

## PATENT ASSIGNMENT COVER SHEET

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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>
	TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.	03/01/2012
<b>RECEIVING PARTY DATA</b>		
<b>Name:</b>	TSMC SOLID STATE LIGHTING LTD.	
<b>Street Address:</b>	9, LI-HSIN 4TH RD.	
<b>Internal Address:</b>	HSINCHU SCIENCE PARK	
<b>City:</b>	HSINCHU	
<b>State/Country:</b>	TAIWAN	
<b>Postal Code:</b>	300-77	
<b>PROPERTY NUMBERS Total: 1</b>		
	<b>Property Type</b>	<b>Number</b>
	Application Number:	14466172
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<b>ATTORNEY DOCKET NUMBER:</b>	48047.199	
<b>NAME OF SUBMITTER:</b>	ERIC Q. LI	
<b>SIGNATURE:</b>	/Eric Q. Li/	
<b>DATE SIGNED:</b>	04/15/2015	
<b>Total Attachments: 2</b>		
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ASSIGNMENT

WHEREAS, TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD., (hereinafter "ASSIGNOR"), of No. 8, Li-Hsin Rd. 6, Science-Based Industrial Park Hsin-Chu, Taiwan 300-77, Republic of China, is the owner in the United States Patent and Trademark Office of the full and exclusive right, title and interest in and to the patent applications and patents for United States Patent and the inventions described therein on Attachment A.

WHEREAS, TSMC SOLID STATE LIGHTING LTD., (hereinafter "ASSIGNEE"), of 9, Li-Hsin 4<sup>th</sup> Road, Hsinchu Science Park, Hsinchu, Taiwan 300-77, is desirous of acquiring the entire right, title, and interest in, and to said listed patent applications and patents, said inventions and any patents that may issue on said applications within the United States of America and its territorial possessions;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, ASSIGNOR have sold, assigned, transferred and set over, and by these presents do hereby sell, assign, transfer and set over, unto the said ASSIGNEE, 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 ASSIGNOR 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 ASSIGNEE, its successors, legal representatives and assigns, in accordance with the terms of this instrument.

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

AND ASSIGNOR HEREBY further covenant and agree that ASSIGNOR will communicate to said ASSIGNEE, 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, continuing, and reissue applications, make all rightful declarations and/or oaths and generally do everything possible to aid the said ASSIGNEE, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

TAIWAN SEMICONDUCTOR MANUFACTURING COMPANY, LTD.

  
Signature

Director, IP Division  
Title

8/01/2012  
Date

## ATTACHMENT A

TSMC Ref. No.	Attorney Reference No	Ctry / Region	Application No.	Filing Date	Title
2008-0371	48047.109	US	12/541787	14-Aug-2009	Light-Emitting Diode on a Conductive Substrate