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PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SUNGWOO MYUNG	06/09/2016
GEUMJUNG SEONG	06/09/2016
JISOO OH	06/09/2016
JINWOOK LEE	10/21/2016
DOHYOUNG KIM	10/21/2016
YONG-HO JEON	06/09/2016

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

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15401562	

CORRESPONDENCE DATA

Fax Number: (703)207-0003

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: 703-207-0008 eoa@lee-iplaw.com Email: LEE & MORSE, P.C. **Correspondent Name:**

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Address Line 2: SUITE 500

Address Line 4: FALLS CHURCH, VIRGINIA 22042

ATTORNEY DOCKET NUMBER:	239/1130_00
NAME OF SUBMITTER:	EUGENE M. LEE
SIGNATURE:	/Eugene M. Lee/
DATE SIGNED:	01/09/2017

PATENT REEL: 040902 FRAME: 0887 504169534

Total Attachments: 5 source=Combined_Decl_and_Assignment#page1.tif source=Combined_Decl_and_Assignment#page2.tif source=Combined_Decl_and_Assignment#page3.tif source=Combined_Decl_and_Assignment#page4.tif source=Combined_Decl_and_Assignment#page5.tif

PATENT REEL: 040902 FRAME: 0888

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:

Title: SEM	ICONDUCTOR DEVICES AND METI	HODS OF FABRICATING	THE SAME
for which Ass patent.	signor is about to make or has mad	de United States or Inter	mational application for
WHEREAS, as	s a below named inventor(s), I/(we	e) hereby declare that:	•
Section I. De	eclaration		
This declarat	ion is directed to:		
	The attached U.S. non-provision	nal patent application, o	r
	U.S. non-provisional patent appl	lication number	, filed on
	PCT international patent applica	tion number	, filed on
The above-id	entified application was made or a	authorized to be made b	by me (us).
, ,	e that I am (we are) the original inv the above-identified application.	ventor (original joint inv	entors) of a claimed
	acknowledge that any willful falsonder 18 U.S.C. 1001 by fine or imp		
	e that I have reviewed and unders ncluding the claims.	tand the contents of the	above identified
¹ This form rec	uires the use of an Application Data She	et.	
SEC Ref No.	IE-201507-013-1-US0	Attorney Ref No.	239/1130_00
COMBINED	DECLARATION (37 CER 1 63) FOR LITH	ITV DATENT APPLICATION	I AND ASSIGNMENT FORM

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SAMSUNG ELECTRONICS CO., LTD.

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 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 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

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SAMSUNG ELECTRONICS CO., LTD.

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 LEE & MORSE, PC 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	MYUNG	Sungwoo	
		1 1 3	
SIGNATURE	MILE	DATE	09.06.2016

SEC Ref No.	IE-201507-013-1-US0	Attorney Ref No.	239/1130 00

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LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND INVENTOR/ASSIGNOR	SEONG	GeumJung	
SIGNATURE	e Trif	DATE	09.06.2016

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
THIRD INVENTOR/ASSIGNOR	ОН	Jisoo	
	\bigcap	·	
SIGNATURE	dr-	DATE	01.06.2016
		_	

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FOURTH (INVENTOR/ASSIGNOR	LEE	JinWook	
1	- In		
SIGNATURE		DATE	16.10.21

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SEC Ref No.	IE-201507-013-1-US0	Attorney Ref No.	239/1130_00	

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LEGAL NAME OF FIFTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	Dohyoung -	
			L
SIGNATURE _	Kinds Hyong	DATE	10.21.2016

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SIXTH INVENTOR/ASSIGNOR	JEON	Yong-Ho	,
			1
	I Sulley of the		
SIGNATURE	A Allef	DATE	09.06.2016

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SEC Ref No.	IE-201507-013-1-US0	Attorney Ref No.	239/1130 00
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PATENT REEL: 040902 FRAME: 0893