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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
JUEON KIM	07/19/2022
TAEHYOUNG KIM	07/19/2022
SEUNGJIN PARK	07/20/2022
JIHWAN HYUN	07/19/2022
MYOUNGBO KWAK	07/19/2022
JUNGHWAN CHOI	07/19/2022

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
Name:	NANYANG TECHNOLOGICAL UNIVERSITY
Name: Street Address:	NANYANG TECHNOLOGICAL UNIVERSITY 50 NANYANG AVENUE
Street Address:	50 NANYANG AVENUE

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	17898851

CORRESPONDENCE DATA

Fax Number: (703)563-0600

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)757-7880

Email: pto@muirpatentlaw.com
Correspondent Name: MUIR PATENT LAW, PLLC

Address Line 1: P.O. BOX 1213

Address Line 4: GREAT FALLS, VIRGINIA 22066

PATENT REEL: 061128 FRAME: 0314

ATTORNEY DOCKET NUMBER:	SAM-60222MAS		
NAME OF SUBMITTER:	SANG KI HWANG		
SIGNATURE:	/Sang Ki Hwang/		
DATE SIGNED:	09/18/2022		
Total Attachments: 5			
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PATENT REEL: 061128 FRAME: 0315

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 invented:

Title:	AND N	T DETECTOR CIRCUIT FOR DIFFE METHOD OF COMPENSATING FOR RATOR		
for whi	7	gnor is about to make or has ma	de United States or Inte	rnational application
WHERE	AS, as a	a below named inventor(s), I/(w	e) hereby declare that:	
Section	I. Dec	laration		
This de	claratic	n is directed to:		
		The attached U.S. non-provision U.S. non-provisional patent app	lication number	
		PCT international patent applica		, filed on
The abo	ove-ide	ntified application was made or	authorized to be made l	by me (us).
		that I am (we are) the original in a second in the case. It is a second in the case of the	nventor (original joint i	nventors) of a claimed
	able un	acknowledge that any willful der 18 U.S.C. § 1001 by fine or		
	-	state that I (we) have reviewe ication, including the claims.	d and understand the	contents of the above
		ledge that I (we) am (are) awar entability as defined in 37 C.F.R	<u>-</u>	e information which is
¹ This fo	rm requ	res the use of an Application Data She	et.	
SEC Ref	No	ID-202109-113-1-US0	Attorney Ref No.	SAM-60222MAS

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

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, and

NANYANG TECHNOLOGICAL UNIVERSITY

having an address at 50 Nanyang Avenue, Singapore, 639798, Singapore, (hereinafter designated as Assignees), 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 I of this document.

Assignor hereby confirms any prior assignment to Assignees, and to the extent that Assignor has not already done so, agrees to assign, and hereby does, sell, assign and transfer unto Assignees 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 Assignees 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 Assignees without further or other compensation than that above set forth;

SEC Ref No.	1D-202109-113-1-US0	Attorney Ref No.	SAM-60222MAS	

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

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 Assignees, 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 Assignees.

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 INVENTOR/ASSIGNOR	Xim	Jueon	
	225. vis		v .
SIGNATURE	22	DATE	

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND INVENTOR/ASSIGNOR	Kim	Tachyoung	

SEC Ref No. 1D-202109-113-1-US0 Attorney Ref No. SAM-60222MAS

LEGAL NAME OF THIRD INVENTOR/ASSIGNOR	Family Name	First Given Name	Second Given Name
Signature			

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FOURTH INVENTOR/ASSIGNOR	Hyun	ihwan	
SIGNATURE			2032 .09 . 14

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FIFTH NVENTOR/ASSIGNOR	Kwak	Myoungbo	
	//////////////////////////////////////		

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SIXTH INVENTOR/ASSIGNOR	Chai	Junghwan	
	CH02 JW6 4*	5600 000	~~~

A.

SEC Ref No. ID-202109-113-1-US0 Attorney Ref No. SAM-60222MAS

RECORDED: 09/18/2022