506231866 09/01/2020

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT6278610

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
HYUNG-SUN LEE	09/09/2019
KANG-YOON LEE	09/05/2019
SUNG-HUN CHO	09/05/2019
GWAN-HYUNG KIM	09/09/2019
SANG-YUN KIM	09/05/2019
HO-CHUL RYU	09/05/2019
SANG-HO KIM	09/09/2019

RECEIVING PARTY DATA

SAMSUNG ELECTRONICS CO., LTD.
129, SAMSUNG-RO, YEONGTONG-GU
SUWON-SI, GYEONGGI-DO
KOREA, REPUBLIC OF
16677
DECEMBELLS DUCINICS FOUNDATION CUNICKYUNIKWAN UNIVERSITY
RESEARCH & BUSINESS FOUNDATION SUNGKYUNKWAN UNIVERSITY
2066, SEOBU-RO, JANGAN-GU
2066, SEOBU-RO, JANGAN-GU

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16493057

CORRESPONDENCE DATA

506231866

Fax Number: (703)816-4100

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: 7038164000

Email: PTOMAIL@nixonvan.com

Correspondent Name: MICHAEL J. SHEA/NIXON & VANDERHYE P.C.

Address Line 1: 901 N. GLEBE ROAD

11TH FLOOR Address Line 2:

REEL: 053661 FRAME: 0573

PATENT

Address Line 4: ARI	LINGTON, VIRGINIA 22203
ATTORNEY DOCKET NUMBER:	MJS-6280-283
NAME OF SUBMITTER:	MICHAEL J. SHEA
SIGNATURE:	/Michael J. Shea/
DATE SIGNED:	09/01/2020
	This document serves as an Oath/Declaration (37 CFR 1.63).

Total Attachments: 4

source=6280-283_DECLARATION_ASSIGNMENT#page1.tif source=6280-283_DECLARATION_ASSIGNMENT#page2.tif source=6280-283_DECLARATION_ASSIGNMENT#page3.tif source=6280-283_DECLARATION_ASSIGNMENT#page4.tif

> PATENT REEL: 053661 FRAME: 0574

Document Description: Oath or declaration filed		
	Attorney Docket Number	MJS-6280-283
	First Named Inventor	LEE
INVENTOR'S DECLARATION AND ASSIGNMENT APPLICATION (37 CFR 1.63) USING AN APPLICATION Declaration Submitted With Initial Filing OR Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.	ATION DATA SHEET	
INPUT DEVICE, ELECTRONIC SYSTEM AND CON	TROL METHOD THE	REFOR
(Title of the Invention)	***************************************	
As a below named inventor, I hereby declare that:		
This declaration is directed to:		
☐ The attached application,		
OR		
☑ United States Application Number or PCT International application number PCT/K filed on 2018-02-07.	R2018/001628	
The above-identified application was made or authorized to be made by me.		
I believe I am the original inventor or an original joint inventor of a claimed invention in the	e application.	
I hereby acknowledge that any willful false statement made in this declaration is punishably fine or imprisonment of not more than five (5) years, or both.		
WHEREAS, the undersigned (hereinafter ASSIGNORS), have made an invention in the A		***************************************
WHEREAS, Samsung Electronics Co., Ltd., a corporation having an office and Suwon-si, Gyeonggi-do, 16677 Republic of Korea, and Research & Bustoundation having an office and place of business at 2066, Seobu-ro, Jangan-gu	siness Foundation Sung	kyunkwan University a
Korea, (hereinafter ASSIGNEES), are desirous of acquiring an interest therein;		
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of a presents hereby self, assign, and transfer unto the said ASSIGNEES, their successors, as and interest in the United States of America and all foreign countries, in and to the invention application and to all subsequent applications based thereon including any and all continuand all resulting patents, together with the right of priority under the International Convention Relating to Patents, Designs and Industrial Models, and any other internation and the ASSIGNORS hereby authorize and request the Commissioner of Patents and Trainterest as ASSIGNEES, their successors, assigns, and legal representatives. It is under	ssigns, and legal representatives ion as described in the aforesald uations, divisions, reissues, and s ion for the Protection of Industria al agreements to which the Unite ademarks to issue said Letters Pa	, ASSIGNORS' entire right, title application, and to the said substitutes of said application, I Property, Inter-American d States of America adheres, atent to ASSIGNEES, for their

ASSIGNORS hereby agree to transfer a like interest upon request of said ASSIGNEES, their successors, assigns, and legal representatives, and without further remuneration, in and to any improvements, and applications for patents based thereon, growing out of or related to the said invention;

ASSIGNORS hereby agree to execute any papers by ASSIGNEES, their successors, assigns, and legal representatives, deemed essential to ASSIGNEES' full protection and title in and to the invention hereby transferred; and

Vanderhye P.C. have represented only ASSIGNEES and will continue to represent only ASSIGNEES with respect to this invention;

ASSIGNORS hereby agree, upon request of ASSIGNEES, and without further remuneration, to execute any and all papers desired by ASSIGNEES, for the filing and granting of foreign applications and the perfecting of title thereto in ASSIGNEES,

AGREED and everuted as noted below.

LEGAL NAME OF SOLE OR FIRST INVENTOR:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
Hyung-sun	unio de la companya della companya de la companya d
Inventor's Signature	Date: 8 / n / 3 / 8
ISI Additional preparations are being named on the 1 supplementary	autal chantiel

Note: PTO Rules state "A person may not execute an oath or declaration for an application unless that person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in [37 CFR] §1.56 (Page 1 of 2)

> PATENT **REEL: 053661 FRAME: 0575**

SUPPLEMENTAL SHEET FOR DECLARATION

ADDITIONAL INVENTOR(S) Supplemental Sheet

(Page 2 of 2)

ł	ATTCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCCC
Legal Name of Additional Joint Inventor, if any:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
Kang-yoon	LEE
Inventor's Signature:	Date:
Legal Name of Additional Joint Inventor, if any:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
Sung-hun	СНО
Inventor's Signature:	Date:
Legal Name of Additional Joint Inventor, if any:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
Gwan-hyung	KIM
Inventor's Signature: Gwan hynny Km	Date: 20/9, 9, 9
Legal Name of Additional Joint Inventor, if any:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
Sang-yun	KIM
Inventor's Signature:	Date:
Legal Name of Additional Joint Inventor, if any:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
Ho-chul	RYU
Inventor's Signature:	Date:
Legal Name of Additional Joint Inventor, if any:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	
Sang-ho	KIM
Inventor's Signature: Sang ho Klima	Date: September 9, 2019

Document Description: Oath or declaration filed	<u> </u>	ginenen
	Attorney Docket Number	MJS-6280-283
	First Named Inventor	LEE
INVENTOR'S DECLARATION AND ASSIGNMENT APPLICATION (37 CFR 1.63) USING AN APPLICA Declaration Submitted With Initial Filing OR		van sam en samenare d
Declaration Submitted After Initial Filing (surcharge (37 C.F.R. § 1.	16(f)) required)	
INPUT DEVICE, ELECTRONIC SYSTEM AND CON	TROL METHOD THE	REFOR
(Title of the Invention)	70000 TO 0000000000000000000000000000000	V.
As a below named inventor, I hereby declare that:		
This declaration is directed to:		
☐ The attached application,		
OR		
□ United States Application Number or PCT International application number PCT/K filed on 2018-02-07.	R2018/001628	
The above-identified application was made or authorized to be made by me.		
I believe I am the original inventor or an original joint inventor of a claimed invention in the		
I hereby acknowledge that any willful false statement made in this declaration is punishably fine or imprisonment of not more than five (5) years, or both.	***************************************	
WHEREAS, the undersigned (hereinafter ASSIGNORS), have made an invention in the A		989 <u>.</u> gr
WHEREAS, Samsung Electronics Co., Ltd., a corporation having an office and Suwon-si, Gyeonggi-do, 16677 Republic of Korea, and Research & Bur foundation having an office and place of business at 2066, Seobu-ro, Jangan-gu Korea, (hereinafter ASSIGNEES), are desirous of acquiring an interest therein;	siness Foundation Sung	kyunkwan University a
NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of presents hereby sell, assign, and transfer unto the said ASSIGNEES, their successors, a and interest in the United States of America and all foreign countries, in and to the invent application and to all subsequent applications based thereon including any and all continuand all resulting patents, together with the right of priority under the International Convent Convention Relating to Patents, Designs and Industrial Models, and any other internationand the ASSIGNORS hereby authorize and request the Commissioner of Patents and Tr. interest as ASSIGNEES, their successors, assigns, and legal representatives. It is under Vanderhye P.C. have represented only ASSIGNEES and will continue to represent only A	issigns, and legal representatives tion as described in the aforesaid uations, divisions, reissues, and si tion for the Protection of Industria hal agreements to which the Unite ademarks to issue said Letters Parstood and agreed that ASSIGNE	, ASSIGNORS' entire right, title application, and to the said substitutes of said application, if Property, Inter-American id States of America adheres, atent to ASSIGNEES, for their ES' attorneys Nixon &
ASSIGNORS hereby agree to transfer a like interest upon request of said ASSIGNEES, t further remuneration, in and to any improvements, and applications for patents based the	ereon, growing out of or related to	the said invention;
ASSIGNORS hereby agree to execute any papers by ASSIGNEES, their successors, ass ASSIGNEES' full protection and title in and to the invention hereby transferred; and	signs, and legal representatives,	deemed essential to
ASSIGNORS hereby agree, upon request of ASSIGNEES, and without further remunerat the filing and granting of foreign applications and the perfecting of title thereto in ASSIGN		s desired by ASSIGNEES, for
AGREED and executed as noted below:		
LEGAL NAME OF SOLE OR FIRST INVENTOR:		
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)		
Hyung-sun		LEE

