## 505316302 02/06/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5363083

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the ASSIGNEE previously recorded on Reel 047882 Frame 0229. Assignor(s) hereby confirms the SAMSUNG ELECTRONICS CO., LTD. POSTECH ACADEMY-INDUSTRY FOUNDATION.

#### **CONVEYING PARTY DATA**

Name	Execution Date
MINSOO CHOI	10/25/2018
BYUNGSUB KIM	10/25/2018

#### **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:	POSTECH ACADEMY-INDUSTRY FOUNDATION
Street Address:	77, CHEONGAM-RO, NAM-GU
City:	POHANG-SI, GYEONSANGBUK-DO
State/Country:	KOREA, REPUBLIC OF

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

Property Type	Number
Application Number:	16235053

#### **CORRESPONDENCE DATA**

**Fax Number:** (703)668-8200

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:** 703-668-8000

Email: dcmailroom@hdp.com

Correspondent Name: HARNESS, DICKEY & PIERCE, P.L.C.

Address Line 1: P.O. BOX 8910
Address Line 2: GARY D. YACURA

Address Line 4: RESTON, VIRGINIA 20195

ATTORNEY DOCKET NUMBER: 2557-002915-US

NAME OF SUBMITTER: GARY D. YACURA, REG. NO. 35,416

PATENT REEL: 048274 FRAME: 0801

SIGNATURE:	/Gary D. Yacura/									
DATE SIGNED:	02/06/2019									
Total Attachments: 5										
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PATENT REEL: 048274 FRAME: 0802

# 505258849 01/02/2019

# PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

#### **CONVEYING PARTY DATA**

Name	Execution Date
MINSOO CHOI	10/25/2018
BYUNGSUB KIM	10/25/2018

#### **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

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Email: dcmailroom@hdp.com

Correspondent Name: HARNESS, DICKEY & PIERCE, P.L.C.

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Address Line 2: GARY D. YACURA

Address Line 4: RESTON, VIRGINIA 20195

ATTORNEY DOCKET NUMBER:	2557-002915-US						
NAME OF SUBMITTER:	GARY D. YACURA, REG. NO. 35,416						
SIGNATURE:	/Gary D. Yacura/						
DATE SIGNED:	01/02/2019						

#### **Total Attachments: 4**

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PATENT REEL: 048274 FRAME: 0803

EPAS ID: PAT5305621

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

The undersigned acknowledge 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 inventors have invented:

	NSMITTING DEVICE AND RECEIVI FCHING	NG DEVICE PROVIDING	FRELAXED IMPEDANCE
for which Inv	entors are about to make or has	made United States or	International
application f	or patent.		
WHEREAS, a	s a below named inventor(s), I/(w	re) hereby declare that:	
Section I. Do	eclaration		
This declarat	tion is directed to:		
Ø	The attached U.S. non-provision	onal patent application,	or
	U.5. non-provisional patent apport		, filed
П	PCT international patent applic	ation number	filed on
I (we) believ	dentified application was made or e that I am (we are) the original in the above-identified application.		
	y acknowledge that any willful fal Inder 18 U.S.C. 1001 by fine or im	addri muunogu suu maribi dii ili tala bila hahaa tiharina diribhada ili.	
	quires the use of an Application Data Sh	<b>88</b> *	
SEC Ref No.	IF-201805-010-1-US0	Attorney Ref No.	2557-002915-US
COMBINED D	ECLARATION (37 CFR 1.63) FOR UTIL Page	JTY PATENT APPLICATION	I AND ASSIGNMENT FORM

PATENT REEL: 048274 FRAME: 0804 SAMSUNG ELECTRONICS CO., LTD.

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, collectively referred to in Section II as Assignors in this section, 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

#### Postech Academy-Industry Foundation

having an address at 77, Cheongam-ro, Nam-gu, Pohang-si, Gyeongsangbuk-do, 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.

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

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COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 2 of 4

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.

The undersigned hereby grant(s) the law firm of Harness, Dickey & Pierce, P.L.C. 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.

Inventor(s)/Assignor(s) Signature(s) for Section II.

LEGAL NAME O FIRST INVENTOR/ASSIGI		amily Name CHOI	First Given Na Minsoo	me	Second Given Name
SIGNAT	TURE $Z_{2}$	ww		DATE	<u>/0-25-2018</u>
SEC Ref No.	IF-201805-0	10-1-US0	Attorney Ref No		2557-002915-US

COMBINED DECLARATION (37 CFR 1.63) FOR UTILITY PATENT APPLICATION AND ASSIGNMENT FORM
Page 3 of 4

## SAMSUNG ELECTRONICS CO., LTD.

LEGAL NAME OF	Family Name	First Given Name	Second Given Name
SECOND	KIM	Byungsub	
		DATE	
SIGNATURE	<i>-711</i>		od. 25.20/8

SEC Ref No. IF-201805-010-1-US0 Attorney Ref No. 2557-002915-US

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

PATENT REEL: 048274 FRAME: 0807

**RECORDED: 02/06/2019**