## 502643170 01/21/2014

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2

EPAS ID: PAT2689778

SUBMISSION TYPE:		NEW ASSIGNMENT			
NATURE OF CONVEYANCE:		ASSIGNMENT			
CONVEYING PARTY	DATA				
		N	Name	Execution Date	
CHIEN YAO HUANG	ì			01/20/2014	
RECEIVING PARTY	DATA				
Name:	TSMC SOLAF	TSMC SOLAR LTD.			
Street Address:	NO. 5, KEYA	NO. 5, KEYA W. ROAD			
Internal Address:	DAYA DISTRI	DAYA DISTRICT			
City:	TAICHUNG C	TAICHUNG CITY			
State/Country:	TAIWAN				
Postal Code:	428-82	428-82			
Application Number: 14159		468			
Application Number: 14159		468			
CORRESPONDENC	E DATA				
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Fax Number: Phone:	(215- 215-	979-10	00		
Fax Number: Phone: Email:	(215 215 jsjiul	979-10 ianti@d	00 duanemorris.com		
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PATENT REEL: 032006 FRAME: 0257 14/159,468 filed January 21, 2014

ATTORNEY DOCKET NO.: 2013.1771/1781.01351

## ASSIGNMENT AND AGREEMENT

For value received, I, Chien-Yao HUANG, hereby transfers to TSMC Solar Ltd., with its principal place of business located at No. 5, Keya W. Road, Daya District, Taichung City 428-82, Taiwan, Republic of China, and its successors, assigns and legal representatives, the entire right, title and interest, for the United States of America, in and to certain inventions related to THREE DIMENSIONAL COMPOSITIONAL PROFILE IN CISBASED ABSORBER LAYERS OF THIN FILM SOLAR CELLS, described in a non-provisional application claiming priority thereto and under any and all Letters Patent and any divisions, continuations, continuations-in-part, reexamination certificates, reissues, and extensions thereof, or claiming priority therefrom that may be granted in the United States for said inventions; and I also concurrently hereby sell, assign and transfer to TSMC Solar Ltd., the entire right, title and interest in and to said inventions for all countries foreign to the United States, including all rights of priority arising from the application aforesaid, and all the rights and privileges under any and all forms of protection, including Letters Patent, that may be granted in said countries foreign to the United States for said inventions.

I authorize TSMC Solar Ltd. to make application for such protection in its own name and maintain such protection in any and all countries foreign to the United States, and to invoke and claim for any application for patent or other form of protection for said inventions, without further authorization from me, any and all benefits, including the right of priority provided by any and all treaties, conventions, or agreements.

I hereby consent that a copy of this assignment shall be deemed a full legal and formal equivalent of any document which may be required in any country in proof of the right of TSMC Solar Ltd. to apply for patent or other form of protection for said inventions and to claim the aforesaid benefit of the right of priority.

I request that any and all patents for said inventions be issued to TSMC Solar Ltd. in the United States and in all countries foreign to the United States, or to such nominees as TSMC Solar Ltd. may designate.

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## ATTORNEY DOCKET NO.: 2013.1771/1781.01351

I agree that, when requested, I shall, without charge to TSMC Solar Ltd. but at its expense, sign all papers, and do all acts which may be necessary, desirable or convenient in connection with said applications, patents, or other forms of protection.

Inventor No. 1

Dated: 2014-1.20

Residence:

6F., No. 35-5, Hexing Street, Xinzhuang District, New Taipei City 242, Taiwan, R.O.C.

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**PATENT REEL: 032006 FRAME: 0259**