506263583 09/22/2020

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HWASOO LEE	05/06/2020
MINGON SHIN	05/07/2020
SEUNGJAE LEE	05/07/2020
MYEONGJONG JU	05/07/2020

RECEIVING PARTY DATA

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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:	17026714

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ATTORNEY DOCKET NUMBER:	SAM-58146
NAME OF SUBMITTER:	ALYSA N. YOUNGSON
SIGNATURE:	/Alysa N. Youngson/
DATE SIGNED:	09/22/2020

Total Attachments: 4

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PATENT REEL: 053840 FRAME: 0500

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:	STORAGE DEVICE, NONVOLATI CONTROLLER, AND OPERAT		
for whic	n Assignor is about to make or has m	nade United States or Into	ernational application
WHEREA	S, as a below named inventor(s), I/(we) hereby declare that:	
Section	. Declaration		
This dec	aration is directed to:		
[2 	The attached U.S. non-provisi U.S. non-provisional patent ap		
L			
	PCT international patent appl	ication number	, filed on
I (we) be	re-identified application was made of the original in the above-identified application	l inventor (original joint	, , ,
	ereby acknowledge that any willfulled with the constant of the second section of the constant		
	ereby state that I (we) have reviewd application, including the claims.	ved and understand the	contents of the above
	knowledge that I (we) am (are) aw to patentability as defined in 37 C.F		se information which is
1 This for	n requires the use of an Application Data S	heet.	
SEC Ref	No. <u>ID-201906-061-1-US0</u>	Attorney Ref No	SAM-58146

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM Page 1 of 4

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, re-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.

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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 FIRST INVENTOR/ASSIGNOR	Family Name Lee	First Given Name Hwasoo	Second Given Name
SIGNATURE	YYYK	DATE C	2010, 05, 06

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND INVENTOR/ASSIGNOR	Shin	Mingon	
	-470 m		7. ۲. ٥٠٠

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
THIRD INVENTOR/ASSIGNOR	Lne	Seungjae	
	American	DATE	7020.05.07

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	First Given Name	Second Given Name	
Ju	Myeongjong		
SIGNATURE		DATE 2020 05 07	

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