507097379 01/27/2022

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7144217

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
SOO BONG CHANG	01/18/2022
YOUNG-IL LIM	01/18/2022
BOK-YEON WON	01/18/2022
SEOK JAE LEE	01/21/2022
DONG GEON KIM	01/18/2022
MYEONG SIK RYU	01/18/2022
IN SEOK BAEK	01/18/2022
KYOUNG MIN KIM	01/18/2022
SANG WOOK PARK	01/18/2022

RECEIVING PARTY DATA

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

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17585865

CORRESPONDENCE DATA

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ATTORNEY DOCKET NUMBER:	8111S-949
NAME OF SUBMITTER:	RICHARD D. RATCHFORD, JR.
SIGNATURE:	/RICHARD D. RATCHFORD, JR./

PATENT REEL: 058791 FRAME: 0689

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DATE SIGNED:	01/27/2022			
	This document serves as an Oath/Declaration (37 CFR 1.63).			
Total Attachments: 6				
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source=8111S-949-Declaration-Assignment#page2.tif				
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source=8111S-949-Declaration-Assignment#page6.tif				

PATENT REEL: 058791 FRAME: 0690

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:	BITLINE SENSE AMPLIFIER AND A MEMORY DEVICE					
for which Ass for patent.	signor is about to make or has m	ade United States or Interr	national application			
WHEREAS, as	s a below named inventor(s), I/(v	we) hereby declare that:				
Section I. De	eclaration					
This declarat	ion is directed to:					
	The attached U.S. non-provision	onal patent application, or				
	U.S. non-provisional patent ap on	· ————	, filed			
	PCT international patent applic	cation number	, filed on			
The above-id	entified application was made o	r authorized to be made by	y me (us).			
	e that I am (we are) the original in the above-identified application.		ntors) of a claimed			
	vacknowledge that any willful fal nder 18 U.S.C. 1001 by fine or im					
¹ This form rec	uires the use of an Application Data Sh	neet.				
SEC Ref No.	ID-202010-006-1-US0	Attorney Ref No.	8111S-949 (SIP200317US)			

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 1 of 6

PATENT REEL: 058791 FRAME: 0691 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; and

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,

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		<u></u>	(SIP200317US)	

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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 **F. Chau & Associates, LLC** 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	CHANG	S00 B0	NG	7
SIGNATURE	Chang Soo Bun		DATE	202,0/.18

SEC Ref No. ID-202010-006-1-US0 Attorney Ref No. 81115-949 (SIP200317US)

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

(SIP200317US)

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FIFTH INVENTOR/ASSIGNOR	KIM	DONG GEON	
SIGNATURE	Kin boggeon	DATE -	22.01.18
·		·	
LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SIXTH INVENTOR/ASSIGNOR	RYU	MYEONG SIK	
SIGNATURE		DATE	D2 c1 18
LEGAL NAME OF SEVENTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	BAEK	IN SEOK	
SIGNATURE	fact In s	DATE.	22.01.18
	, , , , , , , , , , , , , , , , , ,		·
SEC Ref No. ID-202010	-006-1-US0	Attorney Ref No.	81115-949

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

LEGAL NAME OF EIGTH	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	KIM	KYOUNG MIN	
SIGNATURE _		DATE	22. /, (8

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
INVENTOR/ASSIGNOR	PARK	SANG WOOK	
୍ଧୀ SIGNATURE	RANGEZIBUR Park Sangn	00 k	22. 1.18

SEC Ref No.	ID-202010-006-1-US0	Attorney Ref No.	81115-949
			(SIP200317US)

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

DRAM설계1팀(메모리)/김경민/10213679/2022-01-18 10:53 RECORDED: 01/27/2022 Page 6 of 6

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