504137355 12/20/2016

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4193642

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HYUN-SIK SIM	09/12/2016
JUNG-SUK OH	09/12/2016
JAE-SEOK KIM	09/26/2016
HO-GON KIM	10/10/2016
JUN-WON LEE	09/29/2016
HYUK-YUL CHOI	10/04/2016
HYUNG-HO KIM	09/12/2016
SANG-JIN CHOI	09/12/2016
HEOK-JAE LEE	09/20/2016
DONG-OK SHIN	09/12/2016
JANG-HYOUN YOUM	09/12/2016
ICHIRO NISHIKAWA	10/07/2016
MASANORI TERASAKA	10/13/2016
MASASHI HAMADA	10/07/2016
TAE-HOON LEE	10/19/2016

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU
City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677
Name:	HORIBA STEC, CO., LTD.
Street Address:	11-5, HOKODATE-CHO, KAMITOBA, MINAMI-KU
City:	куото
State/Country:	JAPAN

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15385006

PATENT REEL: 040692 FRAME: 0406

504137355

CORRESPONDENCE DATA

Fax Number: (516)692-8889

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: 516-692-8888

Email: mail@chauiplaw.com

Correspondent Name: F. CHAU & ASSOCIATES, LLC

Address Line 1: 130 WOODBURY ROAD

Address Line 4: WOODBURY, NEW YORK 11797

ATTORNEY DOCKET NUMBER:	8021S-897 (SS-51312-US)
NAME OF SUBMITTER:	SEAN R. WILSUSEN
SIGNATURE:	/SEAN R. WILSUSEN/
DATE SIGNED:	12/20/2016
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 9

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PATENT REEL: 040692 FRAME: 0407

COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM¹ FOR MORE THAN ONE ASSIGNEE

The undersigned acknowledge that this document is being used both as an assignment of

the invention and as the declaration (37 CFR 1.63) for a Utility or Design Application. WHEREAS, the undersigned inventors have invented: Title: VAPORIZER AND THIN FILM DEPOSITION APPARATUS INCLUDING THE SAME for which inventors are about to make or has made United States or international application for patent. WHEREAS, as a below named inventor(s), I/(we) hereby declare that: Section I. Declaration This declaration is directed to: X The attached U.S. non-provisional patent application, or U.S. non-provisional patent application number _______, filed on _____, or PCT international patent application number ________, filed on The above-identified application was made or authorized to be made by me (us). I (we) believe that I am (we are) the original inventor (original joint inventors) of a claimed invention in the above-identified application. I (we) 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. This form requires the use of an Application Data Sheet. SEC Ref No. IH-201512-001-1-US0 Attorney Ref No. 8021S-897 (SS-51312-US)

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

I hereby state that I have reviewed and understand the contents of the above identified application, including the claims.

acknowledge that I am aware of the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

Section II. Assignment

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, collectively referred to in Section II as Assignors in this section, hereby sell(s) and assign(s) to

Samsung Electronics Co., Ltd.

having an address at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 16677, Republic of Korea (hereinafter designated as the Assignee), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign

SEC Ref No.	IH-201512-001-1-US0	Attorney Ref No.	80218-897
			(SS-51312-US)

countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, re-examination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

The undersigned hereby grant(s) the law firm of F. Chau & Associates, LLC the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Inventor(s)/Assignor(s) Signature(s) for Section II.

LEGAL NAME OF FIRST	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	SIM	HYUN-SIK	
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SIGNATURE		DATÉ	20/11/05//2
2:QNW) One			

SEC Ref No. IH-201512-001-1-US0 Attorney Ref No. 8021S-897 (SS-51312-US)

LEGAL NAME OF SECOND	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	ОН	JUNG-SUK	
SIGNATURE		DATE	sold . 9. 12

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
THIRD INVENTOR/ASSIGNOR	KIM	JAE-SEOK	
SIGNATURE		DATE	2016.9,26

LEGAL NAME OF FOURTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	HO-GON	
	i		
SIGNATURE	~1~ 2 FO	DATE	× 1/ 10 m

SEC Ref No. IH-201512-001-1-US0 Attorney Ref No. 80215-897 (SS-51312-US)

LEGAL NAME OF FIFTH INVENTOR/ASSIGNOR	Family Name	First Given Name JUN-WON	Second Given Name
SIGNATURE	J. A.	DATE	2016, 7, 24

LEGAL NAME OF SIXTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	СНОІ	HYUK-YUL	
SIGNATURE		DATE	20/b. /o. d.

