503532362 10/21/2015

PATENT ASSIGNMENT COVER SHEET

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
WEONHO SHIN	07/13/2015
YUN SUNG WOO	07/13/2015
DAEJIN YANG	07/17/2015
JINYOUNG HWANG	07/17/2015
CHAN KWAK	07/17/2015
HYEON CHEOL PARK	07/17/2015
JAE-YOUNG CHOI	08/20/2015

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:	443-742

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	14918711

CORRESPONDENCE DATA

Fax Number: (860)286-0115

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: 860-286-2929

Email: sgarbo@cantorcolburn.com
Correspondent Name: CANTOR COLBURN LLP
Address Line 1: 20 CHURCH STREET

Address Line 2: 22ND FLOOR

Address Line 4: HARTFORD, CONNECTICUT 06103

ATTORNEY DOCKET NUMBER:	PNK1371US
NAME OF SUBMITTER:	GRANT M. EHRLICH
SIGNATURE:	/Grant M. Ehrlich/
DATE SIGNED:	10/21/2015

503532362 PATENT REEL: 036842 FRAME: 0620

	This document serves as an Oath/Declaration (37 CFR 1.63).	
Total Attachments: 6		
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PATENT REEL: 036842 FRAME: 0621

DECLARATION AND ASSIGNMENT

Title of Invention: TRANSPARENT ELECTRODES AND ELECTRONIC DEVICES INCLUDING THE SAME

As a below named inventor, I hereby declare that:

This declaration is directed to:

[X] the attached application (Attorney Docket Number PNK1371US), or
[] United States application or PCT international application number filed on

The above-identified application was made or 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, including the claims.

I am aware of the duty to disclose to the United States Patent and Trademark Office all information known to me to be material to patentability as defined in 37 CFR Section 1.56.

Whereas, each undersigned inventor has made certain inventions, improvements, and discoveries (herein referred to as the "INVENTION") disclosed in the above-identified patent application (herein referred to as the ("APPLICATION");

Whereas, <u>SAMSUNG ELECTRONICS CO., LTD.</u>, a corporation of the <u>Republic of Korea</u> having a place of business at <u>129</u>, <u>Samsung-ro</u>, <u>Yeongtong-gu</u>, <u>Suwon-si</u>, <u>Gyeonggi-do</u>, <u>443-742</u>, <u>Republic of Korea</u> (herein referred to as "ASSIGNEE"), desires to acquire, and each undersigned inventor desires to grant to ASSIGNEE, the entire worldwide right, title, and interest in and to the INVENTION and in and to any and all patent applications and patents directed thereto;

Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned

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PNK1371US OPP20143978US

had this Assignment not been made; and each undersigned inventor agrees to execute any and all documents and instruments and perform all lawful acts reasonably related to recording this Assignment or perfecting title to the INVENTION, the APPLICATION, and all related patents and applications, in ASSIGNEE, its successors, legal representatives, and assigns, whenever requested by ASSIGNEE, its successors, legal representatives, and assigns.

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

The undersigned hereby grant(s) the law firm of **Cantor Colburn LLP** 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.

Legal Name of Inventor: Weonho SHIN	
Signature:	Date: 13/July (2015
Legal Name of Inventor: Yun Sung WOO	
Signature:	Date: 13/ July/ 2015
Legal Name of Inventor; Daejin YANG	
Signature:	Date: July 17, 2015
Legal Name of Inventor: Jinyoung HWANG	
Signature: Hurng, Imyong	Date: 07/17/2015
Legal Name of Inventor: Chan KWAK	
Signature: Cham Cwak	Date: July 17, 2015

PNK1371US OPP20143978US

Legal Name of Inventor: Hyeon Cheol PARK	
Signature: _ M. C. Park.	July 17, 2015
Legal Name of Inventor: Jae-Young CHOI	
Signature:	Date:

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This declaration is directed to:

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[] United States application or PCT international application number filed on ______.

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Now, therefore, for good and valuable consideration, the receipt and sufficiency thereof being hereby acknowledged, each undersigned inventor (herein referred to ASSIGNOR") hereby sells or has sold, assigns or has assigned, and otherwise transfers or has transferred to the ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the INVENTION, the APPLICATION, and any and all other patent applications and patents for the INVENTION which may be applied for or granted therefor in the United States and in all foreign countries and jurisdictions, including all divisions, continuations, continuations-in-part, reissues, reexaminations, renewals, extensions, counterparts, substitutes, and extensions thereof, and all rights of priority resulting from the filing of such applications and granting of such patents. In addition, each undersigned inventor hereby authorizes and requests the Director of the United States Patent and Trademark Office to issue any United States Patent, and foreign patent authorities to issue any foreign patent, granted for the INVENTION, to ASSIGNEE, its successors, legal representatives, and assigns, the entire worldwide right, title, and interest in and to the same to be held and enjoyed by ASSIGNEE, its successors, legal representatives, and assigns to the full end of the terms for which any and all such patents may be granted, as fully and entirely as would have been held and enjoyed by the undersigned

PNK1371US OPP20143978US

Legal Name of Inventor: Weonho SHIN

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Signature:	Date:
Legal Name of Inventor: Yun Sung WOO	
Signature:	Date:
Legal Name of Inventor: Daejin YANG	
Signature:	Date:
Legal Name of Inventor: Jinyoung HWANG	
Signature:	Date:
Legal Name of Inventor: Chan KWAK	
Signature:	Date:

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Legal Name of Inv	ventor: Hyeon Cheol PARK		
Signature:		Date:	energie.
Legal Name of Inv	ventor: Jae-Young CHOI		
Signature:	Ju Mary Chai	Date: August 20,	2015

REEL: 036842 FRAME: 0627