502800218 05/08/2014

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WOO-HEE LEE	04/30/2014
NAE-IN LEE	03/13/2014
KUG-HWAN KIM	03/13/2014
JONG-HO LEE	03/13/2014

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.	
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU, GYEONGGI-DO	
City:	SUWON-SI	
State/Country:	KOREA, REPUBLIC OF	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14271909

CORRESPONDENCE DATA

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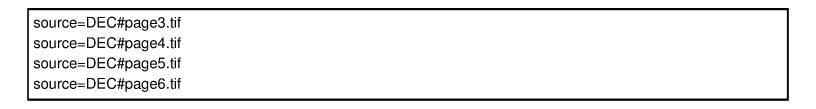
Address Line 4: BURLINGTON, MASSACHUSETTS 01803

ATTORNEY DOCKET NUMBER:	SAM-1733
NAME OF SUBMITTER:	ANTHONY P. ONELLO, JR.
SIGNATURE:	/Anthony P. Onello, Jr./
DATE SIGNED:	05/08/2014
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 6 source=DEC#page1.tif source=DEC#page2.tif

PATENT REEL: 032848 FRAME: 0824

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PATENT REEL: 032848 FRAME: 0825

COMBINED DECLARATION (37 CFR §1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM¹

The undersigned acknowledges 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, hereinafter referred to collectively as Assignor, has invented: SEMICONDUCTOR DEVICE AND METHOD FOR FABRICATING THE SAME Title: for which Assignor is 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: \bowtie The attached U.S. non-provisional patent application, or U.S. non-provisional patent application number _______, filed 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. IB-201301-034-1-US0 Attorney Ref No. SAM-1733

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
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PATENT REEL: 032848 FRAME: 0826

SAMSUNG ELECTRONICS CO., LTD.

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

I 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, the undersigned hereby sell(s) and assign(s) to

Samsung Electronics Co., Ltd.

having an address at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do 443-742, 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;

SEC Ref No	IB-201301-034-1-US0	Attorney Ref No.	SAM-1733	
				

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 Onello & Mello, LLP 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.

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

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FIRST INVENTOR/ASSIGNOR	Kim	Woo-Hee	
SIGNATURE		DATE	
SIGNATORE			

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LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND INVENTOR/ASSIGNOR	Lee	Nae-In	
-		1	
SIGNATURE	of un	DATE -	3/13/2014
		and the state of t	

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
THIRD INVENTOR/ASSIGNOR	Kim	Kug-Hwan	
SIGNATURE	Kighwan	DATE	3/13/2014

LEGAL NAME OF FOURTH INVENTOR/ASSIGNOR	Family Name Lee	Eirst Given Name Jong-Ho	Second Given Name
SIGNATURE _	Leefongh	DATE	3/13/2014

SEC Ref No.	IB-201301-034-1-US0	Attorney Ref No.	SAM-1733

Doc code: Oath

Document Description: Oath or declaration filed

PTO/AIA/02 (07-13) Approved for use through 01/31/2014. OMB 0651-0032

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SUBSTITUTE STATEMENT IN LIEU OF AN OATH OR DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (35 U.S.C. 115(d) AND 37 CFR 1.64)

Title of Invention	SEMICONDUCTOR DEVICE AND METHOD FOR FABRICTING THE SAME				
This statement is directed to:					
The attached application,					
OR					
United States application or PCT international application number			filed on		
LEGAL NAME of inventor to whom this substitute statement applies:					
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)					
Woo-Hee KIM					
Residence (except for a deceased or legally incapacitated inventor):					
_{city} Hwaseong-si		State	Country KR		
Mailing Address (except for a deceased or legally incapacitated inventor): Intellectual Property Team, Samsung Semiconductor Samsung Electronics Co., Ltd., SAN#16, Banwol-Dong					
_{City} Hwas	ung-City, Gyeonggi-do	State	Zip	Country KR	
I believe the above-named inventor or joint inventor to be the original inventor or an original joint inventor of a claimed invention in the application.					
The above-identified application was made or authorized to be made by me.					
I hereby acknowledge that any willful false statement made in this statement is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.					
Relationship to the inventor to whom this substitute statement applies.					
Legal Representative (for deceased or legally incapacitated inventor only),					
Assignee,					
Pe	Person to whom the inventor is under an obligation to assign,				
Pe	Person who otherwise shows a sufficient proprietary interest in the matter (petition under 37 CFR 1.46 is required), or				
Joint Inventor.					

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This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63, The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS, SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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SUBSTITUTE STATEMENT

Circumstances permitting execution of this substitute statement:					
Inventor is deceased,					
Inventor is under legal incapacity,					
Inventor cannot be found or reached after diligent effort, or					
Inventor has refused to execute the oath or declaration under 37 CFR 1.63.					
If there are joint inventors, please check the appropriate box below:					
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) naming the entire inventive entity has been or is currently submitted.					
OR					
An application data sheet under 37 CFR 1.76 (PTO/AIA/14 or equivalent) has not been submitted. Thus, a Substitute Statement Supplemental Sheet (PTO/AIA/11 or equivalent) naming the entire inventive entity and providing inventor information is attached. See 37 CFR 1.64(b).					
WARNING:					
Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available. PERSON EXECUTING THIS SUBSTITUTE STATEMENT: Name: Taeksung Kim Signature:					
APPLICANT NAME AND TITLE OF PERSON EXECUTING THIS SUBSTITUTE STATEMENT:					
If the applicant is a juristic entity, list the applicant name and the title of the sign	ner;				
Samsung Electronics Co., Ltd.					
Title of Person Executing This Substitute Statement: VP, Director of IP Prosecution Group)				
The signer whose title is supplied above, is authorized to act on behalf of the applicant.					
Residence of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent):					
	Country Republic of Korea				
Mailing Address of the signer (unless provided in an application data sheet, PTO/AIA/14 or equivalent)					
Intellectual Property Team, Samsung Semiconductor Samsung Electronics Co., Ltd., SAN#16, Banwol-Dong					
_{City} Hwaseong-si, Gyeonggi-do _{State}	zip Country KR				
Note: Use an additional PTO/AIA/02 form for each inventor who is deceased, legally incapacitated, cannot be found or reached after diligent effort, or has refused to execute the eath or declaration under 37 CFR 1.63.					
after diagent enort, or has refused to execute the dath of decidation drider of OFF 7.50.					

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