

<b>PATENT ASSIGNMENT COVER SHEET</b>
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<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
HYEON CHEOL PARK	08/22/2016
YOUNGJIN CHO	08/22/2016
DAEJIN YANG	08/22/2016
CHAN KWAK	08/22/2016
KWANGHEE KIM	08/22/2016
WEONHO SHIN	07/22/2016
YUN SUNG WOO	08/22/2016
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	SAMSUNG ELECTRONICS CO., LTD.
<b>Street Address:</b>	129, SAMSUNG-RO, YEONGTONG-GU
<b>City:</b>	SUWON-SI, GYEONGGI-DO
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	16677
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	15343541
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	
<i>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.</i>	
<b>Email:</b>	usptopatentmail@cantorcolburn.com
<b>Correspondent Name:</b>	CANTOR COLBURN LLP
<b>Address Line 1:</b>	20 CHURCH STREET, 22ND FLOOR
<b>Address Line 4:</b>	HARTFORD, CONNECTICUT 06103
<b>ATTORNEY DOCKET NUMBER:</b>	PNK1461US
<b>NAME OF SUBMITTER:</b>	APRIL FOUBARE
<b>SIGNATURE:</b>	/April Foubare/
<b>DATE SIGNED:</b>	12/02/2016
This document serves as an Oath/Declaration (37 CFR 1.63).	

**Total Attachments: 6**

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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:

- the attached application (Attorney Docket Number PNK1461US 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, **Samsung Electronics Co., Ltd.**, a corporation of Country of Korea having a place of business at 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Republic of Korea (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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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: **Hyeon Cheol PARK**

Signature: H. C. Park Date: August 22, 2016

Legal Name of Inventor: **Youngjin CHO**

Signature: Youngjin Cho Date: August 22, 2016

Legal Name of Inventor: **Daejin YANG**

Signature: Daejin Yang Date: August 22, 2016

Legal Name of Inventor: **Chan KWAK**

Signature: Chan Kwak Date: August 22, 2016

Legal Name of Inventor: **Kwanghee KIM**

Signature: Kwanghee Kim Date: August 22, 2016

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Legal Name of Inventor: Weonho SHIN

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Legal Name of Inventor: Yua Sung WOO

Signature: Woo \_\_\_\_\_ Date: August 22, 2016

**DECLARATION AND ASSIGNMENT**

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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

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Legal Name of Inventor: **Hyeon Cheol PARK**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Legal Name of Inventor: **Youngjin CHO**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Legal Name of Inventor: **Daejin YANG**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Legal Name of Inventor: **Chan KWAK**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Legal Name of Inventor: **Kwanghee KIM**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

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Legal Name of Inventor: **Weonho SHIN**

Signature:  Date: 2016/09/22

Legal Name of Inventor: **Yun Sung WOO**

Signature: \_\_\_\_\_ Date: \_\_\_\_\_