504905188 05/08/2018

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT4951932

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
YANG-SOO KIM	04/19/2018
SURAJ SINGH TANWAR	04/20/2018

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

PROPERTY NUMBERS Total: 1

Property Type	Number	
Application Number:	15974133	

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.

2022937060 Phone:

Email: cannes@sughrue.com, sughrue@sughrue.com

SUGHRUE MION, PLLC Correspondent Name:

Address Line 1: 2100 PENNSYLVANIA AVENUE, N.W.

Address Line 2: SUITE 800

Address Line 4: WASHINGTON, D.C. 20037

ATTORNEY DOCKET NUMBER:	Q238600	
NAME OF SUBMITTER:	CHRISTOPHER ANNES	
SIGNATURE:	/Christopher Annes/	
DATE SIGNED:	05/08/2018	

Total Attachments: 4

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PATENT REEL: 046103 FRAME: 0959 504905188

Docket No.:Q238600, Client's Ref.: CA-201703-003-1-US0 Only After Sept 16, 2012

ASSIGNMENT WITH DECLARATION FOR UTILITY OR DESIGN PATENT APPLICATION G7 CFR 1.63)

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

Whereas, <u>SAMSUNG FLECTRONICS CO., LTD. of 129</u>, <u>Samsung-to.</u> Yeongtong-gu. <u>Suwon-si.</u> <u>Gyeonggi-do.</u> <u>16677</u>, <u>Republic of Korea</u>, (assignee), decires 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.

As the below named inventor, I hereby	dectare that:		
This assignment with declaration is directed to:	☐ The attached applica	ilion, 61	
The application is entifled:	United States Applic	cation or PCT International Application Number	filed

DISPLAY APPARATUS AND CONTROLLING 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.

(Legalization not required for recording but is prima facie evidence of execution under 35 USC 261)

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 line or imprisonment of not more than five (5) years, or both.

PATENT REEL: 046103 FRAME: 0960

NAME OF SOLE OR FIRST INVENTOR:	
단독 혹은 회로 발생하여 경영	
Given Name (first and middle [if any]) 이름(정씨는 제의) Yang-soo	Family Name or Surname 전(姓) KIM
19명하의 시역 - YANGGOO King	0ase 84 APHI 19,2018
Residence: 四季利: Yongia-si, Gyconggi-do, Republic of F	Corea
Muiling Address:	eon-gil, Suji-gu, Yongin-si, Gyeonggi-do, Republic of Koma
NAME OF SECOND INVENTOR: 무원의 항영자의 성명	
Given Name (first and middle [if any]) 이름(정저는 제외) Suraj Singh	Family Name of Surname
Inventor's signature 발명자의 시명	Date 製品
Residence: 귀추지: Noida, India	
Mailing Address: 辛利辛生: A-479, Ground Flour, Sector 46, N	loids 27(130) Jeste

PATENT REEL: 046103 FRAME: 0961

Docket No.:Q238600, Client's Ref.: CA-201703-003-1-US0 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-au, Suwon-si, Gyeonggi-do, 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 but is prima facile evidence of execution under 35 USC 261)			
As the below named inventor, I hereby	decla	ere that:	
This assignment with declaration is directed to:	M	The attached application, or	fileo
The application is entitled:		United States Application or PCT International Application Number on APPARATE AND CONTROLLING METHOD THEREOF	nec
<u> Disp</u> i	AX.	APPAR <mark>ATER AND CONTROLEING METHOD THEREOF</mark>	

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

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.

NAME OF SOLE OR FIRST INVENTOR: 단독 혹은 최초 활명자의 성명	
Given Name (first and middle [if any]) 의용(성씨는 체외) Yang-soo	Family Name or Surname 성(姓) KIM
Inventor's signature 발명자의 서명	Date. 일자
Residence. 거주자: Yongin-si, Gyeonggi-do, Republic of Korea.	
Mailing Address: 유편 주소: 203-1102, 66, Yonggu-daero 2771beon-gil, Suji-gu, Y	Yongin-si, Gyeonggi-do, Repúblic of Korea
NAME OF SECOND INVENTOR. 두번째 발명자의 성명	
Given Name (first and middle [if any]) 이용(정씨는 제외) Suraj Singh	Family Name or Surname 包(姓) TANWAR
Inventor's signature 발명자의 서명 (itter)	Date 일자 2004[2018
Residence: 각 서주기: Noida, India	
Mailing Address: 우편 주소: A-479 Ground Fluor, Sector 46, Noida -201301, In	ndia



Sergi Gruph Tarwari 161628135566setz Asia madquadere (SHI**- Pres 3)** ranom S/V/ 2 Team 1571090225 **3 MIII NIII III III III IIII III III III**

REEL: 046103 FRAME: 0963