

## PATENT ASSIGNMENT COVER SHEET

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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>CHIH-KUANG YU</td> <td>11/26/2013</td> </tr> <tr> <td>HUNG-YI KUO</td> <td>11/18/2013</td> </tr> </tbody> </table>		Name	Execution Date	CHIH-KUANG YU	11/26/2013	HUNG-YI KUO	11/18/2013				
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RECEIVING PARTY DATA											
<table border="1"> <tr> <td>Name:</td> <td>TSMC SOLID STATE LIGHTING LTD.</td> </tr> <tr> <td>Street Address:</td> <td>9, LI-HSIN 4TH ROAD</td> </tr> <tr> <td>Internal Address:</td> <td>HSINCHU SCIENCE PARK</td> </tr> <tr> <td>City:</td> <td>HSINCHU</td> </tr> <tr> <td>State/Country:</td> <td>TAIWAN</td> </tr> </table>		Name:	TSMC SOLID STATE LIGHTING LTD.	Street Address:	9, LI-HSIN 4TH ROAD	Internal Address:	HSINCHU SCIENCE PARK	City:	HSINCHU	State/Country:	TAIWAN
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PROPERTY NUMBERS Total: 1											
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CORRESPONDENCE DATA											
<p>Fax Number: (214)200-0853          Phone: 214-651-5000          Email: ipdocketing@haynesboone.com  <i>Correspondence will be sent via US Mail when the email attempt is unsuccessful.</i>          Correspondent Name: HAYNES AND BOONE, LLP IP SECTION          Address Line 1: 2323 VICTORY AVENUE          Address Line 2: SUITE 700          Address Line 4: DALLAS, TEXAS 75219</p>											
ATTORNEY DOCKET NUMBER:	48047.165										
NAME OF SUBMITTER:	ERIC Q. LI										
Signature:	/Eric Q. Li/										
Date:	12/04/2013										
Total Attachments: 2 source=48047-165_Assignment#page1.tif source=48047-165_Assignment#page2.tif											

OP \$40.00 14096420

## ASSIGNMENT

WHEREAS, we,

- (1) Chih-Kuang Yu of No. 6, Ln. 43, Heping Rd., East District  
Chiayi City, Taiwan, R.O.C. 600
- (2) Hung-Yi Kuo of 1F., No. 29, Ln. 169, Leye St., Daan District  
Taipei City, Taiwan, R.O.C. 106

have invented certain improvements in

WAFER LEVEL PHOTONIC DEVICE DIE STRUCTURE AND  
METHOD OF MAKING THE SAME

for which we have executed an application for Letters Patent of the United States of America,

  X   of even date filed herewith; and  
           filed on                                  and assigned application number                                 ; and

WHEREAS, we authorize the attorney of record to update this document to include Patent Office information as deemed necessary (i.e., filing date, serial number, etc.);

WHEREAS, TSMC Solid State Lighting Ltd., 9, Li-Hsin 4<sup>th</sup> Rd., HsinChu Science Park, HsinChu, Taiwan, ROC. is desirous of obtaining the entire right, title, and interest in, to and under the said invention and the said application in the United States of America and in any and all countries foreign thereto;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, and other good and valuable consideration, we have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said TSMC, its successors, legal representatives, and assigns, the entire right, title, and interest in, to and under the said invention, and the said application, and all divisional, renewal, substitutional, and continuing applications thereof, and all Letters Patent of the United States of America which may be granted thereon and all reissues and extensions thereof, and all applications for Letters Patent which may be filed for said invention in any country or countries foreign to the United States of America, and all extensions, renewals, and reissues thereof, and all prior patents and patent applications from which a filing priority of the above-described patent application may be obtained, including the right to collect past damages; and we hereby authorize and request the Commissioner of Patents of the United States of America, and any official of any country or countries foreign to the United States of America, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

AND WE HEREBY covenant that we have full right to convey the entire interest herein assigned, and that we have not executed, and will not execute, any agreement in conflict herewith.

AND WE HEREBY further covenant and agree that we will communicate to said TSMC, its successors, legal representatives and assigns, any facts known to us respecting said invention, and testify in any legal proceedings, sign all lawful papers, execute all divisional, renewal, substitutional,

Assignment

Docket No.: 2011-0187-C /48047.165

Customer No.: 42717

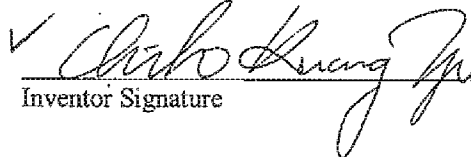
continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said TSMC, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

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Inventor Name: Chih-Kuang Yu

Residence Address: No. 6, Ln. 43, Heping Rd., East District  
Chiayi City, Taiwan, R.O.C. 600

✓ Dated: 11/26/2013

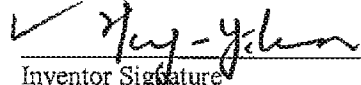
✓   
Inventor Signature

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Inventor Name: Hung-Yi Kuo

Residence Address: 1F., No. 29, Ln. 169, Leye St., Daan District  
Taipei City, Taiwan, R.O.C. 106

✓ Dated: 11/18/13

✓   
Inventor Signature