505445096 04/25/2019

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5491897

SUBMISSION TYPE:	CORRECTIVE ASSIGNMENT
NATURE OF CONVEYANCE:	Corrective Assignment to correct the MISSING ASSIGNOR NAME previously recorded on Reel 048918 Frame 0190. Assignor(s) hereby confirms the ASSIGNMENT OF ASSIGNORS INTEREST.

CONVEYING PARTY DATA

Name	Execution Date
SUNG-JUN HWANG	08/13/2018
DONG-HUN SHIN	08/13/2018
DAE-WUNG KIM	08/13/2018
JUN-YONG PARK	08/13/2018
YOUNG-AH LEE	08/13/2018
DONGHYEON KIM	12/04/2018
SEOK-HO BAN	08/13/2018

RECEIVING PARTY DATA

Name:	SAMSUNG ELECTRONICS CO., LTD
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU, GYEONGGI-DO
City:	SUWON-SI
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16213384

CORRESPONDENCE DATA

Fax Number: (202)293-7860

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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Correspondent Name: SUGHRUE MION, PLLC

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Address Line 2: SUITE 800

Address Line 4: WASHINGTON, D.C. 20037

ATTORNEY DOCKET NUMBER:	Q240232
NAME OF SUBMITTER:	/OXANA TIMOSHENKO/
SIGNATURE:	/OXANA TIMOSHENKO/ (TEAMS DPT)

PATENT 505445096 REEL: 048992 FRAME: 0825

DATE SIGNED:	04/25/2019
	This document serves as an Oath/Declaration (37 CFR 1.63).
Total Attachments: 9	
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source=Q240232CNORasfiled#page4.ti	f
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505225819 12/07/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT5272588

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date	
SUNG-JUN HWANG	08/13/2018	
DONG-HUN SHIN	08/13/2018	
DAE-WUNG KIM	08/13/2018	
JUN-YONG PARK	08/13/2018	
YOUNG-AH LEE	08/13/2018	

| Name | Execution Date:
| DONGHYEON KIM 12/04/2018 |
| Name | Execution Date: |
| SECK-HO BAN | 08/12/2018 |

Name:	SAMSUNG ELECTRONICS CO., LTD.
Street Address:	129, SAMSUNG-RO, YEONGTONG-GU, GYEONGGI-DO
City:	SUWON-SI
State/Country:	KOREA, REPUBLIC OF
Postal Code:	16677

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	16213384

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Fax Number: (202)293-7860

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Correspondent Name: SUGHRUE MION, PLLC

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ATTORNEY DOCKET NUMBER:	Q240232
NAME OF SUBMITTER:	DENNIS E BUTLER - TEAMS
SIGNATURE:	/Dennis Butler/
DATE SIGNED:	12/07/2018
	This document serves as an Oath/Declaration (37 CFR 1.63).

Docket No.:

Q240232

Only After Sept 16, 2012

Client Ref.: CA-201711-015-1-U80

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, We, the undersigned inventors hereinafter called assignors, have invented centain improvements described in the application identified below; and

Whereas, SAMSUNG ELECTRONICS CO., LTD. of 129. Samsung-ro. Yeongtong-ga. Gyeonggi-do. Suwon-si, 16677. Republic of Korea. (assignee), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above named assignors, hereby sell, assign and transfer to the above named assignee, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America and all other countries, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, and including rights of priority under the International Convention of Paris (1883) as amended, the laws of all foreign countries, and the laws of the United States including the right to claim priority under 35 USC 119 and the right to sue for past damages, and we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and we hereby agree that the assignee may apply for foreign Letters Patent on the invention and we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee.

(Legalization not required for recording	g but	is prima facie svidence of execution under 35 USC 261)	
As the below named inventor, I hereby	decla	re jhat:	
This assignment with declaration is directed to:	M	The attached application, or	
The application is entitled:	0	United States Application or PCT International Application Number	filed
and additional and an experience			

ELECTRONIC APPARATUS AND CONTROL METHOD THEREOF

The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application for which this assignment with declaration is being submitted.

I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1.56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1(8)1 by fine or imprisonment of not more than five (5) years, or both.

