PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT7534455

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	SECURITY INTEREST

CONVEYING PARTY DATA

Name	Execution Date
SUNPOWER CORPORATION	09/12/2022

RECEIVING PARTY DATA

Name:	BANK OF AMERICA, N.A., AS AGENT	
Street Address:	900 W. TRADE STREET	
Internal Address:	GATEWAY VILLAGE - 900 BLDG	
City:	CHARLOTTE	
State/Country:	NORTH CAROLINA	
Postal Code:	28255	

PROPERTY NUMBERS Total: 236

Property Type	Number
Application Number:	12622764
Application Number:	13528763
Application Number:	14042259
Application Number:	14612037
Application Number:	16813285
Application Number:	62965621
Application Number:	14319985
Application Number:	13532712
Application Number:	13532703
Application Number:	13532708
Application Number:	13070351
Application Number:	13561350
Application Number:	15072719
Application Number:	12708498
Application Number:	12708501
Application Number:	13730580
Application Number:	15448107
Application Number:	16775693
Application Number:	13053770

PATENT REEL: 061422 FRAME: 0566

507487565

Property Type	Number
Application Number:	13047005
Application Number:	14574986
Application Number:	15047085
Application Number:	13169978
Application Number:	14723107
Application Number:	15199127
Application Number:	16280153
Application Number:	13532733
Application Number:	16404226
Application Number:	16119665
Application Number:	15383757
Application Number:	16537165
Application Number:	16539150
Application Number:	17163671
Application Number:	10632625
Application Number:	15971751
Application Number:	13740770
Application Number:	63296703
Application Number:	13174495
Application Number:	14611046
Application Number:	15649594
Application Number:	29746664
Application Number:	29836796
Application Number:	29836780
Application Number:	16734629
Application Number:	13730592
Application Number:	15166655
Application Number:	15884433
Application Number:	14529937
Application Number:	15682708
Application Number:	14941401
Application Number:	15196599
Application Number:	15804167
Application Number:	15234829
Application Number:	16811832
Application Number:	17520277
Application Number:	16811891
Application Number:	15346383

Property Type	Number
Application Number:	16730186
Application Number:	15261062
Application Number:	11140261
Application Number:	13631788
Application Number:	09929459
Application Number:	12960039
Application Number:	13076078
Application Number:	15241648
Application Number:	13539169
Application Number:	17589905
Application Number:	63144190
Application Number:	16984163
Application Number:	16685670
Application Number:	13324992
Application Number:	17183364
Application Number:	62980862
Application Number:	29706559
Application Number:	29768274
Application Number:	15989687
Application Number:	14630963
Application Number:	13019931
Application Number:	13631782
Application Number:	16690349
Application Number:	13100243
Application Number:	13532728
Application Number:	14939883
Application Number:	15229986
Application Number:	17731817
Application Number:	63181524
Application Number:	12977001
Application Number:	14550823
Application Number:	12977006
Application Number:	13622270
Application Number:	14958699
Application Number:	13561456
Application Number:	15987856
Application Number:	13097705
Application Number:	15396602

Property Type	Number
Application Number:	12136698
Application Number:	15272911
Application Number:	15892961
Application Number:	13721579
Application Number:	15713087
Application Number:	17304345
Application Number:	14058708
Application Number:	12796875
Application Number:	13420376
Application Number:	12772756
Application Number:	14272794
Application Number:	17381581
Application Number:	14864259
Application Number:	17587448
Application Number:	63144224
Application Number:	15199184
Application Number:	16713174
Application Number:	12177107
Application Number:	15945375
Application Number:	12625363
Application Number:	29659983
Application Number:	13532731
Application Number:	15254997
Application Number:	16412025
Application Number:	14139755
Application Number:	17447264
Application Number:	13842131
Application Number:	12849604
Application Number:	12849606
Application Number:	13686753
Application Number:	14083213
Application Number:	14529965
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Application Number:	14879547
Application Number:	12416358
Application Number:	12480231
Application Number:	13908336
Application Number:	12688989

Property Type	Number
Application Number:	13908460
Application Number:	14317615
Application Number:	17324715
Application Number:	63144204
Application Number:	12371315
Application Number:	15254980
Application Number:	16188776
Application Number:	15255001
Application Number:	16811763
Application Number:	16811802
Application Number:	11681972
Application Number:	12207690
Application Number:	14748038
Application Number:	17223953
Application Number:	17875892
Application Number:	63027563
Application Number:	15254991
Application Number:	14722138
Application Number:	12577613
Application Number:	12721372
Application Number:	13675178
Application Number:	14135287
Application Number:	15254988
Application Number:	16404555
Application Number:	15272575
Application Number:	16260411
Application Number:	13645062
Application Number:	11776316
Application Number:	15642134
Application Number:	16512973
Application Number:	14252374
Application Number:	16275981
Application Number:	17130454
Application Number:	17589176
Application Number:	13726439
Application Number:	14814585
Application Number:	10078918
Application Number:	10872126

Property Type	Number
Application Number:	11049260
Application Number:	10078913
Application Number:	13539051
Application Number:	15497748
Application Number:	16003788
Application Number:	14810423
Application Number:	16671817
Application Number:	09975572
Application Number:	16580125
Application Number:	62978187
Application Number:	62987036
Application Number:	13631775
Application Number:	15057942
Application Number:	14317548
Application Number:	15261378
Application Number:	15254976
Application Number:	12021682
Application Number:	15389667
Application Number:	16025401
Application Number:	15081320
Application Number:	14143893
Application Number:	14877651
Application Number:	29278258
Application Number:	29278260
Application Number:	14209996
Application Number:	13730648
Application Number:	13176276
Application Number:	13333964
Application Number:	14714002
Application Number:	29304041
Application Number:	12540290
Application Number:	13354217
Application Number:	14012887
Application Number:	14680445
Application Number:	17138130
Application Number:	16694173
Application Number:	15280987
Application Number:	15242275

Property Type	Number
Application Number:	63144256
Application Number:	17587482
Application Number:	14673733
Application Number:	14810424
Application Number:	14099739
Application Number:	13250825
Application Number:	12021727
Application Number:	13044047
Application Number:	15254971
Application Number:	10802116
Application Number:	12473163
Application Number:	29278262
Application Number:	14752836
Application Number:	14288465
Application Number:	15387151
Application Number:	12182537
Application Number:	14302054
Application Number:	15163359
Application Number:	16398698
Application Number:	12882793
Application Number:	63054517
Application Number:	63066043
Application Number:	62986423
Application Number:	63143208
Application Number:	16994195
Application Number:	17240270
Application Number:	16864736

CORRESPONDENCE DATA

Fax Number: (212)751-4864

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.

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Email: angela.amaru@lw.com

Correspondent Name: LATHAM & WATKINS LLP C/O ANGELA M. AMARU

Address Line 1: 1271 AVENUE OF THE AMERICAS
Address Line 4: NEW YORK, NEW YORK 10020

ATTORNEY DOCKET NUMBER:	042525-0308
NAME OF SUBMITTER:	ANGELA M. AMARU

SIGNATURE:	/s/Angela M. Amaru	
DATE SIGNED:	09/13/2022	
Total Attachments: 18		
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PATENT SECURITY AGREEMENT

This **PATENT SECURITY AGREEMENT**, dated as of September 12, 2022 (this "<u>Agreement</u>"), is made by each of the signatories hereto indicated as a Grantor (each a "<u>Grantor</u>" and collectively, the "<u>Grantors</u>") in favor of Bank of America, N.A., as Collateral Agent (in such capacity and together with its successors and assigns in such capacity, the "<u>Agent</u>") for the Secured Parties.

WHEREAS, the Grantors entered into a Collateral Agreement dated as of September 12, 2022 (as amended, restated, supplemented or otherwise modified from time to time, the "Security Agreement") between the Grantors, the other grantors party thereto and the Agent, pursuant to which each of the Grantors granted to the Agent, for the benefit of the Secured Parties, a security interest in the Patent Collateral (as defined below); and

WHEREAS, pursuant to the Security Agreement, each Grantor agreed to execute and deliver this Agreement, in order to record the security interest granted to the Agent for the benefit of the Secured Parties with the United States Patent and Trademark Office.

NOW, THEREFORE, in consideration of the foregoing and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Grantor hereby agrees with the Agent as follows::

SECTION 1. Defined Terms

Capitalized terms used but not defined herein shall have the respective meanings given thereto (including by reference) in the Security Agreement.

SECTION 2. Grant of Security Interest.

Each Grantor hereby grants to the Agent, for the benefit of the Secured Parties, a security interest in, all of the following property, in each case, wherever located and now owned or at any time hereafter acquired by such Grantor or in which such Grantor now has or at any time in the future may acquire any right, title or interest (collectively, the "Patent Collateral") as collateral security for the prompt and complete payment and performance when due (whether at the stated maturity, by acceleration or otherwise) of the Secured Obligations:

all patentable inventions and designs, all United States, foreign, and multinational patents, certificates of invention, and similar industrial property rights, and applications for any of the foregoing, including without limitation: (i) each patent and patent application listed in Schedule A attached hereto (ii) all reissues, substitutes, divisionals, continuations, continuations-in-part, extensions, renewals, and reexaminations thereof, (iii) all inventions and improvements described and claimed therein, (iv) all rights to sue or otherwise recover for any past, present and future infringement or other violation thereof, (v) all Proceeds of the foregoing, including, without limitation, license fees, royalties, income, payments, claims, damages, and proceeds of suit now or hereafter due and/or payable with respect thereto, income, royalties, damages and other payments now and hereafter due and/or payable with respect thereto, and (vi) all other rights of any accruing thereunder or pertaining thereto throughout the world.

SECTION 3. Security Agreement

The security interest granted pursuant to this Agreement is granted in conjunction with the security interest granted to the Agent for the Secured Parties pursuant to the Security Agreement, and the Grantors hereby acknowledge and affirm that the rights and remedies of the Agent with respect to the security interest in the Patent Collateral made and granted hereby are more fully set forth in the Security Agreement, the terms and provisions of which are incorporated by reference herein as if fully set forth herein. In the event that any provision of this Agreement is deemed to conflict with the Security Agreement, the provisions of the Security Agreement shall control.

SECTION 4. Governing Law

THIS AGREEMENT AND ANY CLAIMS, CONTROVERSY, DISPUTE OR CAUSE OF ACTION (WHETHER ARISING IN CONTRACT, TORT OR OTHERWISE) BASED UPON, ARISING OUT OF OR RELATING TO THIS AGREEMENT SHALL BE GOVERNED BY, AND CONSTRUED IN ACCORDANCE WITH, THE LAW OF THE STATE OF NEW YORK WITHOUT REGARD TO CONFLICTS OF LAW RULES THAT WOULD RESULT IN THE APPLICATION OF A DIFFERENT GOVERNING LAW (OTHER THAN ANY MANDATORY PROVISIONS OF THE UCC RELATING TO THE LAW GOVERNING PERFECTION AND EFFECT OF PERFECTION OF THE SECURITY INTERESTS).

SECTION 5. Counterparts

This Agreement may be executed in one or more counterparts and by different parties hereto in separate counterparts, each of which when so executed and delivered shall be deemed an original, but all such counterparts together shall constitute but one and the same instrument.

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IN WITNESS WHEREOF, the Grantor has caused this Agreement to be executed and delivered by its duly authorized officer as of the date first set forth above.

SUNPOWER CORPORATION

By:

Name: Guthrie Dundas

Title: Interim Chief Financial Officer

REEL: 061422 FRAME: 0576

Accepted and Agreed:

BANK OF AMERICA, N.A.,

as Agent

Byt

Name: Christine Trotter
Title: Vice President

[Signature page to Patent Security Agreement]

SCHEDULE A to PATENT SECURITY AGREEMENT

PATENTS AND PATENT APPLICATIONS

<u>Title</u>	Application	Application	<u>Patent</u>	Issue Date	Country	Owner
	Number	<u>Date</u>	Number			
A Device and Method for Solar	12/622,764	11/20/2009	8,304,644	2012-11-06	United	SunPower
Power Generation					States	Corporation
A DEVICE AND METHOD	13/528,763	6/20/2012	8,546,681	2013-10-01	United	SunPower
FOR SOLAR POWER					States	Corporation
GENERATION						
A DEVICE AND METHOD	14/042,259	9/30/2013	8,946,541	2015-02-03	United	SunPower
FOR SOLAR POWER					States	Corporation
GENERATION						
A DEVICE AND METHOD	14/612,037	2/2/2015	9,252,314	2016-02-02	United	SunPower
FOR SOLAR POWER					States	Corporation
GENERATION						
A system and method for	16/813,285	3/9/2020	N/A	N/A	United	SunPower
estimating performance of					States	Corporation
Photovoltaic Energy Systems						
A system and method for	62/965,621	1/24/2020	N/A	N/A	United	SunPower
estimating performance of					States	Corporation
Photovoltaic Energy Systems						
ACTIVE FIRE-BLOCKING	14/319,985	6/30/2014	9,512,620	2016-12-06	United	SunPower
WIND DEFLECTOR					States	Corporation
ANCHOR FOR SOLAR	13/532,712	6/25/2012	9,193,014	2015-11-24	United	SunPower
MODULE					States	Corporation
ANCHOR FOR SOLAR	13/532,703	6/25/2012	9,976,297	2018-05-22	United	SunPower
MODULE					States	Corporation
ANCHOR FOR SOLAR	13/532,708	6/25/2012	9,498,854	2016-11-22	United	SunPower
MODULE					States	Corporation
Apparatus and Method for Data	13/070,351	3/23/2011	8,774,007	2014-07-08	United	SunPower
Communication in an Energy					States	Corporation
Distribution Network						
Apparatus and method for the	13/561,350	7/30/2012	9315917	2016-04-19	United	SunPower
production of ingots					States	Corporation
APPARATUS AND METHOD	15/072,719	3/17/2016	N/A	N/A	United	SunPower
FOR THE PRODUCTION OF					States	Corporation ¹
INGOTS						
Automated Solar Collector	12/708,498	2/18/2010	8,818,924	8/26/2014	United	SunPower
Installation Design					States	Corporation

 $^{^{1}}$ To be updated with the USPTO to reflect change in ownership from Solarworld Americas Inc. to SunPower Corporation.

<u>Title</u>	Application Number	Application Date	<u>Pateni</u> Number	Issue Date	Country	Owner
Automated Solar Collector Installation Design Including Ability to Define Heterogeneous Design Preferences	12/708,501	2/18/2010	8,352,220	2013-01-08	United States	SunPower Corporation
AUTOMATED SOLAR COLLECTOR INSTALLATION DESIGN INCLUDING ABILITY TO DEFINE HETEROGENEOUS DESIGN PREFERENCES	13/730,580	12/28/2012	8,712,745	2014-04-29	United States	SunPower Corporation
Automated Solar Collector Installation Design Including Version Management	15/448,107	3/2/2017	10,592,834	2020-03-17	United States	SunPower Corporation
Automated Solar Collector Installation Design Including Version Management	16/775,693	1/29/2020	N/A	N/A	United States	SunPower Corporation
Automatic Generation and Analysis of Solar Cell IV Curves	13/053,770	3/22/2011	8,744,791	2014-06-03	United States	SunPower Corporation
Automatic Voltage Regulation for Photovoltaic Systems	13/047,005	3/14/2011	8,922,062	2014-12-30	United States	SunPower Corporation
Automatic Voltage Regulation for Photovoltaic Systems	14/574,986	12/18/2014	9,300,224	2016-03-29	United States	SunPower Corporation
Automatic Voltage Regulation for Photovoltaic Systems	15/047,085	2/18/2016	9,866,030	2018-01-09	United States	SunPower Corporation
Automatic Voltage Regulation for PV Generation	13/169,978	6/27/2011	9,059,604	2015-06-16	United States	SunPower Corporation
Automatic Voltage Regulation for PV Generation	14/723,107	5/27/2015	9,806,665	2017-10-31	United States	SunPower Corporation
BACKFEED POWER SUPPLY FOR SOLAR POWER SYSTEM	15/199,127	6/30/2016	10236690	2019-03-19	United States	SunPower Corporation
BACKFEED POWER SUPPLY FOR SOLAR POWER SYSTEM	16/280,153	2/20/2019	10666057	2020-05-26	United States	SunPower Corporation
BRACE FOR SOLAR MODULE ARRAY	13/532,733	6/25/2012	8,943,765	2015-02-03	United States	SunPower Corporation
CABLING SYSTEMS FOR ROOFTOP PHOTOVOLTAIC SOLAR SYSTEMS	16/404,226	5/6/2019	11,223,479	2022-01-25	United States	SunPower Corporation
Circuits and Methods for Controlling Current in a Parallel-Connected Array	16/119,665	8/31/2018	10,972,046	2021-04-06	United States	SunPower Corporation
CLAMPS FOR SOLAR SYSTEMS	15/383,757	12/19/2016	10,432,133	2019-10-01	United States	SunPower Corporation
CLAMPS FOR SOLAR SYSTEMS	16/537,165	8/9/2019	10,680,548	2020-06-09	United States	SunPower Corporation
Commanding Distributed Energy Resources	16/539,150	8/13/2019	10530157	2020-01-07	United States	SunPower Corporation

Title	Application	Application	<u>Patent</u>	Issue Date	Country	Owner
	Number	<u>Date</u>	<u>Number</u>			
Commissioning for Energy	17/163,671	2/1/2021	N/A	N/A	United	SunPower
Storage	,				States	Corporation
Compact Micro-Concentrator	10/632,625	8/1/2003	7,297,865	2007-11-20	United	SunPower
for Photovoltaic Cells	ĺ				States	Corporation
Composition Roof Direct	15/971,751	5/4/2018	N/A	N/A	United	SunPower
Mount Solar System	ĺ				States	Corporation
CONCENTRATING SOLAR	13/740,770	1/14/2013	9270225	2016-02-23	United	SunPower
ENERGY COLLECTOR	ĺ				States	Corporation
CONVERTIBLE ENERGY	63/296,703	1/5/2022	N/A	N/A	United	SunPower
CONTROL SYSTEM	,				States	Corporation
Device and Method for	13/174,495	6/30/2011	8,963,375	2015-02-24	United	SunPower
Electrically Decoupling a Solar	,				States	Corporation
Module from a Solar System in						
Response to Loss of an Input						
AC Signal						
DEVICE AND METHOD FOR	14/611,046	1/30/2015	9742190	2017-08-22	United	SunPower
ELECTRICALLY	·				States	Corporation
DECOUPLING A						-
SOLAR MODULE FROM A						
SOLAR SYSTEM						
DEVICE AND METHOD FOR	15/649,594	7/13/2017	10,804,698	2020-10-13	United	SunPower
ELECTRICALLY					States	Corporation
DECOUPLING A						
SOLAR MODULE FROM A						
SOLAR SYSTEM						
DISPLAY SCREEN OR	29/746,664	8/16/2020	D951979	2022-05-17	United	SunPower
PORTION THEREOF WITH					States	Corporation
GRAPHICAL USER						
INTERFACE						
DISPLAY SCREEN OR	29/836,796	4/29/2022	N/A	N/A	United	SunPower
PORTION THEREOF WITH					States	Corporation
GRAPHICAL USER						
INTERFACE						
DISPLAY SCREEN OR	29/836,780	4/29/2022	N/A	N/A	United	SunPower
PORTION THEREOF WITH					States	Corporation
GRAPHICAL USER						
INTERFACE						
Distributed Energy Resource	16/734,629	1/6/2020	11,050,256	2021-06-29	United	SunPower
Topology and Operation					States	Corporation
DRIVE WITH INTEGRATED	13/730,592	12/28/2012	9,353,970	2016-05-31	United	SunPower
INCLINATION SENSOR					States	Corporation
DRIVE WITH INTEGRATED	15/166,655	5/27/2016	9,920,957	2018-03-20	United	SunPower
INCLINATION SENSOR					States	Corporation
DRIVE WITH INTEGRATED	15/884,433	1/31/2018	10,520,224	2019-12-31	United	SunPower
INCLINATION SENSOR					States	Corporation
ELECTRICAL	14/529,937	10/31/2014	9,927,827	2018-03-27	United	SunPower
INDEPENDENCE OF					States	Corporation
TRACKER ROWS						
Electrical Junction Box With	15/682,708	8/22/2017	10681829	2020-06-09	United	SunPower
Removable Sealing Cover					States	Corporation

<u>Title</u>	Application Number	Application Date	<u>Patent</u> Number	Issue Date	Country	Owner
ENCLOSURE HAVING RECONFIGURABLE WIRING COMPARTMENTS	14/941,401	11/13/2015	9750145	2017-08-29	United States	SunPower Corporation
END CLAMP FOR MOUNTING SOLAR MODULE TO RAIL	15/196,599	6/29/2016	9,813,015	2017-11-07	United States	SunPower Corporation
END CLAMP FOR MOUNTING SOLAR MODULE TO RAIL	15/804,167	11/6/2017	10,243,507	2019-03-26	United States	SunPower Corporation
END CLAMPS FOR SOLAR SYSTEMS	15/234,829	8/11/2016	9,777,948	2017-10-03	United States	SunPower Corporation
ENERGY CONTROL SYSTEM	16/811,832	3/6/2020	11,201,496	2021-12-14	United States	SunPower Corporation
ENERGY CONTROL SYSTEM	17/520,277	11/5/2021	N/A	N/A	United States	SunPower Corporation
ENERGY CONTROL SYSTEM	16/811,891	3/6/2020	N/A	N/A	United States	SunPower Corporation
ENERGY FLOW PREDICTION FOR ELECTRIC SYSTEMS INCLUDING PHOTOVOLTAIC SOLAR SYSTEMS	15/346,383	11/8/2016	10,523,010	2019-12-31	United States	SunPower Corporation
ENERGY FLOW PREDICTION FOR ELECTRIC SYSTEMS INCLUDING PHOTOVOLTAIC SOLAR SYSTEMS	16/730,186	12/30/2019	11,322,945	2022-05-03	United States	SunPower Corporation
Face Spline Torsion Lock	15/261,062	9/9/2016	10,174,970	2019-01-08	United States	SunPower Corporation
Fire Resistant PV Shingle Assembly	11/140,261	5/27/2005	8,276,329	2012-10-02	United States	SunPower Corporation
FIRE RESISTANT PV SHINGLE ASSEMBLY	13/631,788	9/28/2012	8,904,717	2014-12-09	United States	SunPower Corporation
Fixed Angle Solar Collector Arrangement	09/929,459	8/15/2001	6,722,357	2004-04-20	United States	SunPower Corporation
Folded Fin Heat Sink	12/960,039	12/3/2010	9,246,037	2016-01-26	United States	SunPower Corporation
Frame-Mounted Wire Management Device	13/076,078	3/30/2011	9450130	2016-09-20	United States	SunPower Corporation
Frame-Mounted Wire Management Device	15/241,648	8/19/2016	10,536,110	2020-01-14	United States	SunPower Corporation
FRAMING SYSTEM FOR MOUNTING SOLAR COLLECTING DEVICES	13/539,169	6/29/2012	9,316,417	2016-04-19	United States	SunPower Corporation
GENERATING A DYNAMIC PHOTOVOLTAIC SYSTEM DESIGN AND PROPOSAL	17/589,905	2/1/2022	N/A	N/A	United States	SunPower Corporation

<u>Title</u>	Application	Application	<u>Patent</u>	Issue Date	Country	Owner
	Number	Date	Number			
GENERATING A DYNAMIC	63/144,190	2/1/2021	N/A	N/A	United	SunPower
PHOTOVOLTAIC SYSTEM					States	Corporation
DESIGN AND PROPOSAL						
GENERATING A	16/984,163	8/4/2020	11392730	2022-07-19	United	SunPower
PHOTOVOLTAIC SYSTEM					States	Corporation
DESIGN FOR A						
BUILDING						
GENERATING A	16/685,670	11/15/2019	10,754,999	2020-08-25	United	SunPower
PHOTOVOLTAIC SYSTEM					States	Corporation
DESIGN FOR A						
BUILDING (Instant Design)						
Glass Bending Method and	13/324,992	12/13/2011	9,249,044	2016-02-02	United	SunPower
Apparatus					States	Corporation
Helix Proposal Tool (Instant	17/183,364	2/24/2021	N/A	N/A	United	SunPower
Design Implementation)					States	Corporation
Helix Proposal Tool (Instant	62/980,862	2/24/2020	N/A	N/A	United	SunPower
Design Implementation)					States	Corporation
HUB/ESS Aesthetics - Door	29/706,559	9/20/2019	D909974	2021-02-09	United	SunPower
					States	Corporation
HUB/ESS Aesthetics -	29/768,274	1/28/2021	N/A	N/A	United	SunPower
Enclosure					States	Corporation
Hybrid Management Module	15/989,687	5/25/2018	10,886,874	2021-01-05	United	SunPower
_	·				States	Corporation
IMPROVED END CLAMPS	14/630,963	2/25/2015	9,416,992	2016-08-16	United	SunPower
FOR SOLAR SYSTEMS					States	Corporation
Integrated Composition Shingle	13/019,931	2/2/2011	8,215,071	2012-07-10	United	SunPower
PV System					States	Corporation
INTEGRATED TORQUE	13/631,782	9/28/2012	9,395,104	2016-07-19	United	SunPower
COUPLING AND MOUNT					States	Corporation
INVERTER COUPLING AND	16/690,349	11/21/2019	10,992,237	2021-04-27	United	SunPower
DECOUPLING					States	Corporation
MANAGEMENT						
Junction Box Thermal	13/100,243	5/3/2011	9101082	2015-08-04	United	SunPower
Management					States	Corporation
LEVELER FOR SOLAR	13/532,728	6/25/2012	9,010,041	2015-04-21	United	SunPower
MODULE ARRAY					States	Corporation
LEVELER FOR SOLAR	14/939,883	11/12/2015	9,413,286	2016-08-09	United	SunPower
MODULE ARRAY					States	Corporation
LEVELER FOR SOLAR	15/229,986	8/5/2016	10,224,866	2019-03-05	United	SunPower
MODULE ARRAY					States	Corporation
Load Control Architecture Of	17/731,817	4/28/2022	N/A	N/A	United	SunPower
An Energy Control System					States	Corporation
Load Control Architecture Of	63/181,524	4/29/2021	N/A	N/A	United	SunPower
An Energy Control System					States	Corporation
Locating Connectors and	12/977,001	12/22/2010	8,893,713	2014-11-25	United	SunPower
Methods for Mounting Solar					States	Corporation
Hardware						
Locating Connectors and	14/550,823	11/21/2014	9,746,655	2017-08-29	United	SunPower
Methods for Mounting Solar					States	Corporation
Hardware						

