PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JIN-SU LEE	04/28/2021
HONG SIK CHAE	04/28/2021
YOUN SOO KIM	05/11/2021
TAE KYUN KIM	04/28/2021
YOUN JOUNG CHO	09/06/2021

RECEIVING PARTY DATA

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State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17470370

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ATTORNEY DOCKET NUMBER:	2677-000625-US
NAME OF SUBMITTER:	JOHN A. CASTELLANO, REG NO. 35,094
SIGNATURE:	/John A. Castellano/
DATE SIGNED:	09/14/2021

Total Attachments: 4

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PATENT REEL: 057470 FRAME: 0112

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:	SEMICONDUCTOR DEVICE	AND METHOD FOR FAB	RICATING THEREOF
for which Ass	signor is about to make or has n	nade United States or In	ternational application
for patent.			
WHEREAS, as	a below named inventor(s), i/(we) hereby declare that	::
Section I. De	claration		
This declarat	ion is directed to:		
\boxtimes	The attached U.S. non-provis	ional patent application	, or
	U.S. non-provisional patent ap		, filed
	PCT international patent appl	ication number	, filed on
The above-id	entified application was made o	or authorized to be mad	e by me (us).
	that I am (we are) the original the above-identified application		nventors) of a claimed
	acknowledge that any willful fander 18 U.S.C. 1001 by fine or in		
¹ This form req	uires the use of an Application Data S	heet.	
SEC Ref No.	IE-202005-035-1-US0	Attorney Ref No.	A CMM 0 0 0 7 CM M X 7 CM

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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 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-

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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 Harness, Dickey & Pierce, P.L.C. 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	Jin-Su	
SIGNATURE		DATE	eozi, 04,2.4
		i i	

LEGAL NAME OF SECOND	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	CHAE	Hong Sik	
SIGNATURE	Evy.	DATE ,	2021.04.2 <u>8</u>

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LEGAL NAME OF THIRD	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	Youn Soo	
SIGNATURE	Younson Kim	DATE	2021, 05, 11

LEGAL NAME OF FORTH	Family Name	First Given Name	Second Given Name
NVENTOR/ASSIGNOR	KIM	Tae Kyun	
	area		
SIGNATURE		DATE	a1.04/28

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LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FIFTH INVENTOR/ASSIGNOR	СНО	Youn Joung	
<u>,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>			
SIGNATURE	You Jon du	DATE	x021.59.06

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