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SEVENTH INVENTOR/ASSIGNOR	KIM	HYUNG-HO	
		<u> </u>	
		DATE	50/6:9.12

SEC Ref No. III-201512-001-1-US0 Attorney Ref No. 8021S-897 (SS-51312-US)

LEGAL NAME OF EIGHTH INVENTOR/ASSIGNOR	Family Name CHOI	First Given Name SANG-JIN	Second Given Name
SIGNATURE	1 de	DATE	2016, 3. 12

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
NINTH INVENTOR/ASSIGNOR	LEE	HEOK-JAE	

LEGAL NAME OF TENTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	SHIN	DONG-OK	
SIGNATURE		DATE	9/12/20/6

SEC Ref No. III-201512-001-1-US0 Attorney Ref No. 8021S-897 (SS-51312-US)

LEGAL NAME OF ELEVENTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	YOUM	JANG-HYOUN	
SIGNATURE	John	DATE	20/6.7.12

Section III. Assignment

In consideration of the sum of One Dollar (\$1.00) and other good and valuable consideration paid to each of the undersigned, collectively referred to in Section II as Assignors in this section, hereby sell(s) and assign(s) to

HORIBA STEC, CO., LTD.

having an address at 11-5, Hokodate-cho, Kamitoba, Minami-ku, Kyoto, Japan (hereinafter designated as the Assignee), the entire (100%) right, title and interest for the United States as defined in 35 USC §100, in the invention described in the application identified in Section I of this document.

Assignor hereby confirms any prior assignment to Assignee, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignee and its successors in interest, the full and exclusive right, title and interest in the United States of America and throughout the world, including the right to claim priority under the laws of the United States, the Paris Convention, and any foreign countries, to the inventions as described in the aforesaid application, to the aforesaid application itself, and all divisions, continuations, continuations-in-part, or other applications claiming priority directly or indirectly from the aforesaid application, and any United States or foreign Letters Patent, utility model, or other similar rights which may be granted thereon, including reissues, reexaminations and extensions thereof, and all copyright rights throughout the world in the aforesaid application and the subject matter disclosed therein, these rights, title and interest to be held and enjoyed by Assignee to the full end of the term for which the Letters Patent, utility model, or other similar rights, are granted and any extensions thereof as fully and entirely as the same would have been held by Assignor had this assignment and sale not been made, and the right to sue for, and recover for past infringements of, or liabilities for, any of the rights relating to any of the applications, patents, utility models, or other similar rights, resulting therefrom, and the copyright rights;

SEC Ref No.	##-201512-001-1-US0	Attorney Ref No.	8021S-897
			(SS-51312-US)

Assignor hereby covenants and agrees to execute all instruments or documents required or requested for the making and prosecution of any applications of any type for patent, utility model, or other similar rights, and for copyright, in the United States and in all foreign countries including, but not limited to, any provisional, continuation, continuation-in-part, divisional, renewal or substitute thereof, and as to letters patent any reissue, reexamination, or extension thereof, and for litigation regarding, or for the purpose of protecting title and to the said invention, the United States application for patent, or Letters Patent therefor, and to testify in support thereof, for the benefit of Assignee without further or other compensation than that above set forth;

Assignor hereby covenants that no assignment, sale, license, agreement or encumbrance has been or will be entered into which would conflict with this Assignment; and

Assignor hereby requests the United States Patent and Trademark Office to issue the Letters Patent of the United States of America to Assignee, and requests that any official of any country or countries foreign to the United States, whose duty it is to issue or grant patents and applications as aforesaid, to issue the Letters Patent, Utility Model Registration or other similar right to Assignee.

The undersigned hereby grant(s) the law firm of F. Chau & Associates, LLC the power to insert on this Declaration and Assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent and Trademark Office for recordation of this document.

Inventor(s)/Assignor(s) Signature(s) for Section III.

LEGAL NAME OF FIRS		First Given Name	Second Given Name
neverson, Adamsed	" NISHIKAWA	ICHIRO	
SIGNATUF	re <u>Chira Dinhiko</u>	DATE	Oct. 7, 2016
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COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND INVENTOR/ASSIGNOR	TERASAKA	MASANORI	

TICNATIOE *	nesanori Teresoks	DATE	007.13,20/6

LEGAL NAME OF THIRD	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	HAMADA	MASASHI	
SIGNATURE	Masashi Hamo	da DATE	Oct, 7, 2016

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FOURTH INVENTOR/ASSIGNOR	LEE	TAE-HOON	
			i
SIGNATURE _	이 제출	DATE	Oct. 19, 2016
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SEC Ref No.	IH-201512-001-1-US0	Attorney Ref No.	80215-897
			(88-51312-US)

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM