502621438 01/06/2014

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2668047

	SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT				
CONVEYING PARTY D)ATA					
		1	Name	Execution Date		
MING-HSIN HUANG				04/03/2012		
RECEIVING PARTY DA	ATA					
Name: TSMC SOLID STATE			E LIGHTING LTD.			
Street Address:	LI-HSIN 4TH F	LI-HSIN 4TH ROAD				
Internal Address:	HSINCHU SC	HSINCHU SCIENCE PARK				
City:	HSINCHU					
State/Country:	TAIWAN					
Property Type Application Number:		12894829				
CORRESPONDENCE	DATA					
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PATENT REEL: 031893 FRAME: 0418

Docket No.: 2010-0296 / 48047.87

Customer No.: 42717

ASSIGNMENT

WHEREAS, I

Ming-Hsin Huang

of

No. 5, Qiashui Road, Baoshan Township Hsinchu County 30845, Taiwan, R.O.C.

has invented certain improvements in

MECHANISMS FOR ANTI-FLICKERING

	1 1
	of even date filed herewith; and
<u>X</u>	filed on September 30, 2010 and assigned application number 12/894829; and

for Which I have executed an application for Letters Patent of the United States of America

WHEREAS, I 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. (TSMC-SSL), Li-Flsin 4th Rd., HsinChu Science Park, HsinChu, Taiwan, Republic of China. 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-SSL, 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, whose duty it is to issue patents on applications as aforesaid, to issue all Letters Patent for said invention to the said TSMC-SSL, 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-SSL, 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 TSMC-SSL, its successors, legal representatives and assigns, to obtain and enforce proper patent protection for said invention in all countries.

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Docket No.: 2010-0296 / 48047.87

Customer No.: 42717

Inventor Name:

Ming-Hsin Huang

Residence Address:

No. 5, Qiashui Road, Baoshan Township Hsinchu County 30845, Taiwan, R.O.C.

Dated: 7012.04.03

Ming-His Hung

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RECORDED: 01/06/2014

PATENT REEL: 031893 FRAME: 0420