

## PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1  
 Stylesheet Version v1.2

EPAS ID: PAT4822945

<b>SUBMISSION TYPE:</b>	NEW ASSIGNMENT
<b>NATURE OF CONVEYANCE:</b>	ASSIGNMENT
<b>CONVEYING PARTY DATA</b>	
<b>Name</b>	<b>Execution Date</b>
CHANGZHOU TRINA SOLAR ENERGY CO., LTD.	02/13/2018
<b>RECEIVING PARTY DATA</b>	
<b>Name:</b>	TRINA SOLAR CO., LTD
<b>Street Address:</b>	NO. 2 TRINA ROAD, TRINA PV PARK
<b>Internal Address:</b>	XINBEI DISTRICT
<b>City:</b>	CHANGZHOU, JIANGSU
<b>State/Country:</b>	CHINA
<b>PROPERTY NUMBERS Total: 1</b>	
<b>Property Type</b>	<b>Number</b>
Application Number:	15303386
<b>CORRESPONDENCE DATA</b>	
<b>Fax Number:</b>	(419)249-7151
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<b>ATTORNEY DOCKET NUMBER:</b>	1-25302
<b>NAME OF SUBMITTER:</b>	KRISTENE M. RAGAN
<b>SIGNATURE:</b>	/kmr/
<b>DATE SIGNED:</b>	02/13/2018
<b>Total Attachments: 2</b>	
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source=1-25302Assignment#page2.tif	

ASSIGNMENT OF INVENTION

For:   x   U.S. and/or Foreign Rights  
For:   x   U.S. Application  
By:   x   Inventor(s) or Present Owner

For good and valuable consideration, the receipt of which is hereby acknowledged,

ASSIGNOR: Inventors or persons or entities who own the invention

CHANGZHOU TRINA SOLAR  
ENERGY CO., LTD.  
No. 2 Trina Road, Trina PV Park  
Xinbei District  
Changzhou, Jiangsu  
China

A Limited Liability Company of China  
Nationality

hereby sell, assign and transfer to

ASSIGNEE:

TRINA SOLAR CO., LTD  
No. 2 Trina Road, Trina PV Park  
Xinbei District  
Changzhou, Jiangsu  
China

A Corporation of China  
Nationality

and the successors, assigns and legal representatives of the ASSIGNEE, their entire right, title and interest, for the United States and its territorial possessions, and in all foreign countries, including all rights to claim priority, in and to any and all improvements which are disclosed in the invention entitled:

Method and Apparatus for Detecting Crystal Orientation of Silicon Wafer

Name of inventor(s) Shaoyong FU and Zhen XIONG

which is found in U.S. patent application No. 15/303,386 filed October 11, 2016, under 35 USC 371 of International Application No. PCT/CN2014/077340 filed May 13, 2014.

and any legal equivalent thereof in a foreign country, including the right to claim priority, and in and to, all Letters Patent to be obtained for said invention by the above application, for the United States of America and its territorial possessions and any other foreign country or countries that may be granted to them therefor, and any continuation, division, renewal, or substitute thereof, and as to letters patent any reissue or re-examination thereof;

ASSIGNOR agree that this Assignment may be executed in one or more counterparts, each of which shall be deemed to be an original and all of which together shall be deemed to constitute one and the same instrument.

ASSIGNOR hereby covenant that no assignment, sale, agreement or encumbrance has been or will be made or entered into which would conflict with this Assignment;

ASSIGNOR further covenant that ASSIGNEE will, upon its request, be provided promptly with all pertinent facts and documents relating to said invention and said Letters Patent and legal equivalents as may be known and accessible to ASSIGNOR and will testify as to the same in any interference, litigation or proceeding related thereto and will promptly execute and deliver to ASSIGNEE or its legal representatives any and all papers, instruments or affidavits required to apply for, obtain, maintain, issue and enforce said application, said invention and said Letters Patent and said equivalents thereof which may be necessary or desirable to carry out the purposes thereof.

ASSIGNOR

Date: 2018.2.13

  
Signature

Zhiqiang Feng  
Printed Name

Vice President  
Title

NOTE: No witnessing, notarization or legalization is necessary. If the assignment is notarized or legalized, then it will only be prima facie evidence of execution. 35 U.S.C. 261.