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	Number	Date	Number	2014 00 22	** *	2 5
Locating Connectors and Methods for Mounting Solar Hardware	12/977,006	12/22/2010	8,839,784	2014-09-23	United States	SunPower Corporation
Maintenance-Fuse Based Solution to Mitigate Arc Flash Hazard in AC Inverter Solutions for PV Solar Power Plants	13/622,270	9/18/2012	9,240,682	2016-01-19	United States	SunPower Corporation
Maintenance-Fuse Based Solution to Mitigate Arc Flash Hazard in AC Inverter Solutions for PV Solar Power Plants	14/958,699	12/3/2015	10,211,625	2019-02-19	United States	SunPower Corporation
MELTING APPARATUS	13/561,456	7/30/2012	9664448	2017-05-30	United States	SunPower Corporation
METERING AND CONTROL SUBSYSTEMS FOR PHOTOVOLTAIC SOLAR SYSTEMS	15/987,856	5/23/2018	N/A	N/A	United States	SunPower Corporation
Method and Apparatus for Monitoring Energy Consumption of a Customer Structure	13/097,705	4/29/2011	US 8,350,417	2013-01-08	United States	SunPower Corporation
METHOD AND SYSTEM FOR COMMUNICATION BETWEEN INVERTER AND SOLAR MODULE	15/396,602	12/31/2016	10720878	2020-07-21	United States	SunPower Corporation
Method for Enabling Monitoring of Power Consumption	12/136,698	6/10/2008	7,622,912	2009-11-24	United States	SunPower Corporation
Method for improving performance of solar power plants with voltage limiting devices	15/272,911	9/22/2016	10,218,182	2019-02-26	United States	SunPower Corporation
Method for instant display of solar energy data via pre- calculation and extrapolation (EDDIE)	15/892,961	2/9/2018	10,902,159	2021-01-26	United States	SunPower Corporation
METHOD FOR MANUFACTURING SILICON BLOCKS	13/721,579	12/20/2012	8936652	2015-01-20	United States	SunPower Corporation
Method for mechanical sealing of a composition sloped roof anchor penetration	15/713,087	9/22/2017	11,085,484	2021-08-10	United States	SunPower Corporation
Method for mechanical sealing of a composition sloped roof anchor penetration	17/304,345	6/18/2021	N/A	N/A	United States	SunPower Corporation
METHOD FOR PRODUCING SILICON-INGOTS	14/058,708	10/21/2013	9506165	2016-11-29	United States	SunPower Corporation
Method of Operating a Solar Tracking Apparatus	12/796,875	6/9/2010	9,964,336	2018-05-08	United States	SunPower Corporation

