PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT3574866

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
ILHUN SEO	09/11/2015
YONGDUCK SON	09/11/2015
JAEBEOM CHOI	09/11/2015
BYOUNGKI KIM	09/11/2015

RECEIVING PARTY DATA

Name:	SAMSUNG DISPLAY CO., LTD.
Street Address:	1, SAMSUNG-RO, GIHEUNG-GU
City:	YONGIN-CITY, GYEONGGI-DO
State/Country:	KOREA, REPUBLIC OF

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14872610

CORRESPONDENCE DATA

Fax Number: (202)289-7100

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: (202)408-9040 Email: rebushnell@aol.com

ROBERT E. BUSHNELL & LAW FIRM Correspondent Name:

Address Line 1: 2029 K STREET N.W.

Address Line 2: SUITE 600

Address Line 4: WASHINGTON, D.C. 20006-1004

ATTORNEY DOCKET NUMBER:	P60431
NAME OF SUBMITTER:	ROBERT E. BUSHNELL
SIGNATURE:	/Robert E. Bushnell/
DATE SIGNED:	10/19/2015

Total Attachments: 3

source=P60431_AssignmentandDeclaration10-1-2015#page1.tif source=P60431_AssignmentandDeclaration10-1-2015#page2.tif source=P60431 AssignmentandDeclaration10-1-2015#page3.tif

PATENT REEL: 036820 FRAME: 0393 503528239

PTO/AIA/(11/2012) Docket No. P60431

COMBINED ASSIGNMENT AND DECLARATION (One of Three)

ASSIGNMENT

AS A BELOW NAMED INVENTOR, I, and each of us, individually hereby declare that:
IN CONSIDERATION of the sum of TEN (\$10.00) dollars or the equivalent thereof, and other good and valuable consideration, the receipt and sufficiency of which from the hereinafter named Assignce is hereby acknowledged, I do hereby sell, assign and forever grant and convey unto:

ASSIGNEE: SAMSUNG DISPLAY CO., LTD.,

a corporation chartered in and existing under the laws of the Republic of Korea,

ADDRESS: 1, Samsung-ro, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea

Who is my Assignee, and to the successors and assigns of my Assignee, all my right, title and interest, in and for the United States of America and all other countries, including all rights of priority, including all rights to claim priority, and including the right to sue or otherwise bring action and to collect and receive damages therefrom, for past infringement thereof, and all rights to claim priority under all available International Agreements, Treaties and Conventions for the protection of intellectual property in its various forms in every participating country, and the right to collect reasonable royalties for pre-grant U.S. patent application publications, in and to the invention entitled:

TITLE: THIN FILM TRANSISTOR ARRAY SUBSTRATE AND DISPLAY APPARATUS INCLUDING THE SAME

invented by me (if only one inventor is named below) or us (if more than one inventor is named below) and described in an application for a United States patent the specification of which is either attached hereto or otherwise accompanies this Assignment, or is more particularly identified as:

	executed on a	even date herewith, or		1 October 2018	
	Serial No.	<u> 14/872,610 </u>	filed in the U.S. Patent & Trademark Office or	1 CORONGE AVEO	31
\Box	executed on			**************************************	

and in and to all United States patents which may be granted thereon and therefor, and in and to all certificates of corrections, divisions, continuations, reissued and re-examined patents, and to any extensions thereof, said interest being the entire ownership of the patent when granted, to be held and enjoyed by said Samsung Display Co., Ltd., my Assignee, its successors, assigns or other legal representatives, to the full end of the term, terms, or any extension or renewal thereof, for which said patent or patents may be granted, as fully and entirely as the same would have been held and enjoyed by me or us if this assignment, sale and conveyance had not been made;

AND I grant full power of attorney to my Assignee to submit this Deed of Assignment, including any Annex, to the U.S. Patent & Trademark Office to record this assignment of the legal title to the Assigned Patents from Assignor to Assignees among the Assignment Records maintained by the U.S. Patent & Trademark Office;

AND I hereby covenant and agree to sign and execute, without receiving any money or other consideration, any further documents or instruments which may from time-to-time be either necessary, lawful, proper or requested by the Assignee, in the prosecution of the above-named application or in the preparation and prosecution of all substitute applications, certificate of correction, division, continuation, reissue, re-examination, in any amendment, extension, or interference proceeding, whether administrative or judicial, or otherwise, to secure the title hereto in said Assignee, together with the right of priority under the International Convention for the Protection of Industrial Property, Inter-American Convention Relating to Patents, Designs and Industrial Models, and any other international agreement or treaty to which the United States of America adheres;

AND I do hereby authorize and request the Commissioner of Patent & Trademarks to issue said Patent or Patents to the Assignee, and I hereby appoint as my, or our attorney, and authorize and request R. E. Bushnell, Reg. No. 27,774, to insert on this Assignment any further identification or to complete such identification which may be either necessary or desirable in order to comply the rules of the United States Patent & Trademark Office for recordation of this document.

