAN

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	14080685	

CORRESPONDENCE DATA

502580295

Fax Number:(215)568-3439Phone:215-568-3100

Email: assignments@woodcock.com

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Correspondent Name: WOODCOCK WASHBURN LLP

Address Line 1: 2929 ARCH STREET

Address Line 2: CIRA CENTRE, 12TH FLOOR

Address Line 4: PHILADELPHIA, PENNSYLVANIA 19104-2891

ATTORNEY DOCKET NUMBER:	EBMZ-0029
NAME OF SUBMITTER:	ROZELL PRICE FISCHER
Signature:	/Rozell Price Fischer/
	PATENT

REEL: 031662 FRAME: 0252

14080685

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Date:	11/22/2013
Total Attachments: 6 source=EBMZ-0029_Executed_Assignments source=EBMZ-0029_Executed_Assignments source=EBMZ-0029_Executed_Assignments source=EBMZ-0029_Executed_Assignments source=EBMZ-0029_Executed_Assignments source=EBMZ-0029_Executed_Assignments	ts#page2.tif ts#page3.tif ts#page4.tif ts#page5.tif

PATENT REEL: 031662 FRAME: 0253

ASSIGNMENT

WHEREAS, I, Fujihiko TOYOMASU, a citizen of Japan, residing at c/o Ebara Corporation, 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo, Japan, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number EBMZ-0029 ("the invention"), which is entitled "SUBSTRATE CLEANING APPARATUS AND SUBSTRATE CLEANING METHOD" ("the subject application"), and which claims priority to Japanese patent application number 2012-250960 filed November 15, 2012 ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

AND WHEREAS, EBARA CORPORATION, ASSIGNEE, having a place of business at 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo, Japan, is desirous of obtaining my entire right, title, and interest in, to, and under the invention:

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, I, the ASSIGNOR, hereby sell, assign, transfer, and set over, unto the ASSIGNEE, its successors, legal representatives, and assigns, my entire right, title, and interest in, to, and under the invention, and all applications for industrial property protection, including without limitation, all applications for patents, utility models, inventors' certificates, and designs that have been filed, and that may hereafter be filed, in any country, that disclose, describe, and/or claim the invention, including, without limitation, the subject application and the priority application, and all extensions, renewals, and reissues of such applications, including all divisions and continuations in whole or in part; all patents granted on such applications in any country, and all extensions, renewals, and reissues of such patents, including all divisions and continuations in whole or in part; the right to file such applications in any country; and the right to claim for such applications in any country the priority rights derived from the priority application and the subject application under the International Convention for the Protection of Industrial Property, the Patent Laws of the United States, any other international agreement or protection, or the domestic laws of any country in which any such application is filed, as may be applicable.

AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

•			
Executed this18	thday of _ Novembe	er , year of <u>2013</u> .	
Fijihiko Tog	<i>formatu</i>		
Signature (Fujihiko	TOYOMASU)	*********	*******
STATEMENT OF SIGNED at	WITNESS		
(City)	(Co	untry)	
Thisday of _	, 201		
I,		whose full	
residence address is			
was personally pres	, 201, and :	execute the above such assignor is personally kr	e assignment on the
Signature of Witnes		·	*****
The foregoing assig November 14, 201	<u>3</u> .	ation number 14/080,685	, filed on
		Swope/	
	Name of Attorne Registration No.:	y: Michael J. Swope 38.041	

November 22, 2013

Page 2 of 2

Date of Insertion:

ASSIGNMENT

WHEREAS, I, Toru MARUYAMA, a citizen of Japan, residing at c/o Ebara Corporation, 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo, Japan, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number EBMZ-0029 ("the invention"), which is entitled "SUBSTRATE CLEANING APPARATUS AND SUBSTRATE CLEANING METHOD" ("the subject application"), and which claims priority to Japanese patent application number 2012-250960 filed November 15, 2012 ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

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AND I HEREBY covenant and agree that I have full right to convey my entire interest herein assigned, and that I have not executed, and will not execute, any agreement in conflict herewith.

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the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature.

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Executed this _	18th	day of _ N	ovember	, year of _	2013 .		
		1					
Torn Man Signature (Torn	morre	<u> </u>					
Signature (Tor	MARUYA	MA)					
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STATEMENT	OF WITN	PSS					
SIGNED at							

(City)			(Count	ry)			
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residence addre	ss is						
	-						
was personally	present and	d did see		execu	ite the abov	e assignment on th	ie
day of _		, 201_	_, and suc	h assignor is p	ersonally k	nown to me to be th	е
person describe	ed in such do	cument.					
Signature of W	îtnece						
Digital City	5 CE 2 CO 1 S ()						
******	******	********	******	******	********	**********	*
The foregoing	assionment i	covers natent	applicatio	n number 14	1/080,685	filed on	
November 14,	•	JOYOLD PRIONI	арриоли	II HUHLOVI			
				,			
				wope/			
			-	Michael J. S	wope		
			on No.:		2012		
		Date of In	seruon:	November 2	.4, 2015		

Page 2 of 2

ASSIGNMENT

WHEREAS, I, Mitsunori KOMATSU, a citizen of Japan, residing at c/o Ebara Corporation, 11-1, Haneda Asahi-cho, Ohta-ku, Tokyo, Japan, ASSIGNOR, am an inventor of one or more inventions disclosed, described and/or claimed in the application referred to as Docket Number EBMZ-0029 ("the invention"), which is entitled "SUBSTRATE CLEANING APPARATUS AND SUBSTRATE CLEANING METHOD" ("the subject application"), and which claims priority to Japanese patent application number 2012-250960 filed November 15, 2012 ("the priority application"). I authorize and direct any of the attorneys responsible for prosecuting the subject application on behalf of the ASSIGNEE to insert the application number and filing date of the subject application in the final paragraph of this assignment.

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AND I HEREBY further covenant and agree that I will communicate to the ASSIGNEE, its successors, legal representatives, and assigns, any facts known to me respecting the invention, and testify in any legal proceeding, sign all lawful papers, execute all disclaimers and all divisional, continuing, reissue, and foreign applications, make all rightful oaths, deliver upon request all papers, documents, affidavits, or other instruments that may be necessary or helpful in the prosecution of any application for industrial property protection describing and/or claiming

the invention, and generally do everything possible to aid the ASSIGNEE, its successors, legal representatives, and assigns, to obtain and enforce proper protection for the invention in all countries.

IN TESTIMONY WHEREOF, I have signed my name below on the date indicated above my signature. Executed this 18th day of November, year of 2013. Mitsupori Komatsu Signature (Mitsunori KOMATSU) STATEMENT OF WITNESS SIGNED at _____ (Country) (City) This _____ day of ______, 201__. residence address is_____ was personally present and did see ______ execute the above assignment on the ____ day of _____, 201__, and such assignor is personally known to me to be the person described in such document. Signature of Witness The foregoing assignment covers patent application number 14/080,685 , filed on

/Michael J. Swope/

Name of Attorney: Michael J. Swope

Registration No.: 38,041

Date of Insertion: November 22, 2013

Page 2 of 2

PATENT REEL: 031662 FRAME: 0259

November 14, 2013.