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	Number	Date	Number			
Methods and Apparatus for	13/420,376	3/14/2012	10,069,300	2018-09-04	United	SunPower
Dispatching Electrical Energy					States	Corporation
from Distributed Energy						
Resources						
Methods and Apparatuses to	12/772,756	5/3/2010	8,757,567	2014-06-24	United	SunPower
Support Photovoltaic Modules					States	Corporation
Methods and Apparatuses to	14/272,794	5/8/2014	9743501	2017-08-22	United	SunPower
Support Photovoltaic Modules					States	Corporation
Methods and Systems for	17/381,581	7/21/2021	N/A	N/A	United	SunPower
Integrating Energy Control					States	Corporation
Systems with Electrical						
Systems						
METHODS AND SYSTEMS	14/864,259	9/24/2015	10431987	2019-10-01	United	SunPower
FOR MAINTAINING					States	Corporation
PHOTOVOLTAIC						
POWER PLANT REACTIVE						
POWER CAPABILITY	15/505 110	1/20/2022	37/4	27/4	TT 1. 1	G . D
Methods And Systems For	17/587,448	1/28/2022	N/A	N/A	United	SunPower
Managing State of Charge Of					States	Corporation
An Energy Storage System						
During Off-Grid Operation Methods And Systems For	63/144,224	2/1/2021	N/A	N/A	United	SunPower
Managing State of Charge Of	03/144,224	2/1/2021	IN/A	IN/A	States	Corporation
An Energy					States	Corporation
Storage System During Off-						
Grid Operation						
MICROINVERTER	15/199,184	6/30/2016	10511174	2019-12-17	United	SunPower
SYSTEMS AND	15/155,101	0/50/2010	10311171	2013 12 17	States	Corporation
SUBSYSTEMS						
MICROINVERTER	16/713,174	12/13/2019	11,342,756	2022-05-24	United	SunPower
SYSTEMS AND					States	Corporation
SUBSYSTEMS						
Misalignment Tolerant	12/177,107	7/21/2008	7,530,830	2009-05-12	United	SunPower
Connector					States	Corporation
MONITORING ELECTRIC	15/945,375	4/4/2018	10,969,414	2021-04-06	United	SunPower
SYSTEMS FOR WIRING					States	Corporation
FAULTS						
MOUNTING SUPPORT FOR	12/625,363	11/24/2009	8,402,703	2013-03-26	United	SunPower
A PHOTOVOLTAIC					States	Corporation
MODULE						
MOUNTING SURFACE	29/659,983	8/14/2018	D891,360	2020-07-28	United	SunPower
TRANSITION					States	Corporation
MOUNTING SYSTEM FOR	13/532,731	6/25/2012	8,683,761	2014-04-01	United	SunPower
SOLAR MODULE ARRAY	15/051005	0/1/2016	10.000 :50	2010.05.25	States	Corporation
MULTI-DRIVE SOLAR-	15/254,997	9/1/2016	10,333,458	2019-06-25	United	SunPower
TRACKING DIJOTOVOLTAIC SYSTEM					States	Corporation
PHOTOVOLTAIC SYSTEM	16/412 025	5/14/2010	NT/A	NT/A	TInite d	CumPares
MULTI-DRIVE SOLAR-	16/412,025	5/14/2019	N/A	N/A	United	SunPower
TRACKING					States	Corporation
PHOTOVOLTAIC SYSTEM Multi-purpose clip & spring	14/139,755	12/23/2013	9,531,319	12/27/2016	United	SunPower
clamp component	14/139,/33	12/23/2013	9,331,319	12/2//2010	States	Corporation
Cramp component	<u> </u>	L	L	<u> </u>	Diaco	Corporation

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	Number	<u>Date</u>	Number			
Multi-purpose clip & spring	17/447,264	9/9/2021	N/A	N/A	United	SunPower
clamp component					States	Corporation
NESTED TORQUE TUBES	13/842,131	3/15/2013	9,279,457	2016-03-08	United	SunPower
FOR PHOTOVOLTAIC					States	Corporation
TRACKING						
SYSTEMS						
Opposing Row Linear	12/849,604	8/3/2010	9,897,346	2018-02-20	United	SunPower
Concentrator Architecture					States	Corporation
Opposing Row Linear	12/849,606	8/3/2010	8336539	2012-12-25	United	SunPower
Concentrator Architecture					States	Corporation
Opposing Row Linear	13/686,753	11/27/2012	8,584,667	2013-11-19	United	SunPower
Concentrator Architecture					States	Corporation
Opposing Row Linear	14/083,213	11/18/2013	9,322,963	2016-04-26	United	SunPower
Concentrator Architecture					States	Corporation
PARALLEL BUS	14/529,965	10/31/2014	9,710,005	2017-07-18	United	SunPower
					States	Corporation
Passive flow accelerator	12/822,893	6/24/2010	9911882	2018-03-06	United	SunPower
					States	Corporation
Photovoltaic Array with Array-	14/879,547	10/9/2015	9,716,465	2017-07-25	United	SunPower
Roof Integration Member					States	Corporation
Photovoltaic Array with	12/416,358	4/1/2009	8294022	2012-10-23	United	SunPower
Minimally Penetrating Rooftop					States	Corporation
Support System						
Photovoltaic Assemblies and	12/480,231	6/8/2009	8534007	2013-09-17	United	SunPower
Methods for Transporting					States	Corporation
Photovoltaic Assemblies and	13/908,336	6/3/2013	8,793,942	2014-08-05	United	SunPower
Methods for Transporting					States	Corporation
Photovoltaic Assembly for Use	12/688,989	1/18/2010	8455806	2013-06-04	United	SunPower
in Diffuse Weather Conditions					States	Corporation
and Related Methods						
Photovoltaic Assembly for Use	13/908,460	6/3/2013	8,785,830	2014-07-22	United	SunPower
in Diffuse Weather Conditions					States	Corporation
and Related Methods						
Photovoltaic Assembly for Use	14/317,615	6/27/2014	10,415,974	2019-09-17	United	SunPower
in Diffuse Weather Conditions					States	Corporation
and Related Methods		- 12 0 12 0 2 2	27/4	27/1		2 2
Photovoltaic Disconnect	17/324,715	5/19/2021	N/A	N/A	United	SunPower
Device For Storage Integration		- / - /		/-	States	Corporation
Photovoltaic Disconnect	63/144,204	2/1/2021	N/A	N/A	United	SunPower
Device For Storage Integration	10/07: 015	0/10/0000	0.007.007	2015 12 22	States	Corporation
Photovoltaic Installation with	12/371,315	2/13/2009	9,225,285	2015-12-29	United	SunPower
Automatic Disconnect Device	15/05/ 000	0/1/2016	10 150 222	2010 12 12	States	Corporation
PHOTOVOLTAIC MODULE	15/254,980	9/1/2016	10,158,323	2018-12-18	United	SunPower
CLIP	16/100 776	11/10/2010	10.626.222	2020 04 25	States	Corporation
PHOTOVOLTAIC MODULE	16/188,776	11/13/2018	10,630,232	2020-04-21	United	SunPower
CLIP	15/055005	0/1/2011	10.200.172	2010 07 05	States	Corporation
PHOTOVOLTAIC MODULE	15/255,001	9/1/2016	10,298,172	2019-05-21	United	SunPower
MOUNTING ASSEMBLY					States	Corporation
HAVING A RETAINER						

