# 505527390 06/16/2019

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5574196

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
GUK IL AN	05/08/2019
KEUN HWI CHO	05/08/2019
DAE WON HA	05/08/2019
SEUNG SEOK HA	05/08/2019

#### **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

#### **PROPERTY NUMBERS Total: 1**

Property Type	Number	
Application Number:	16425337	

### 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

ATTORNEY DOCKET NUMBER:	SAM-57118
NAME OF SUBMITTER:	JINSEONG PARK
SIGNATURE:	/Jinseong Park/
DATE SIGNED:	06/16/2019

### **Total Attachments: 4**

source=SAM-57118\_CDA#page1.tif source=SAM-57118\_CDA#page2.tif source=SAM-57118\_CDA#page3.tif

PATENT 505527390 REEL: 049480 FRAME: 0863

source=SAM-57118\_CDA#page4.tif

PATENT REEL: 049480 FRAME: 0864

# COMBINED DECLARATION (37 CFR § 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM<sup>1</sup>

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:	SEMICO	NDUCTOR DEVICE	
for which As for patent.	signor is about to make or has ma	ade United States or Inte	rnational application
WHEREAS, a	s a below named inventor(s), I/(v	ve) hereby declare that:	
Section I. De	eclaration		
This declarat	ion is directed to:		
Z	The attached U.S. non-provisio	nal patent application, c	<b>K</b>
	U.S. non-provisional patent ap		, filed on
	PCT international patent applic	ation number	
The above-ic	entified application was made or	authorized to be made	by me (us).
	e that I am (we are) the original the above-identified application.	inventor (original joint i	nventors) of a claimed
	y acknowledge that any willfu nder 18 U.S.C. § 1001 by fine or		
	y state that I (we) have reviewe plication, including the claims.	ed and understand the	contents of the above
	wledge that I (we) am (are) awa atentability as defined in 37 C.F.I		e information which is
1 This form rec	uires the use of an Application Data Sh	ee <b>t</b> .	

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. IE-201886-117-1-US0 Attorney Ref No.

SAM-57118

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

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	AN	Guk II	
SIGNATURE		DATE	3-411.5-7

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND NVENTOR/ASSIGNOR	СНО	Keun Hwi	
SIGNATURE	7k82225	DATE	20 (4 t g

	LEGAL NAME OF	Family Name	First Given Name	Second Given Name
	THIRD INVENTOR/ASSIGNOR	на	Dat Won	
A to the first of the same of the same of the same of	SIGNATURE	17) PX	LATE	Mry 8, 2019
				7

SEC Ref No.

IE-201806-117-1-USO

Attorney Ref No.

SAM-57118

COMBINED DECLARATION (37 CFR 1 63) FOR LITILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 3 of 4

LEGAL NAME OF	Familly Name	First Given Name	Second Given Name	
FOURTH INVENTOR/ASSIGNOR	HA	Seung Seok		
SIGNATURE	44,2	DATE	- 3# 19 . \$ . <del>\$</del>	

96 (1865) 246 / 789 / 6450 / 645

SEC Ref No. IE-201806-117-1-4750 Attorney Ref No. 8AM-57118

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

togic TD됨(반도체엔)/단국일/15026403/2019-05-07 09:31

PATENT

REEL: 049480 FRAME: 0868