Page 11

NAME OF SOLE OR FIRST INVENTOR:					
Given Name (first and middle [if any]) Sung-jun	Family Name or Surname HWANG				
Inventor's signature	Date 2518 - 8 - 13.				
Residence: Suwon-si, Republic of Korea					
Mailing Address: #306, 5, Sinwon-ro 211beon-gil, Yeongtong-gu, Suwon-si, Gyeonggi-do 16676 Republic of Korea					
NAME OF SECOND INVENTOR:					
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Inventor's signature	Date 2019-P-13				
Residence: Secul, Republic of Korea					
Mailing Address: #Na-dong-102, 129-7, Bogeon-gil, Gwanak-gu, Se	oul 08835 Republic of Korca				
NAME OF THIRD INVENTOR:	· · · · · · · · · · · · · · · · · · ·				
Given Name (first and middle [if any]) Dac-wung	Family Name or Surname KIM				
Inventor's signature Lacutes—	Date 2018-13				
Residence: Seoul, Republic of Korea					
Mailing Address: #111-1105, 9, Jangseungbægi-ro 4-gil, Dongjak-gu, Seoul 06966 Republic of Korca					
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Inventor's Ary Ary	Date 2016 - 8-73				
Residence: Secol, Republic of Kores					
Mailing Address: #102-1308, 269, Olympic-ro, Songpa-gu, Seoul 05510 Republic of Korea					

NAME OF SIXTH INVENTOR:				
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Inventor's signature	Date			
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NAME OF SEVENTH INVENTOR:				
Given Name (first and middle [if any]) Scok-ho	Pamily Name or Surname BAN			
inventor's signature	Date 2018 . A. 13			
Residence: Suwon-si, Republic of Korea				
#303-1401, 36, Dongtanwoncheun-ro 915beon-gil, Matiing Address: Korea	Yeongtong-gu, Suwon-si, Gyronggi-do 16547 Republic of			

Docket No.: Q240232 Only After Sept 16, 2012

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION (37 CFR 1.63)

Whereas, We, the undersigned inventors hereinafter called assignors, have invented certain improvements described in the application identified below; and

Whereas, SAMSUNG ELECTRONICS CO., LTD. of 129, Samsung-ro, Yeongtong-gu, Gyeonggi-do, Suwon-si, 16677, Republic of Korea, (assignce), desires to acquire the entire right, title, and interest in the application and invention, and to any United States patents to be obtained therefor;

Now therefore, for valuable consideration, receipt whereof is hereby acknowledged,

We, the above named assignors, hereby sell, assign and transfer to the above named assigne, its successors and assigns, the entire right, title and interest in the application and the invention disclosed therein for the United States of America and all other countries, including all divisions, and continuations thereof, and all Letters Patent of the United States that may be granted thereon, and all reissues thereof, and including rights of priority under the International Convention of Paris (1883) as amended, the laws of all foreign countries, and the laws of the United States including the right to claim priority under 35 USC 119 and the right to sue for past damages, and we request the Director of the U.S. Patent and Trademark Office to issue any Letters Patent granted upon the invention set forth in the application to the assignee, its successors and assigns; and we hereby agree that the assignee may apply for foreign Letters Patent on the invention and we will execute without further consideration all papers deemed necessary by the assignee in connection with the United States and foreign applications when called upon to do so by the assignee.

(Legalization not required for recording	g but	is prima facie evidence of execution under 35 USC 261)	
As the below named inventor, I hereby	decla	ue that:	
This assignment with declaration is directed to:	Ø	The attached application, or	
and the same of th		United States Application or PCT International Application Number	filed
The application is entitled:		(8):	

ELECTRONIC APPARATUS AND CONTROL METHOD THEREOF

The above identified application was made or was authorized to be made by me.

I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

I have reviewed and understand the contents of the application for which this assignment with declaration is being submitted.

I am aware of the duty to disclose to the Office all information known to me to be material to patentability as defined in 37 CFR 1,56.

I hereby acknowledge that any willful false statement made in this assignment with declaration is punishable under 18 USC 1001 by fine or imprisonment of not more than five (5) years, or both.

[Page 1]

NAME OF SOLE OR FIRST INVENTOR:					
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NAME OF THIRD INVENTOR:					
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NAME OF FOURTH INVENTOR:					
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Inventor's signature	Date				
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Mailing Address: #301, 7, Jangdari-ro 219bcon-gil, Paldal-gu, Suwon-si, Gyeonggi-do 16474 Republic of Korea					
NAME OF FIFTH INVENTOR:					
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Inventor's signature Date					
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REEL: 048992 FRAME: 0832

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Inventor's signature	D	ate			
Residence: Sowon-si, Republic of Korea					
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[Page 3]