

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1
 Stylesheet Version v1.2

EPAS ID: PAT4453413

SUBMISSION TYPE:	NEW ASSIGNMENT	
NATURE OF CONVEYANCE:	ASSIGNMENT	
CONVEYING PARTY DATA		
	Name	Execution Date
	FIRST SOLAR MALAYSIA SDN. BHD.	08/05/2013
RECEIVING PARTY DATA		
Name:	FIRST SOLAR, INC.	
Street Address:	350 WEST WASHINGTON STREET	
Internal Address:	6TH FLOOR	
City:	TEMPE	
State/Country:	ARIZONA	
Postal Code:	85281	
PROPERTY NUMBERS Total: 1		
	Property Type	Number
	Application Number:	15586505
CORRESPONDENCE DATA		
Fax Number:	(419)255-9639	
<i>Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.</i>		
Phone:	419-255-5900	
Email:	docketing@mstfirm.com	
Correspondent Name:	MACMILLAN, SOBANSKI & TODD, LLC	
Address Line 1:	720 WATER STREET	
Address Line 2:	ONE MARITIME PLAZA, FIFTH FLOOR	
Address Line 4:	TOLEDO, OHIO 43604	
ATTORNEY DOCKET NUMBER:	1-59261	
NAME OF SUBMITTER:	JOSEPH W. TUCKER	
SIGNATURE:	/Joseph W. Tucker/	
DATE SIGNED:	06/09/2017	
Total Attachments: 18		
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PATENT ASSIGNMENT

THIS PATENT ASSIGNMENT ("Assignment"), dated March 14, 2016 (the "Effective Date"), is entered into by and between First Solar Malaysia Sdn. Bhd., a Malaysian corporation ("Assignor"), and First Solar, Inc. ("Assignee"). Assignor and Assignee are sometimes referred to herein individually as a "Party" and collectively as the "Parties."

WHEREAS, pursuant to an Intercompany Agreement, dated August 5, 2013 and an Agency Agreement, dated August 5, 2013, Assignor has previously assigned to Assignee *certain rights* in the patents and patent applications listed on the attached Schedule A (collectively the "Assigned Patents," whether issued or not), as predominantly reflected in the assignment document recorded at the United States Patent and Trademark Office at least on January 14, 2014 at reel 32045; frame 657;

WHEREAS, Assignee has directed and may continue in the future to direct the filing of additional division, continuation, and continuation-in-part applications in the patent office of the United States or any other country, that make a claim of priority to one or more of the Assigned Patents, (which applications and any US patents issuing therefrom are collectively the "Ongoing Applications," whether issued or not); and

WHEREAS, Assignee desires to acquire any *remaining unassigned rights* in the Assigned Patents and to acquire all right, title, and interest in the Ongoing Applications; and Assignor desires to assign these rights to Assignee.

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby assigns, sells, conveys, delivers, and transfers to Assignee its entire right, title, and interest in and to *the inventions* embodied in the Assigned Patents, including but not limited to (i) any provisional application to which the Assigned Patents claim priority, and (ii) the right to file one or more applications for Letters Patent for said inventions in the United States and all foreign countries, including the right of priority under the International Convention of 1883 and its later modifications, and to any Letters Patent, Reexamination Certificates and/or Reissue Patent that may issue from such applications or for the invention in any country of the world; and we request the officials of said worldwide patent

offices to issue to Assignee any Letters Patent that may issue from such applications or for the inventions, in accordance with the terms of this assignment.

Additionally, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, Assignor hereby assigns, sells, conveys, delivers, and transfers to Assignee its entire right, title, and interest in and to *the inventions* embodied in the Ongoing Applications, including but not limited to (i) the Ongoing Applications themselves; (ii) any provisional or non-provisional application to which the Ongoing Applications claim priority; (iii) any further division, continuation, or continuation-in-part thereof that makes a claim of priority to one or more of the Ongoing Applications; (iv) the sole right to sue for infringement of the Ongoing Applications in any country and to collect all damages for infringement of any of the Ongoing Applications accruing on and after the Effective Date; and (v) the right to file one or more applications for Letters Patent for said inventions in the United States and all foreign countries, including the right of priority under the International Convention of 1883 and its later modifications, and to any Letters Patent, Reexamination Certificates and/or Reissue Patent that may issue from such applications or for the invention in any country of the world; and we request the Commissioner of Patents and Trademarks of the United States to issue to Assignee any Letters Patent that may issue from the Application or for the invention, in accordance with the terms of this assignment.

