

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

| SUBMISSION TYPE:                                                                                                                                                                                                                                                                                                                                                                                                                            | NEW ASSIGNMENT               |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------|---------------|--------------------------|---------------------|------------------------------|-------------|--------------------------|----------------|--------------------|--------------|------------|-------------|------------|-------------|------------|
| NATURE OF CONVEYANCE:                                                                                                                                                                                                                                                                                                                                                                                                                       | ASSIGNMENT                   |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| CONVEYING PARTY DATA                                                                                                                                                                                                                                                                                                                                                                                                                        |                              |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| <table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Moon-Soon Ko</td> <td>07/05/2013</td> </tr> <tr> <td>Il-Jung Lee</td> <td>07/05/2013</td> </tr> <tr> <td>Choong-Youl Im</td> <td>07/05/2013</td> </tr> <tr> <td>Do-Hyun Kwon</td> <td>07/05/2013</td> </tr> <tr> <td>Ju-Won Yoon</td> <td>07/05/2013</td> </tr> <tr> <td>Min-Woo Woo</td> <td>07/05/2013</td> </tr> </tbody> </table> |                              | Name          | Execution Date           | Moon-Soon Ko        | 07/05/2013                   | Il-Jung Lee | 07/05/2013               | Choong-Youl Im | 07/05/2013         | Do-Hyun Kwon | 07/05/2013 | Ju-Won Yoon | 07/05/2013 | Min-Woo Woo | 07/05/2013 |
| Name                                                                                                                                                                                                                                                                                                                                                                                                                                        | Execution Date               |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Moon-Soon Ko                                                                                                                                                                                                                                                                                                                                                                                                                                | 07/05/2013                   |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Il-Jung Lee                                                                                                                                                                                                                                                                                                                                                                                                                                 | 07/05/2013                   |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Choong-Youl Im                                                                                                                                                                                                                                                                                                                                                                                                                              | 07/05/2013                   |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Do-Hyun Kwon                                                                                                                                                                                                                                                                                                                                                                                                                                | 07/05/2013                   |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Ju-Won Yoon                                                                                                                                                                                                                                                                                                                                                                                                                                 | 07/05/2013                   |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Min-Woo Woo                                                                                                                                                                                                                                                                                                                                                                                                                                 | 07/05/2013                   |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| RECEIVING PARTY DATA                                                                                                                                                                                                                                                                                                                                                                                                                        |                              |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| <table border="1"> <tr> <td>Name:</td> <td>SAMSUNG DISPLAY CO., LTD</td> </tr> <tr> <td>Street Address:</td> <td>95, Samsung 2 Ro, Giheung-gu</td> </tr> <tr> <td>City:</td> <td>Yongin-City, Gyeonggi-do</td> </tr> <tr> <td>State/Country:</td> <td>KOREA, REPUBLIC OF</td> </tr> </table>                                                                                                                                                |                              | Name:         | SAMSUNG DISPLAY CO., LTD | Street Address:     | 95, Samsung 2 Ro, Giheung-gu | City:       | Yongin-City, Gyeonggi-do | State/Country: | KOREA, REPUBLIC OF |              |            |             |            |             |            |
| Name:                                                                                                                                                                                                                                                                                                                                                                                                                                       | SAMSUNG DISPLAY CO., LTD     |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Street Address:                                                                                                                                                                                                                                                                                                                                                                                                                             | 95, Samsung 2 Ro, Giheung-gu |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| City:                                                                                                                                                                                                                                                                                                                                                                                                                                       | Yongin-City, Gyeonggi-do     |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| State/Country:                                                                                                                                                                                                                                                                                                                                                                                                                              | KOREA, REPUBLIC OF           |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| PROPERTY NUMBERS Total: 1                                                                                                                                                                                                                                                                                                                                                                                                                   |                              |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| <table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13961823</td> </tr> </tbody> </table>                                                                                                                                                                                                                                                                   |                              | Property Type | Number                   | Application Number: | 13961823                     |             |                          |                |                    |              |            |             |            |             |            |
| Property Type                                                                                                                                                                                                                                                                                                                                                                                                                               | Number                       |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Application Number:                                                                                                                                                                                                                                                                                                                                                                                                                         | 13961823                     |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| CORRESPONDENCE DATA                                                                                                                                                                                                                                                                                                                                                                                                                         |                              |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| <p>Fax Number: 6265778800<br/> <i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i></p> <p>Phone: 626-795-9900<br/>       Email: pto@cph.com<br/>       Correspondent Name: CHRISTIE, PARKER &amp; HALE, LLP<br/>       Address Line 1: PO BOX 29001<br/>       Address Line 4: GLENDALE, CALIFORNIA 91209</p>                                                                                              |                              |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| ATTORNEY DOCKET NUMBER:                                                                                                                                                                                                                                                                                                                                                                                                                     | 72814/S1437 JEJ/SMM          |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| NAME OF SUBMITTER:                                                                                                                                                                                                                                                                                                                                                                                                                          | Sandra M. Medina             |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |
| Signature:                                                                                                                                                                                                                                                                                                                                                                                                                                  | /Sandra M. Medina/           |               |                          |                     |                              |             |                          |                |                    |              |            |             |            |             |            |