LO-201412-076-1-US0_DP-48676-US_Y.P. Lee, Mock & Partners

PATENT REEL: 036820 FRAME: 0394 PTO/ASA/(11/2012) Decket No. P60431

COMBINED ASSIGNMENT AND DECLARATION (Two of Three)

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

	As the below named	inventor, I hereby declare that this	declaration is directed to:	
*	The attached applicat			
u	United States applica	tion or PCT international application	on number filed on	
	The above-identified	application was made or authorize	t in he made by me.	
	I believe that I am the	e original usventor or an original ju	int myemor of a claimed invention in	the application.
to the expriority § 365(a) United 5	d by any amendment in caraination of this application title 3: 3 of any PCT Internations are provinced and provinced and provinced and applicational and applicational and applicational applications.	referred to abuve. I acknowledge t digation in accurdance with Title 3 5, U.S. Code § 119(a)-(d) or § 36 tonal modicadon which designated	contents of the above-identified speci- he duty to disclose information which T of the Code of Federal Regulation i(b) of any foreign application(s) for a at least one country other than the t diso identified below any foreign application priority is claimed:	n is material to pactuality and § \$1.56. I hereby claim foreign parent or inventor's certificate, or Juited States, or \$119(e) of any
10.26	015-0050240	Republic of Korea	9 April 2015	Yes [X] No [
	Semion Stamber)	(Cosoby)	(Usy/Month/Year filed)	
applicat paragrap The Cor	ional application design is not disclosed	gnating the United States, listed him the prior United States or PC ade, § 112, Lacknowledge the duty ions, § 1.56(a) which became available.	§ 120, of any United States applica- elow and, insofar as the subject mat T International application(s) in the production of the partial to pa	ter of each or the claims or only the manner provided by the first atentability as defined in Tale 37.
(Application)	ng Sprint Bir.)	stáling Bans)	(STATES parently pending abundant	rd)
27774, Bog. No.	S U.S.C. 84601 by fin I hereby revoke all p Michael D Parker, Rep. 3, 36,938, Young Janu No. 72446. Tomoko transact all business	e or imprisonment of not more that sreviously granted powers of attert g. No. 34973, Joseph G Saeber, Reg. Kint, Reg. No. 56213, Mark Ku Yota, Limited Recognition No. 13 in the U.S. Fatem & Trademark or transportation and issuing. W	if any willful false statement made five (5) years, or both, ney and appoint the following attemate, No. 27719, Matthew J Lestina, Residenty, Reg. No. 47715, Michael A. 1863, and Chiym H. Yau, Reg. No. 71 Office connected therewith and with full power of appointment and issue thereon, and request that all co-	eys: Robert E Bushnell, Reg. No. 9, No. 44437, George N. Stevens, Van Lente, Reg. No. 52, 314, Xin 1340 to prosecute this application ith any divisional, continuation, with full power to substitute on

Robert E. Businicii, Customer No. 808439 Autoricy-at-Low Suite 680, 2029 "K" Street, N.W.

(O-201412-076-1-USQ_DP-48676-US_Y.P. Lee, Mock & Partners

267181930462465

33 Inventors are being named on separately numbered sheets attached hereto.

PTO/AIA/ (11/2012)

Docket No. P60431

COMBINED ASSIGNMENT AND DECLARATION (Three of Three)

DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET (37 CFR 1.76)

LEGAL NAME OF INVENTOR(s)	Date Signed (Optional)	Witnessgest
1) Ilhum Seo (Seal)	2015-9-11	
2) Yongduck Son (Sout)	2015. 9.11.	
3) <u>JAE REPT CHO</u> (Seal) Jackeom Choi	2015, 9-4	
n <u>Bibliog (i Alba (Sesi)</u> Bjounski Kun	206-9-11	

LO-201412-076-1-USO_DP-48676-US_Y.P. Lee, Mock & Partners

ASS & 712424000703 (904.) O Penetatri (3497) 194007972011006131 (2020

RECORDED: 10/19/2015

287383439437465