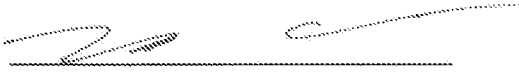
This Assignment shall be binding upon, and shall inure to the benefit of, the Parties hereto and their respective successors and assigns, and may be executed in two or more counterparts, each of which shall be deemed an original, and it shall not be necessary in making proof of this Assignment to produce or account for more than one set of counterparts signed by all of the Parties.

Nothing in this Assignment shall be construed as purporting to convey any rights that Assignor has previously conveyed to Assignee.

No waiver, modification, or change of any of the provisions of this Assignment shall be valid unless in writing and signed by the Party against whom such claimed waiver, modification, or change is sought to be enforced.

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed
as of the date first above written.

FIRST SOLAR MALAYSIA SDN. BHD., "Assignor"



Name: Richard Henkler
Title: Chief Intellectual Property Counsel

FIRST SOLAR, INC., "Assignee"



Name: Richard Henkler
Title: Chief Intellectual Property Counsel

Assigned Patents

Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
GE	US	12/415267	31-MAR-09	NA	NA
GE	US	12/503390	15-JUL-09	NA	NA
GE	US	12/645618	23-DEC-09	NA	NA
GE	US	12/415275	31-MAR-09	NA	NA
GE	US	12/612271	04-NOV-09	NA	NA
GE	US	12/844931	28-JUL-10	NA	NA
GE	US	12/915671	29-OCT-10	NA	NA
GE	US	12/608455	29-OCT-09	NA	NA
PrimeStar	US	12/010919	31-JAN-08	NA	NA
PrimeStar	US	60/994813	24-SEP-07	NA	NA
PrimeStar	US	60/994939	24-SEP-07	NA	NA

SCHEDULE A

Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
GE	US	13/052485	21-MAR-11	NA	NA
GE	US	12/635767	11-DEC-09	NA	NA
GE	US	12/639093	16-DEC-09	NA	NA
GE	US	12/645802	23-DEC-09	30-OCT-12	8301409
GE	US	12/893288	29-SEP-10	NA	NA
GE	US	12/645660	23-DEC-09	NA	NA
PrimeStar	US	12/818669	18-JUN-10	NA	NA
PrimeStar	US	12/683831	07-JAN-10	28-AUG-12	8252117
PrimeStar	US	12/765268	22-APR-10	02-APR-13	8409407
GE	US	12/826234	29-JUN-10	NA	NA
PrimeStar	US	12/639037	16-DEC-09	21-AUG-12	8247683
PrimeStar	US	12/765316	22-APR-10	29-JAN-13	8361229
PrimeStar	US	13/751852	28-JAN-13	NA	NA
PrimeStar	US	12/639043	16-DEC-09	24-APR-12	8163089

SCHEDULE A

Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	13/447534	16-APR-12	26-JUN-12	8207006
PrimeStar	US	12/841489	22-JUL-10	26-MAR-13	8402628
PrimeStar	US	12/638713	15-DEC-09	29-MAY-12	8189198
PrimeStar	US	12/828359	01-JUL-10	NA	NA
PrimeStar	US	12/638772	15-DEC-09	NA	NA
PrimeStar	US	12/639048	16-DEC-09	06-NOV-12	8303779
PrimeStar	US	12/638749	15-DEC-09	27-MAR-12	8143515
PrimeStar	US	12/818717	18-JUN-10	NA	NA
PrimeStar	US	12/639053	16-DEC-09	30-APR-13	8430966
PrimeStar	US	12/828378	01-JUL-10	NA	NA
PrimeStar	US	12/639073	16-DEC-09	NA	NA
PrimeStar	US	12/825815	29-JUN-10	11-JUN-13	8460765
GE	US	12/639099	16-DEC-09	18-OCT-11	8039290
PrimeStar	US	12/649621	30-DEC-09	11-DEC-12	8328946

SCHEDULE A

Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	12/639085	16-DEC-09	01-NOV-11	8048194
PrimeStar	US	13/285184	31-OCT-11	26-MAR-13	8404177
PrimeStar	US	12/683807	07-JAN-10	30-APR-13	8430963
PrimeStar	US	12/766135	23-APR-10	28-AUG-12	NA
PrimeStar	US	13/561575	30-JUL-12	NA	NA
PrimeStar	US	12/828408	01-JUL-10	NA	NA
PrimeStar	US	12/828421	01-JUL-10	NA	NA
PrimeStar	US	12/638731	15-DEC-09	29-MAY-12	8187555
PrimeStar	US	12/827029	30-JUN-10	NA	NA
PrimeStar	US	12/770027	29-APR-10	29-JAN-13	8361232
PrimeStar	US	13/751761	28-JAN-13	NA	NA
PrimeStar	US	12/638807	15-DEC-09	28-AUG-12	NA
GE	US	13/005602	13-JAN-11	NA	NA

SCHEDULE A

Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
GE	US	12/894217	30-SEP-10	NA	NA
GE	US	12/894242	30-SEP-10	25-OCT-11	8044477
GE	US	13/251851	03-OCT-11	09-OCT-12	8283187
PrimeStar	US	12/750056	30-MAR-10	04-SEP-12	8257561
PrimeStar	US	12/771515	30-APR-10	08-MAY-12	8173482
PrimeStar	US	12/765295	22-APR-10	NA	NA
PrimeStar	US	12/750096	30-MAR-10	10-NOV-11	8053350
PrimeStar	US	12/765340	22-APR-10	NA	NA
PrimeStar	US	12/770055	29-APR-10	NA	NA
PrimeStar	US	12/750116	30-MAR-10	25-OCT-11	8043954
PrimeStar	US	12/770078	29-APR-10	NA	NA
PrimeStar	US	12/750136	30-MAR-10	25-OCT-11	8043955
PrimeStar	US	13/235780	19-SEP-11	05-MAR-13	8390122
PrimeStar	US	12/638653	15-DEC-09	21-AUG-12	8247255

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	12/638687	15-DEC-09	09-JUL-13	8481355
PrimeStar	US	13/560155	27-JUL-12	NA	NA
PrimeStar	US	13/937765	09-JUL-13	NA	NA
PrimeStar	US	12/770102	29-APR-10	NA	NA
GE	US	12/768929	28-APR-10	NA	NA
GE	US	12/790689	28-MAY-10	NA	NA
GE	US	12/765225	22-APR-10	NA	NA
GE	US	12/894901	30-SEP-10	NA	NA
GE	US	12/894916	30-SEP-10	NA	NA
GE	US	12/894926	30-SEP-10	NA	NA
PrimeStar	US	12/827053	30-JUN-10	NA	NA
PrimeStar	US	12/825800	29-JUN-10	21-AUG-12	8247682
PrimeStar	US	12/826966	30-JUN-10	NA	NA

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	12/829544	02-JUL-10	07-AUG-12	8236601
PrimeStar	US	13/558770	26-JUL-12	NA	NA
PrimeStar	US	12/829563	02-JUL-10	14-AUG-12	8241938
PrimeStar	US	13/429699	26-MAR-12	NA	NA
PrimeStar	US	12/892360	28-SEP-10	08-JAN-13	8349144
PrimeStar	US	12/870013	27-AUG-10	NA	NA
PrimeStar	US	12/825495	29-JUN-10	NA	NA
PrimeStar	US	12/857810	17-AUG-10	NA	NA
PrimeStar	US	12/975493	22-DEC-10	NA	NA
PrimeStar	US	13/089797	19-APR-11	26-JUN-12	8207009
PrimeStar	US	12/913419	27-OCT-10	NA	NA
PrimeStar	US	12/913454	27-OCT-10	NA	NA
PrimeStar	US	12/829652	02-JUL-10	NA	NA
PrimeStar	US	12/842106	23-JUL-10	NA	NA