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|--------------------------------------------------------------------------------------------------------------------------------------------|------------|
| Date:                                                                                                                                      | 08/16/2013 |
| <b>Total Attachments: 3</b><br>source=72814 Assignment#page1.tif<br>source=72814 Assignment#page2.tif<br>source=72814 Assignment#page3.tif |            |

INVENTOR'S DECLARATION AND ASSIGNMENT PATENT  
FOR PATENT APPLICATION

Title of Invention: THIN FILM TRANSISTOR ARRAY SUBSTRATE AND ORGANIC  
LIGHT-EMITTING DISPLAY APPARATUS INCLUDING THE SAME

Docket No.: 72814/L550

INVENTOR'S DECLARATION

As a below named inventor, I hereby declare that:

This declaration is directed to the attached application unless the following is checked:

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  
above-identified application.

I have reviewed and understand the contents of the above-identified application including the  
claims.

I acknowledge the duty to disclose information which is material to patentability as defined in  
37 C.F.R. §1.56, including for continuation-in-part applications, material information which  
became available between the filing date of the prior application and the national or PCT  
international filing date of the continuation-in-part application.

I acknowledge that any willful false statements 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.

ASSIGNMENT

In consideration of good and valuable consideration, the receipt of which is hereby  
acknowledged, the undersigned,

(1) Moo-Soon Ko, Il-Jung Lee, Choong-Youl Im, Do-Hyun Kwon, Ju-Won Yoon, and Min-  
Woo Woo

HEREBY SELL(S), ASSIGN(S) AND TRANSFER(S) TO

(2) SAMSUNG DISPLAY CO., LTD.

having a place of business at

(3) 95, Samsung 2 Ro, Gijchung-Gu, Yongin-City, Gyeonggi-Do, Korea

INVENTOR'S DECLARATION AND ASSIGNMENT  
FOR PATENT APPLICATION

Docket No. 72814/L550

(hereinafter called "ASSIGNEE") the entire right, title and interest in and to any and all improvements which are disclosed in the application for United States Letters Patent entitled:

(4) THIN FILM TRANSISTOR ARRAY SUBSTRATE AND ORGANIC LIGHT-  
EMITTING DISPLAY APPARATUS INCLUDING THE SAME

which application executed on even date herewith or was

(a) executed on (5a)

(b) filed on (5b) August 7, 2013

Application No. 13/796,823

CHRISTIE PARKER & HALE, LLP, P.O. Box  
29001, Glendale, CA 91209-9001 is hereby  
authorized to insert in (b) the specified data  
when known.

including any and all United States Patents which may be granted on said application, and any and all extensions, divisions, reissues, substitutes, renewals or continuations of said application and patents, and the right to all benefits under all international conventions for the protection of industrial property and applications for said improvements.

It is hereby authorized and requested that the Commissioner of Patents issue any and all of said Letters Patent, when granted, to said ASSIGNEE, its assigns or its successors in interest or its designee.

Upon said consideration, it is further agreed that, when requested, without charge to but at the expense of said ASSIGNEE, the undersigned will execute all divisional, continuing, substitute, renewal, and reissue patent applications, execute all required other papers, and generally do everything possible which said ASSIGNEE shall consider desirable for aiding in securing and maintaining patent protection as provided herein.

12409545  
Moo-Soon Ko  
Legal Name of Inventor

2013 July 15  
Date

Moo-Soon Ko  
Signature

Il-Jung Lee  
Legal Name of Inventor

2013 July 15  
Date

Il-Jung Lee  
Signature

INVENTOR'S DECLARATION AND ASSIGNMENT  
FOR PATENT APPLICATION

Docket No. 72814/L550

Choong-Youl Im  
Legal Name of Inventor

2013-July-11  
Date

Choong-Youl Im  
Signature

Do-Hyun Kwon  
Legal Name of Inventor

2013-July-11  
Date

Do-Hyun Kwon  
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Ju-Won Yoon  
Legal Name of Inventor

2013-July-11  
Date

Ju-Won Yoon  
Signature

Min-Woo Woo  
Legal Name of Inventor

2013-July-11  
Date

Min-Woo Woo  
Signature

WITNESSES:

SRH PAS1232132 11:05:21/13 11:12 AM

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