

## PATENT ASSIGNMENT

Electronic Version v1.1  
 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT																				
NATURE OF CONVEYANCE:	ASSIGNMENT																				
<b>CONVEYING PARTY DATA</b>																					
<table border="1"> <thead> <tr> <th>Name</th> <th>Execution Date</th> </tr> </thead> <tbody> <tr> <td>Stephen P. Murphy</td> <td>03/22/2013</td> </tr> <tr> <td>Anthony Maher</td> <td>03/22/2013</td> </tr> <tr> <td>Gregory A. Ritz</td> <td>03/22/2013</td> </tr> <tr> <td>Imran Khan</td> <td>03/22/2013</td> </tr> <tr> <td>Weston Gerwin</td> <td>03/22/2013</td> </tr> <tr> <td>Dhruv Gajaria</td> <td>03/27/2013</td> </tr> <tr> <td>Yacov Elgar</td> <td>03/27/2013</td> </tr> <tr> <td>Scott Edmonson</td> <td>03/27/2013</td> </tr> <tr> <td>Scott Jacoby</td> <td>03/22/2013</td> </tr> </tbody> </table>		Name	Execution Date	Stephen P. Murphy	03/22/2013	Anthony Maher	03/22/2013	Gregory A. Ritz	03/22/2013	Imran Khan	03/22/2013	Weston Gerwin	03/22/2013	Dhruv Gajaria	03/27/2013	Yacov Elgar	03/27/2013	Scott Edmonson	03/27/2013	Scott Jacoby	03/22/2013
Name	Execution Date																				
Stephen P. Murphy	03/22/2013																				
Anthony Maher	03/22/2013																				
Gregory A. Ritz	03/22/2013																				
Imran Khan	03/22/2013																				
Weston Gerwin	03/22/2013																				
Dhruv Gajaria	03/27/2013																				
Yacov Elgar	03/27/2013																				
Scott Edmonson	03/27/2013																				
Scott Jacoby	03/22/2013																				
<b>RECEIVING PARTY DATA</b>																					
Name:	FIRST SOLAR, INC.																				
Street Address:	28101 Cedar Park Boulevard																				
Internal Address:	P.O. Box 730																				
City:	Perrysburg																				
State/Country:	OHIO																				
Postal Code:	43551																				
<b>PROPERTY NUMBERS Total: 1</b>																					
<table border="1"> <thead> <tr> <th>Property Type</th> <th>Number</th> </tr> </thead> <tbody> <tr> <td>Application Number:</td> <td>13836449</td> </tr> </tbody> </table>		Property Type	Number	Application Number:	13836449																
Property Type	Number																				
Application Number:	13836449																				
<b>CORRESPONDENCE DATA</b>																					
Fax Number:																					
<i>Correspondence will be sent via US Mail when the fax attempt is unsuccessful.</i>																					
Email:	damicot@dicksteinshapiro.com																				
Correspondent Name:	Dickstein Shapiro LLP																				
Address Line 1:	1825 Eye Street, NW																				
Address Line 4:	Washington, DISTRICT OF COLUMBIA 20006																				

OP \$40.00 13836449

ATTORNEY DOCKET NUMBER:	F4500.1147/P1147-A
NAME OF SUBMITTER:	Thomas J. D'Amico
Signature:	/Thomas J. D'Amico/
Date:	04/09/2013
Total Attachments: 12 source=F1147A#page1.tif source=F1147A#page2.tif source=F1147A#page3.tif source=F1147A#page4.tif source=F1147A#page5.tif source=F1147A#page6.tif source=F1147A#page7.tif source=F1147A#page8.tif source=F1147A#page9.tif source=F1147A#page10.tif source=F1147A#page11.tif source=F1147A#page12.tif	

ASSIGNMENT BY INVENTORS

*Maher*

**THIS ASSIGNMENT**, made by Stephen P. Murphy; Anthony ~~Mayer~~; Gregory A. Ritz; Imran Khan; Weston Gerwin; Dhruv Gajaria; Yacov Elgar; Scott Edmonson; and Scott Jacoby (hereinafter referred to as Assignors), residing at 613 Delaware Drive, Perrysburg, OH 43551; 26724 Sheringham Rd, Perrysburg, OH 43551; 9805 Wolfinger Road, Berkey, OH 43504; 1417 Indian Creek Drive, Perrysburg, OH 43551; 25331 Ramblehurst Dr., Perrysburg, OH 43551; PO Box 70182, Sunnyvale, CA 94086; 1519 Oriole Ave, Sunnyvale, CA 94087; 1792 Duvall Drive, San Jose, CA 95130; 6951 Williamsburg Sylvania, OH 43560 and, respectively,

