504174193 01/11/2017

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JUN-GU KANG	08/24/2016
MYOUNGKYU PARK	08/24/2016
CHULHO CHUNG	08/24/2016

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:	15401176

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	SAM-54292	
NAME OF SUBMITTER:	ALYSA N. YOUNGSON	
SIGNATURE:	/Alysa N. Youngson/	
DATE SIGNED:	01/11/2017	

Total Attachments: 3

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PATENT 504174193 REEL: 040949 FRAME: 0376

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 individually and collectively as Assignor,

has inve	SEMICONDUCTOR DEVICE HAVI	NG ASYMMETRIC ACTIVE REG	SION AND METHOD
	h Assignor is about to make or has		sational application
for pate			
	AS, as a below named inventor(s), I	V(we) nereby deciare that:	
	I. Declaration		
This dec	laration is directed to:		
*	The asserted is reasonable.	dain and announce and in action of an	
le F		visional patent application, or	73
l	U.S. non-provisional patent on	application number	, filed
[plication number	, filed on
		~"	
The abo	ve-identified application was made	e or authorized to be made by	me (us).
	elieve that I am (we are) the original in the above-identified application		ventors) of a claimed
	ereby acknowledge that any wil ole under 18 U.S.C. § 1001 by fine		
	ereby state that I (we) have revie d application, including the claims		ntents of the above
	knowledge that I (we) am (are) a to patentability as defined in 37 C	*	information which is
This for	m requires the use of an Application Data	ı Sheet.	
SEC Ref N	lo. IB-201508-039-1-US0	Attorney Ref No.	SAM-54292

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 1 of 3

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 U.S.C. § 100, in the invention described in the application identified in Section 1 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, 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.

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SEC Ref No.	IB-201508-039-1-US0	Attorney Ref No.	SAM-54292
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The undersigned hereby grant(s) the law firm of Muir Patent Law, PLLC 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 NVENTOR/ASSIGNOR	KANG	Jun-Gu	<u>.</u>
	• •		
	11 - 200X		2016.8.24

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND INVENTOR/ASSIGNOR	PARK	MYOUNGKYU	
		294 DATE	2016. 8.24

LEGAL NAME OF THIRD	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	CHUNG	СНИГНО	
SIGNATURE		DATE	2016. P., 246

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