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	12/870055	27-AUG-10	25-DEC-12	8338698
PrimeStar	US	12/870092	27-AUG-10	29-MAY-12	8187912
GE	US	12/913296	27-OCT-10	10-MAY-11	7939363
GE	US	13/080029	05-APR-11	08-JAN-13	8349084
PrimeStar	US	12/842352	23-JUL-10	NA	NA
PrimeStar	US	12/913357	27-OCT-10	NA	NA
PrimeStar	US	12/913390	27-OCT-10	17-MAY-11	7943415
PrimeStar	US	12/977139	23-DEC-10	NA	NA
GE	US	12/972242	17-DEC-10	NA	NA
GE	US	13/306392	29-NOV-11	NA	NA
GE	US	12/956761	30-NOV-10	NA	NA
GE	US	12/951108	22-NOV-10	21-FEB-12	8119513
PrimeStar	US	12/977161	23-DEC-10	NA	NA
PrimeStar	US	13/047189	14-MAR-11	NA	NA

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	12/892414	28-SEP-10	11-JUN-13	8460521
PrimeStar	US	12/977543	23-DEC-10	NA	NA
GE	US	13/018650	01-FEB-11	NA	NA
PrimeStar	US	13/070661	24-MAR-11	NA	NA
GE	US	13/088496	18-APR-11	NA	NA
PrimeStar	US	12/975422	22-DEC-10	NA	NA
PrimeStar	US	13/070673	24-MAR-11	21-AUG-12	8247741
PrimeStar	US	12/973058	20-DEC-10	NA	NA
PrimeStar	US	12/973093	20-DEC-10	NA	NA
PrimeStar	US	13/149100	31-MAY-11	08-JAN-13	8350585
PrimeStar	US	12/975435	22-DEC-10	29-MAY-12	8187386
GE	US	12/976166	22-DEC-10	02-JUL-13	8476105
PrimeStar	US	13/089825	19-APR-11	11-JUN-13	8461481
PrimeStar	US	12/977416	23-DEC-10	NA	NA
PrimeStar	US	13/073410	28-MAR-11	NA	NA

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
GE	US	12/956811	30-NOV-10	NA	NA
GE	US	13/165298	21-JUN-11	NA	NA
GE	US	13/150485	01-JUN-11	NA	NA
PrimeStar	US	13/249818	30-SEP-11	NA	NA
PrimeStar	US	13/149167	31-MAY-11	NA	NA
GE	US	13/159558	14-JUN-11	NA	NA
PrimeStar	US	13/197233	03-AUG-11	NA	NA
PrimeStar	US	13/197251	03-AUG-11	NA	NA
PrimeStar	US	13/168207	24-JUN-11	NA	NA
PrimeStar	US	13/149395	31-MAY-11	29-MAY-12	8188562
PrimeStar	US	13/149423	31-MAY-11	21-AUG-12	8247686
PrimeStar	US	13/149454	31-MAY-11	14-AUG-12	8241930
GE	US	13/285501	31-OCT-11	NA	NA
PrimeStar	US	13/249892	30-SEP-11	NA	NA
GE	US	13/284037	28-OCT-11	NA	NA

SCHEDULE A

Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	13/278464	21-OCT-11	NA	NA
GE and Alliance for Sustainable Energy LLC	US	13/192545	28-JUL-11	NA	NA
PrimeStar	US	13/188782	22-JUL-11	NA	NA
PrimeStar	US	13/188808	22-JUL-11	NA	NA
PrimeStar	US	13/217409	25-AUG-11	NA	NA
PrimeStar	US	13/192578	28-JUL-11	NA	NA
GE	US	13/334177	22-DEC-11	NA	NA
PrimeStar	US	13/326775	15-DEC-11	NA	NA
GE	US	13/244971	26-SEP-11	NA	NA
GE	US	13/244995	26-SEP-11	NA	NA
PrimeStar	US	13/326945	15-DEC-11	NA	NA
PrimeStar	US	13/326973	15-DEC-11	NA	NA
PrimeStar	US	13/308288	30-NOV-11	NA	NA