**WHEREAS**, Assignors have invented certain new and useful improvements in SYSTEM AND METHOD FOR PHOTOVOLTAIC DEVICE TEMPERATURE CONTROL WHILE CONDITIONING A PHOTOVOLTAIC DEVICE, set forth in a Patent application for Letters Patent of the United States, already filed on March 15, 2013 as U.S. application No. 13/836,449; and

**WHEREAS**, FIRST SOLAR, INC, a Corporation organized under and pursuant to the laws of Delaware having its principal place of business at First Solar, Inc., P.O. Box 730, 28101 Cedar Park Boulevard, Perrysburg, Ohio 43551 (hereinafter referred to as Assignee), is desirous of acquiring the entire right, title and interest in and to said inventions and said Application for Letters Patent of the United States, and in and to any Letters Patent of the United States to be obtained therefore and thereon.

**NOW, THEREFORE**, in accordance with Intellectual Property provisions of the employment agreement previously executed by and between Assignee and Assignors, and for other good and sufficient consideration, the receipt of which is hereby acknowledged, Assignors have sold, assigned, transferred and set over, and by these presents do sell, assign, transfer and set over, unto Assignee, its successors, legal representatives and assigns, the entire right, title and interest in and to the above-mentioned inventions and application for Letters Patent, and in and to any and all direct and indirect divisions, continuations and continuations-in-part of said application, and in and to all any and all Letters Patent in the United States and all foreign countries which may be

granted therefore and thereon, and reissues, reexaminations and extensions of said Letters Patent, and all rights under the International Convention for the Protection of Industrial Property including all rights of priority, the same to be held and enjoyed by Assignee, for its own use and benefit and the use and benefit of its successors, legal representatives and assigns, to the full end of the term or terms for which Letters Patent may be granted and/or extended, as fully and entirely as the same would have been held and enjoyed by Assignors, had this sale and assignment not been made.

**AND** for the same consideration, Assignors hereby represent and warrant to Assignee, its successors, legal representatives and assigns, that, at the time of execution and delivery of these presents, except for any rights, titles and/or interests that have arisen to Assignee under law or that have already been transferred to Assignee, Assignors are the sole and lawful owners of the entire right, title and interest in and to the said inventions and application for Letters Patent above-mentioned, and that the same are unencumbered and that Assignors have good and full right and lawful authority to sell and convey the same in the manner herein set forth.

**AND** for the same consideration, Assignors hereby covenant and agree to and with Assignee, its successors, legal representatives and assigns, that Assignors will sign all papers and documents, take all lawful oaths and do all acts necessary or required to be done for the procurement, maintenance, enforcement and defense of any Letters Patent and applications for Letters Patent for said inventions, without charge to Assignee, its successors, legal representatives and assigns, whenever counsel of Assignee, or counsel of its successors, legal representatives and assigns, shall advise: that any proceeding in connection with said inventions, or said Patent application for Letters Patent, or any proceeding in connection with any Letters Patent or applications for Letters Patent for said inventions in any country, in any country, including but not limited to interference proceedings, is lawful and desirable; or, that any division, continuation or continuation-in-part of any application for Letters Patent, or any reissue, reexamination or extension of any Letters Patent, to be obtained thereon, is lawful and desirable.

**AND** Assignors hereby request the Commissioner of Patent and Trademarks to issue said Letters Patent of the United States to Assignee, as Assignee of said inventions and the Letters

Patent to be issued thereon, for the sole use and benefit of Assignee, its successors, legal representatives and assigns.

**AND** Assignors hereby grant the following individuals the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trademark Office for recordation of this document:

DICKSTEIN SHAPIRO LLP

All practitioners at Customer Number **16080**.

**AND** Assignors acknowledge an obligation of assignment of this invention to Assignee at the time the invention was made.

