

<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>
SAMSUNG FINE CHEMICALS CO., LTD.	11/23/2015
<b>RECEIVING PARTY DATA</b>	
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<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>Postal Code:</b>	443-742
<b>Name:</b>	SAMSUNG SDI CO., LTD.
<b>Street Address:</b>	150-20, GONGSE-RO, GIHEUNG-GU
<b>City:</b>	YONGIN-SI, GYEONGGI-DO
<b>State/Country:</b>	KOREA, REPUBLIC OF
<b>PROPERTY NUMBERS Total: 4</b>	
<b>Property Type</b>	<b>Number</b>
<b>Application Number:</b>	14806903
<b>Application Number:</b>	14806969
<b>Application Number:</b>	14816180
<b>Application Number:</b>	14816146
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<b>ATTORNEY DOCKET NUMBER:</b>	YPL1577US ET AL
<b>NAME OF SUBMITTER:</b>	GRANT M. EHRLICH
<b>SIGNATURE:</b>	/Grant M. Ehrlich/

<b>DATE SIGNED:</b>	11/24/2015
<b>Total Attachments: 2</b> source=7105458#page1.tif source=7105458#page2.tif	

## ASSIGNMENT

WHEREAS, **SAMSUNG FINE CHEMICALS CO., LTD.**, a corporation organized and existing under the laws of the **Republic of Korea**, having a place of business at **19, Yeocheon-ro 217beon-gil, Nam-gu, Ulsan, 680-090, Republic of Korea** (hereinafter referred to as “**ASSIGNOR**”) is the owner of a right, title and interest in the following inventions and United States patent application (hereinafter referred to as the “**INVENTION**” and “**APPLICATION,**” respectively):

- [1] U.S. Application Serial Number **14/806,903**, filed on **July 23, 2015**
- [2] U.S. Application Serial Number **14/806,969**, filed on **July 23, 2015**
- [3] U.S. Application Serial Number **14/816,180**, filed on **August 3, 2015**
- [4] U.S. Application Serial Number **14/816,146**, filed on **August 3, 2015**

WHEREAS, **Samsung Electronics Co., Ltd.**, a corporation organized and existing under the laws of the **Republic of Korea**, having a place of business at **129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 443-742, Republic of Korea**; and **SAMSUNG SDI CO., LTD.**, a corporation organized and existing under the laws of the **Republic of Korea**, having a place of business at **150-20, Gongse-ro, Giheung-gu, Yongin-si, Gyeonggi-do, Republic of Korea** (collectively hereinafter referred to as “**ASSIGNEES**”) are desirous of acquiring an interest in any and all countries, in and to the **INVENTION**, the **APPLICATIONS**, and any and all Patents to be obtained therefor;

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN, be it known that for good and valuable consideration, the receipt of which is hereby acknowledged, I, the **ASSIGNOR**, have assigned and transferred, and hereby assigns and transfers unto **ASSIGNEES**, my entire right, title and interest in and to the **INVENTION**, the **APPLICATIONS**, and any and all Patents that may be issued therefrom, in any and all countries, including any and all revivals, refilings, continuations, continuations-in-part,

divisions and reissues thereof, to ASSIGNEES; and I do hereby agree that I will execute all papers necessary in connection with any and all patent applications when called upon to do so by ASSIGNEES, their successors or assigns, and that I will, at the cost and expense of ASSIGNEES, fully assist and cooperate in all matters in connection with any and all patent applications and Patents issuing thereon.

The undersigned declares that all statements made herein of his or her own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the APPLICATION or any Patents issuing therefrom.

kilseuk.byun

By: SAMSUNG FINE CHEMICALS CO., LTD.

Name: Kilseuk. BYUN *K.S. Byun*

Title: General manager

Date: November 23, 2015