



To the Director, U.S. Patent and Trademark

Original documents or copy thereof.

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| <p>1. Name of conveying party(ies): (List using numbers or numbers for multiple parties)</p> <p>1. Seok-Hwan Hwang<br/>2. Young-Kook Kim<br/>3. Yoon-Hyun Kwak<br/>4. Jeoung-In Yi<br/>5. Hye-Lim Lee</p> <p>Additional name(s) of conveying party(ies) attached?<br/><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>  | <p>2. Name and address of receiving party(ies):</p> <p><b>Name:</b> Samsung Mobile Display Co., Ltd.<br/><b>Street Address:</b> 575 Shin-dong, Yeongtong-gu<br/><b>City:</b> Suwon-si <b>State:</b> Gyeonggi-do<br/><b>Country:</b> Republic of Korea</p> <p>Additional name(s) of receiving party(ies) attached?<br/><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> |
| <p>3. Nature of conveyance:</p> <p><input checked="" type="checkbox"/> Assignment <input type="checkbox"/> Security Agreement<br/><input type="checkbox"/> Merger <input type="checkbox"/> Change of Name<br/><input type="checkbox"/> Other:</p> <p>Execution Date: (List as in section 1 if multiple signatures)<br/>December 23, 2008</p>   | <p>4. US or PCT Application number(s) or US Patent number(s):</p> <p><input checked="" type="checkbox"/> Application(s) filed herewith</p> <p>Additional numbers attached?<br/><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>  |
| <p>5. Party to whom correspondence concerning document should be mailed:</p> <p><b>Customer No.</b> 20,995<br/><b>Address:</b> Knobbe, Martens, Olson &amp; Bear, LLP<br/>2040 Main Street, 14<sup>th</sup> Floor<br/>Irvine, CA 92614<br/><b>Return Fax:</b> (949) 760-9502<br/><b>Attorney's Docket No.:</b> SDIYPL.213AUS</p>   | <p>6. Total number of applications and patents involved: 1</p>  |
| <p>7. Total fee (37 CFR 1.21(h)): \$40</p> <p><input checked="" type="checkbox"/> Enclosed</p>   | <p>8. Deposit account number: 11-1410</p> <p>Please charge this account for any additional fees which may be required, or credit any overpayment to this account.</p>   |
| <p>9. Statement and signature.</p> <p>To the best of my knowledge and belief, the foregoing information is true and correct, and any attached copy is a true copy of the original document.</p> <p><u>Christopher T. Sweeney</u><br/>Name of Person Signing</p> <p><i>Christopher T. Sweeney</i><br/>Signature</p> <p>January 27, 2009<br/>Date</p> <p>58,110<br/>Registration No.</p> <p>Total number of pages including cover sheet, attachments and document: 3</p> |   |

Documents transmitted via Mail to be recorded with required cover sheet information to:

**Mail Stop Assignment Recordation Services**  
Director, U.S. Patent and Trademark Office  
P.O. Box 1450  
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### ASSIGNMENT

WHEREAS, We, Seok-Hwan Hwang, a Republic of Korea citizen, c/o Samsung Mobile Display Co., Ltd., 575 Shin-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, Young-Kook Kim, a Republic of Korea citizen, c/o Samsung Mobile Display Co., Ltd., 575 Shin-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, Young-Hyun Kwak, a Republic of Korea citizen, c/o Samsung Mobile Display Co., Ltd., 575 Shin-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, Jeoung-In Yi, a Republic of Korea citizen, c/o Samsung Mobile Display Co., Ltd., 575 Shin-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, and Hye-Lim Lee, a Republic of Korea citizen, c/o Samsung Mobile Display Co., Ltd., 575 Shin-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea, have invented certain new and useful improvements in a PHENYL CARBAZOLE COMPOUNDS, ORGANIC LIGHT EMITTING DEVICE COMPRISING THE PHENYL CARBAZOLE COMPOUNDS AND FLAT PANEL DISPLAY DEVICE COMPRISING THE ORGANIC LIGHT EMITTING DEVICE for which we have executed an application for Letters Patent in the United States, on even date herewith;

AND WHEREAS, Samsung Mobile Display Co., Ltd. (hereinafter "ASSIGNEE"), a Corporation, with its principal place of business at 575 Shin-dong, Yeongtong-gu, Suwon-si, Gyeonggi-do, Republic of Korea desires to acquire the entire right, title, and interest in and to said improvements and said Application:

NOW, THEREFORE, in light of good and valuable consideration, the receipt of which is hereby acknowledged, we, the said inventors, do hereby acknowledge that we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto said ASSIGNEE, successors, legal representatives and assigns, the entire right, title, and interest throughout the world in, to and under said improvements, and said application including all provisional applications relating thereto (including but not limited to U.S. Provisional Application No(s)., filed (respectively if plural applications)), and all divisions, renewals and continuations thereof, and all Letters Patent of the United States which may be granted thereon and all reissues and extensions thereof, and all rights of priority under International Conventions and applications for Letters Patent which may hereafter be filed for said improvements in any country or countries foreign to the United States, and all Letters Patent which may be granted for said improvements in any country or countries foreign to the United States and all extensions, renewals and reissues thereof; and we hereby authorize and request the Commissioner of Patents of the United States, and any Official of any country or countries foreign to the United States, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said improvements to said ASSIGNEE, successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE DO HEREBY sell, assign, transfer, and convey to ASSIGNEE, its successors, legal representatives, and assigns all claims for damages and all remedies arising out of any violation of the rights assigned hereby that may have accrued prior to the date of assignment to ASSIGNEE, or may accrue hereafter, including, but not limited to, the right to sue for, collect, and retain damages for past infringements of said Letters Patent before or after issuance.

AND WE HEREBY covenant and agree that we will communicate to said ASSIGNEE, successors, legal representatives and assigns, any facts known to us respecting said improvements, and testify in any legal proceeding, sign all lawful papers, execute all divisional,

Application No.: Unknown  
Filing Date: Herewith

Client Code: Mobile Display YPL.213AUS/SD-32296-US/G07182

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Page 2

continuing and reissue applications, make all rightful oaths and generally do everything possible to aid said ASSIGNEE, successors, legal representatives and assigns, to obtain and enforce proper patent protection for said improvements in all countries.

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23 day of  
December, 2008.

Seok-Hwan Hwang

Seok-Hwan Hwang

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23 day of  
December, 2008.

Young-Kook Kim  
Young-Kook Kim

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23 day of  
December, 2008.

Yoon-Hyun Kwak  
Yoon-Hyun Kwak

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23 day of  
December, 2008.

Jeoung-In Yi  
Jeoung-In Yi

IN TESTIMONY WHEREOF, I hereunto set my hand and seal this 23 day of  
December, 2008.

Hye-Lim Lee  
Hye-Lim Lee

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