504462385 07/18/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KISEOK LEE	05/26/2017
CHAN-SIC YOON	05/29/2017
AUGUSTIN HONG	05/26/2017
KEUNNAM KIM	06/09/2017
DONGOH KIM	06/09/2017
BONG-SOO KIM	05/26/2017
JEMIN PARK	05/26/2017
HOIN LEE	05/26/2017
SUNGHO JANG	06/09/2017
KIWOOK JUNG	05/26/2017
YOOSANG HWANG	05/26/2017

RECEIVING PARTY DATA

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City:	SUWON-SI, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15653198

CORRESPONDENCE DATA

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Correspondent Name: LEE & MORSE, P.C.

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PATENT 504462385 REEL: 043036 FRAME: 0712

ATTORNEY DOCKET NUMBER:	239/1156_00
NAME OF SUBMITTER:	EUGENE M. LEE
SIGNATURE:	/Eugene M. Lee/
DATE SIGNED:	07/18/2017
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 6

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> PATENT REEL: 043036 FRAME: 0713

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:		ICONDUCTOR MEMORY DEVICE AND METHOD OF JUFACTURING THE SAME
for whice for pate		ignor is about to make or has made United States or International application
WHERI	EAS, a	as a below named inventor(s), I/(we) hereby declare that:
Section	I. De	claration
This dec	claratio	on is directed to:
	\boxtimes	The attached U.S. non-provisional patent application, or
		U.S. non-provisional patent application number, filed on, or
l		PCT international patent application number, filed on
The abo	ve-ide	entified application was made or authorized to be made by me (us).
		that I am (we are) the original inventor (original joint inventors) of a claimed ne above-identified application.
	-	acknowledge that any willful false statement made in this declaration is der 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or
_		that I have reviewed and understand the contents of the above identified acluding the claims.
		e that I am aware of the duty to disclose information which is material to as defined in 37 CFR § 1.56.
This fo	orm requ	uires the use of an Application Data Sheet.
SEC Re	ef No.	IE-201609-048-1-US0 Attorney Ref No. 239/1156_00

PATENT REEL: 043036 FRAME: 0714

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

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 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

SEC Ref No.	IE-201609-048-1-US0	Attorney Ref No.	239/1156_00

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION 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 FIRST	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	LEE	Kiscok	
SIGNATURE	<u> </u>	DATE	17 05, 26

LEGAL NAME OF SECOND	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	YOON	Chan-Sic	

		4	
SEC Ref No.	1E-201609-048-1-US0	Attorney Ref No.	239/1156 00

LEGAL NAME OF THIRD	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	HONG	Augustin	
		łi	
SIGNATURE _	antinte	DATE.	05/26/20/7
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LEGAL NAME OF FOURTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	Keunnam	
SIGNATURE	2 + 7	DATE	2011 (06 (19)

LEGAL NAME OF FIFTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	Dongoh	
SIGNATURE	WAX.	DATE	Zath of on
SIGNATURE _	\$X. \$\times \times \tim	DATE	

			N.
SEC Ref No.	IE-201609-048-1-US0	Attorney Ref No.	239/1156_00

LEGAL NAME OF SIXTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	Bong-Soo	***************************************
SIGNATURE	Lin Boysoo	DATE	5/26/2011

LEGAL NAME OF SEVENTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	PARK	Jemin	
	Jemn Park		5/24/
SIGNATURE _	<u> </u>	DATE _ 2 2 /11008494	7 7 7017

		Name
LEE	Hoin	
3 salver Day	********	/7.05.26
	LEE	DATE

SEC Ref No.	IE-201609-048-1-US0	Attorney Ref No.	239/1156_00
	***************************************	₹	***************************************

LEGAL NAME OF NINTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	JANG	Sungho	
,			·····
SIGNATURE	7.19.2	DATE	M. 6 , 5

LEGAL NAME OF TENTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	JUNG	Kiwook	
	7 . 2		
SIGNATURE _	FDIS	DATE	17.5.26

LEGAL NAME OF ELEVENTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	HWANG	Yoosang	·
SIGNATURE	好分分	DATE	17.5.26

SEC RAFNA	TE-201600-04R-1-TISO	Attorney Ref No	230/1156 86

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