PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
JUYUN LEE	10/20/2022
SUNGGEUN KIM	10/13/2022
HYEONJU LEE	10/13/2022
SEUK SON	10/20/2022
KANGJIK KIM	10/20/2022
JAEHYUN PARK	10/20/2022

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD.
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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:	17985193	

CORRESPONDENCE DATA

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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.

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ATTORNEY DOCKET NUMBER:	SAM-60306
NAME OF SUBMITTER:	JINSEONG PARK
SIGNATURE:	/Jinseong Park/
DATE SIGNED:	12/15/2022

Total Attachments: 4

PATENT REEL: 062099 FRAME: 0637

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> PATENT REEL: 062099 FRAME: 0638

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:	DIGI	TAL LOOP FILTER OF LOW LATEN RECOVERY CIRCU	NCY AND LESS OPERATION JIT INCLUDING THE SAME	
for whi		gnor is about to make or has ma	de United States or Intern	ational application
WHERE	AS, as a	a below named inventor(s), I/(we	e) hereby declare that:	
Section	ı I. Dec	laration		
This de	claratic	n is directed to:		
		The attached U.S. non-provision U.S. non-provisional patent app filed on	lication number	,
		PCT international patent applica	ation number	
The abo	ove-ide	ntified application was made or	authorized to be made by	me (us).
		that I am (we are) the original i e above-identified application.	nventor (original joint inv	rentors) of a claimed
	able un	acknowledge that any willful der 18 U.S.C. § 1001 by fine or i		
	-	state that I (we) have reviewe ication, including the claims.	d and understand the co	ntents of the above
		ledge that I (we) am (are) awar centability as defined in 37 C.F.R	•	information which is
¹ This fo	orm requ	 ires the use of an Application Data She	et.	
SEC Ref	No	IF-202108-004-1-US0	Attorney Ref No.	SAM-60306

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 (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 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, 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.

	SEC Ref No. IF-202108-004-1-US0 Attorney Ref No. SAM-	-60306
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REEL: 062099 FRAME: 0640

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	Lee	Juyun	
SIGNATURE	Jaghan	DATE	2022-10-20
	Family Name	First Given Name	Second Given Name

LEGAL NAME OF SECOND INVENTOR/ASSIGNOR	Family Name Kim	First Given Name Sunggeun	Second Given Name
SIGNATURE		DATE	2022-10-13

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
THIRD INVENTOR/ASSIGNOR	Lee	Hyeonju	
	Hurndy		
SIGNATURE _.		_ DATE	2022-10-13

SEC Ref No.	IF-202108-004-1-US0	Attorney Ref No.	SAM-60306

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FOURTH INVENTOR/ASSIGNOR	Son	Seuk	
SIGNATURE	hmz	DATE	2022-10-20

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
FIFTH INVENTOR/ASSIGNOR	Kim	Kangjik	
SIGNATURE	2 may 2	DATE	2022-10-20

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SIXTH INVENTOR/ASSIGNOR	Park	Jaehyun	
	박과정		2022-10-20
SIGNATURE		DATE	

SEC Ref No. 1F-202108-004-1-US0 Attorney Ref No. SAM-60306	EC Ret No.	1F-202108-004-1-US0	Attorney Ref No.	SAM-60306	
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