

PATENT ASSIGNMENT

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SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT
CONVEYING PARTY DATA	
Name	Execution Date
Taiwan Semiconductor Manufacturing Company, Ltd.	03/01/2012
RECEIVING PARTY DATA	
Name:	TSMC Solid State Lighting Ltd.
Street Address:	9, Li-Hsin 4th Road
Internal Address:	Hsinchu Science Park
City:	Hsinchu
State/Country:	TAIWAN
Postal Code:	300-77
PROPERTY NUMBERS Total: 1	
Property Type	Number
Application Number:	12944895
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ATTORNEY DOCKET NUMBER:	48047.12/2010-0578
NAME OF SUBMITTER:	David M. O'Dell
Total Attachments: 2 source=48047--12Assignment#page1.tif source=48047--12Assignment#page2.tif	

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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.

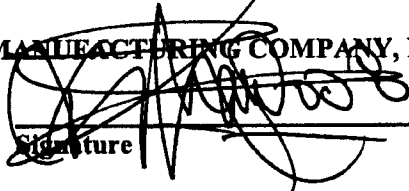
WHEREAS, **TSMC SOLID STATE LIGHTING LTD.**, (hereinafter "**ASSIGNEE**"), of 9, Li-Hsin 4th Road, Hsinchu Science Park, Hsinchu, Taiwan 300-77, is desirous of acquiring the entire right, title, and interest in, and to said listed patent applications and patents, said inventions and any patents that 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

Date

3/01/2012

ATTACHMENT A

TSMC Ref. No.	Attorney Reference No	Ctry / Region	Application No.	Filing Date	Title
2010-0578	48047.12	US	12/944895	12-Nov-2010	LED Device with Improved Thermal Performance