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	13/290474	07-NOV-11	NA	NA
PrimeStar	US	13/290494	07-NOV-11	NA	NA
PrimeStar	US	13/308260	30-NOV-11	NA	NA
PrimeStar	US	13/308367	30-NOV-11	19-FEB-13	8377737
PrimeStar	US	13/308336	30-NOV-11	NA	NA
PrimeStar	US	13/305909	29-NOV-11	NA	NA
GE	US	13/362813	31-JAN-12	NA	NA
PrimeStar	US	13/433940	29-MAR-12	NA	NA
PrimeStar	US	13/308314	30-NOV-11	NA	NA
PrimeStar	US	13/600815	31-AUG-12	NA	NA
PrimeStar	US	13/426011	21-MAR-12	NA	NA
PrimeStar	US	13/476414	21-MAY-12	NA	NA
PrimeStar	US	13/434911	30-MAR-12	NA	NA
GE	US	13/286794	01-NOV-11	NA	NA
GE	US	13/329418	19-DEC-11	NA	NA
PrimeStar	US	13/280499	25-OCT-11	NA	NA
PrimeStar	US	13/291421	08-NOV-11	NA	NA

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	13/654465	18-OCT-12	NA	NA
PrimeStar	US	13/654461	18-OCT-12	NA	NA
PrimeStar	US	13/429545	26-MAR-12	NA	NA
PrimeStar	US	13/554423	20-JUL-12	NA	NA
PrimeStar	US	13/654470	18-OCT-12	NA	NA
PrimeStar	US	13/410516	02-MAR-12	NA	NA
PrimeStar	US	13/441126	06-APR-12	NA	NA
PrimeStar	US	13/607912	10-SEP-12	NA	NA
PrimeStar	US	13/607917	10-SEP-12	NA	NA
PrimeStar	US	13/600940	31-AUG-12	NA	NA
PrimeStar	US	13/560354	27-JUL-12	NA	NA
PrimeStar	US	13/308355	30-NOV-11	NA	NA
PrimeStar	US	13/305924	29-NOV-11	NA	NA
PrimeStar	US	13/326814	15-DEC-11	NA	NA
PrimeStar	US	13/326861	15-DEC-11	NA	NA
PrimeStar	US	13/326889	15-DEC-11	NA	NA
GE	US	13/601110	31-AUG-12	NA	NA
GE	US	13/601162	31-AUG-12	NA	NA

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Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
GE	US	13/538415	29-JUN-12	NA	NA
PrimeStar	US	13/658920	24-OCT-12	NA	NA
GE	US	13/538352	29-JUN-12	NA	NA
GE	US	13/523059	14-JUN-12	NA	NA
GE	US	13/630231	28-SEP-12	NA	NA
PrimeStar	US	13/676550	14-NOV-12	NA	NA
GE	US	13/600272	31-AUG-12	NA	NA
PrimeStar	US	13/600987	31-AUG-12	NA	NA
GE	US	13/713697	13-DEC-12	NA	NA
PrimeStar	US	13/601022	31-AUG-12	NA	NA
PrimeStar	US	13673097	09-NOV-12	NA	NA
GE	US	13/719440	19-DEC-12	NA	NA
GE	US	13/682876	20-NOV-12	NA	NA
PrimeStar	US	13/758185	04-FEB-13	NA	NA
PrimeStar	US	13/681822	20-NOV-12	NA	NA
GE	US	13/782176	01-MAR-13	NA	NA
PrimeStar	US	13/775613	25-FEB-13	NA	NA
PrimeStar	US	13/600846	31-AUG-12	NA	NA

SCHEDULE A

Owner	Country Id	Application Number	Application Date	Patent Date	Patent Number
PrimeStar	US	13/873317	30-APR-13	NA	NA
PrimeStar	US	13/893494	14-MAY-13	NA	NA
GE	US	13/875739	02-MAY-13	NA	NA
GE	US	13/912782	07-JUN-13	NA	NA
GE	US	13/923644	21-JUN-13	NA	NA
PrimeStar	US	13/951768	26-JUL-13	NA	NA
PrimeStar	US	13/950605	25-JUL-13	NA	NA
PrimeStar	US	13/951783	26-JUL-13	NA	NA
GE and Alliance for Sustainable Energy LLC	US	61/705,546	25-SEP-12	NA	NA
GE	US	13/866,132	19-APR-13	NA	NA