Stephen P. Murphy  
Stephen P. Murphy

Date: 3/22/13

United States of America )  
State of Ohio ) ss.:  
County of Wood )

On this 22 day of March, 2013, before me personally came Stephen P. Murphy, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Sarah Kane  
Notary Public



SARAH KANE  
NOTARY PUBLIC - OHIO  
MY COMMISSION EXPIRES 02-16-2016

*Anthony Mayer*

~~Anthony Mayer~~  
Anthony Mayer

Date: 3/22/2013

United States of America )  
State of Ohio ) ss.:  
County of Wood )

On this 22 day of March, 2013, before me personally came Anthony Mayer, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.  
*Anthony Mayer*

*Sarah Kane*

Notary Public



SARAH KANE  
NOTARY PUBLIC - OHIO  
MY COMMISSION EXPIRES 02-16-2016

Gregory A. Ritz  
Gregory A. Ritz

Date: 3/22/2013

United States of America )  
State of Ohio ) ss.:  
County of Wood )

On this 22 day of March, 2013, before me personally came Gregory A. Ritz, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Sarah Kane  
Notary Public



SARAH KANE  
NOTARY PUBLIC - OHIO  
MY COMMISSION EXPIRES 02-18-2016



*Imran Khan*  
Imran Khan

Date: 3/22/2013

United States of America )  
State of Ohio ) ss.:  
County of Wood )

On this 22 day of March, 2013, before me personally came Imran Khan, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

*Sarah Kane*  
Notary Public



SARAH KANE  
NOTARY PUBLIC - OHIO  
MY COMMISSION EXPIRES 02-16-2016

Weston Gerwin  
Weston Gerwin

Date: 3/22/2013

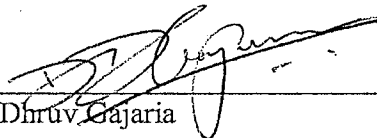
United States of America )  
State of Ohio ) ss.:  
County of Wood )

On this 22 day of March, 2013, before me personally came Weston Gerwin, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

Sarah Kane  
Notary Public



SARAH KANE  
NOTARY PUBLIC - OHIO  
MY COMMISSION EXPIRES 02-16-2016

  
Dhruv Gajaria

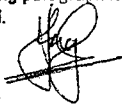
Date: 3-27-13

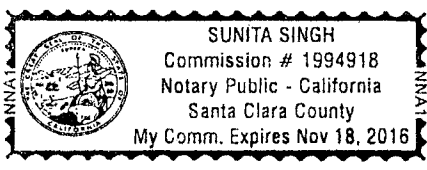
United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally came Dhruv Gajaria, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

\_\_\_\_\_  
Notary Public

State of California County of Santa Clara )ss.  
On Mar 27, 2013 before me, Sunita Singh  
Notary Public, personally appeared Dhruv Dipak Gajaria  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.





*Yacov Elgar*

Yacov Elgar

Date: 3-27-13

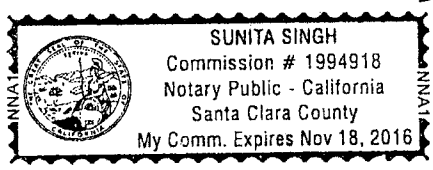
United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

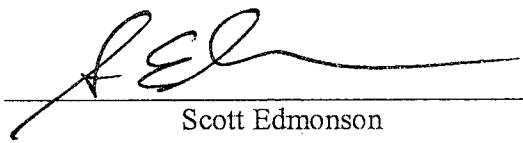
On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally came Yacov Elgar, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

\_\_\_\_\_  
Notary Public

State of California County of Santa Clara )ss.  
On Mar 27, 2013 before me Sunita Singh  
Notary Public, personally appeared Yacov Elgar  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.

*Sunita Singh*



  
\_\_\_\_\_  
Scott Edmonson

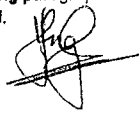
Date: 3/27/2013

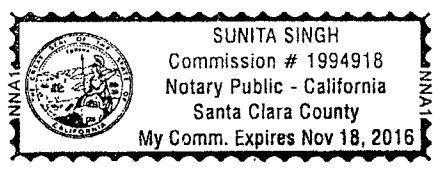
United States of America )  
State of \_\_\_\_\_ ) ss.:  
County of \_\_\_\_\_ )

On this \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_, before me personally came Scott Edmonson, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

\_\_\_\_\_  
Notary Public

State of California County of Santa Clara ss.  
On March 27, 2013 before me Sunita Singh  
Notary Public, personally appeared Scott Edmonson  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument. I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct. WITNESS my hand and official seal.





*Scott Jacoby*

Scott Jacoby

Date: 3/22/13

United States of America )  
State of Ohio ) ss.:  
County of Wood )

On this 22 day of March, 2013, before me personally came Scott Jacoby, to me known to be the individual described in and who executed the foregoing instrument, and acknowledged execution of the same.

*Sarah Kane*

Notary Public



SARAH KANE  
NOTARY PUBLIC - OHIO  
MY COMMISSION EXPIRES 02-16-2016