[6] Additional inventors are being named on the 1 supplemental sheet(s)

Note: PTO Rules state "A person may not execute an oath or declaration for an application unless that person has reviewed and understands the contents of the application, including the claims, and is aware of the duty to disclose to the Office all information known to the person to be material to patentability as defined in [37 CFR] §1.56 (Page 1 of 2)

Inventor's Signature

PATENT REEL: 053661 FRAME: 0577

Date:

	PPLEMENTAL SHEET FOR DECLAR	ATION
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ADDITIONAL INVENTOR(S) Supplemental Sheet

(Page 2 of 2)

Legal Name of Additional Joint Inventor, if any:	2	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)		
Kang-yoon	LEE	
Inventor's Signature: Kang-Yoon Lee	Date: 2019.09.0	<i>F</i>
Legal Name of Additional Joint Inventor, if any:		
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	ta.	
Sung-hun `	• сно	
inventor's Signature. Sung. Nan. CHO	Date: 2019-09-1	05
Legal Name of Additional Joint Inventor, if any:	· •;	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)		*** ***
Gwan-hyung	KIM	
Inventor's Signature:	Date:	
Legal Name of Additional Joint Inventor, if any:		**************************************
Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)		
	KIM	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname)	KIM Date: 10(9 - 09	ο <i>ς</i>
(E.g., Given Name (first and middle (if any)) and Family Name or Surname) Sang-yun		D\$
(E.g., Given Name (first and middle (if any)) and Family Name or Surname) Sang-yun Inventor's Signature: らいりょうしい とられ		0 \$
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(E.g., Given Name (first and middle (if any)) and Family Name or Surname) Sang-yun Inventor's Signature: Sum y - Yun K film Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)	Pate:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname) Sang-yun Inventor's Signature: Sum y - Yun Kinn Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname) Ho-chul Inventor's Signature:	Date: "Lo(9 - 09 - 1	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname) Sang-yun Inventor's Signature: Sum y - Sum K firm Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname) Ho-chul Inventor's Signature:	Pate:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname) Sang-yun Inventor's Signature: Sum y - Gum K firm Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname) Ho-chul Inventor's Signature: I O - Chul Legal Name of Additional Joint Inventor, if any:	Pate:	
(E.g., Given Name (first and middle (if any)) and Family Name or Surname) Sang-yun Inventor's Signature: Sum y - Gum Chm Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname) Ho-chul Inventor's Signature: C - Cur C - Cur Legal Name of Additional Joint Inventor, if any: (E.g., Given Name (first and middle (if any)) and Family Name or Surname)	Pate: "10(9 - 09) RYU Date: 70(9 - 09) C	

PATENT

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RECORDED: 09/01/2020