<u>Title</u>	Application	Application	<u>Patent</u>	Issue Date	Country	Owner
	Number	<u>Date</u>	<u>Number</u>			
PHOTOVOLTAIC MODULE	16/811,763	3/6/2020	N/A	N/A	United	SunPower
MOUNTING ASSEMBLY					States	Corporation
JUNCTION BOX FOR A						_
PHOTOVOLTAIC MODULE						
MOUNTING ASSEMBLY						
PHOTOVOLTAIC MODULE	16/811,802	3/6/2020	N/A	N/A	United	SunPower
MOUNTING ASSEMBLY					States	Corporation
JUNCTION BOX FOR A						
PHOTOVOLTAIC MODULE						
MOUNTING ASSEMBLY						
Photovoltaic Module Mounting	11/681,972	3/5/2007	7,435,134	2008-10-14	United	SunPower
Clip with Integral Grounding					States	Corporation
Photovoltaic Module Mounting	12/207,690	9/10/2008	7,780,472	2010-08-24	United	SunPower
Clip with Integral Grounding					States	Corporation
PHOTOVOLTAIC MODULE	14/748,038	6/23/2015	10,992,255	2021-04-27	United	SunPower
OR ARRAY SHUTDOWN					States	Corporation
PHOTOVOLTAIC MODULE	17/223,953	4/6/2021	11,437,953	2022-09-06	United	SunPower
OR ARRAY SHUTDOWN					States	Corporation
PHOTOVOLTAIC MODULE	17/875,892	7/28/2022	N/A	N/A	United	SunPower
OR ARRAY SHUTDOWN					States	Corporation
PHOTOVOLTAIC RELAY	63/027,563	5/20/2020	N/A	N/A	United	SunPower
DEVICE FOR STORAGE	, ,				States	Corporation
INTEGRATION						
PHOTOVOLTAIC SYSTEM	15/254,991	9/1/2016	10,320,326	2019-06-11	United	SunPower
BEARING ASSEMBLY			, ,		States	Corporation
PHOTOVOLTAIC SYSTEM	14/722,138	5/26/2015	10,056,862	2018-08-21	United	SunPower
PROTECTION			,		States	Corporation
Photovoltaic System with	12/577,613	10/12/2009	9,257,847	2016-02-09	United	SunPower
Managed Output					States	Corporation
PHOTOVOLTAIC SYSTEM	12/721,372	3/10/2010	8334489	2012-12-18	United	SunPower
WITH MANAGED OUTPUT					States	Corporation
AND METHOD OF						'
MANAGING VARIABILITY						
OF OUTPUT FROM A						
PHOTOVOLTAIC SYSTEM						
PHOTOVOLTAIC SYSTEM	13/675,178	11/13/2012	8629383	2014-01-14	United	SunPower
WITH MANAGED OUTPUT					States	Corporation
AND						
METHOD OF MANAGING						
VARIABILITY OF OUTPUT						
FROM A PHOTOVOLTAIC						
SYSTEM						
PHOTOVOLTAIC SYSTEM	14/135,287	12/19/2013	9413288	2016-08-09	United	SunPower
WITH MANAGED OUTPUT	,				States	Corporation
AND						
METHOD OF MANAGING						
VARIABILITY OF OUTPUT						
FROM A PHOTOVOLTAIC						
SYSTEM			<u> </u>	<u> </u>		<u> </u>
PHOTOVOLTIAC MODULE	15/254,988	9/1/2016	10,333,459	2019-06-25	United	SunPower
MOUNTING ASSEMBLY					States	Corporation
HAVING A PIN						-
CONSTRAINT						

<u>Title</u>	Application	Application	<u>Patent</u>	Issue Date	Country	Owner
	Number	<u>Date</u>	Number			
PHOTOVOLTIAC MODULE	16/404,555	5/6/2019	10,958,208	2021-03-23	United	SunPower
MOUNTING ASSEMBLY	·				States	Corporation
HAVING A PIN						_
CONSTRAINT						
Plug-In Distributed Energy	15/272,575	9/22/2016	10218177	2019-02-26	United	SunPower
Resource	,				States	Corporation
Plug-In Distributed Energy	16/260,411	1/29/2019	10418815	2019-09-17	United	SunPower
Resource	,				States	Corporation
Predictive Service Requirement	13/645,062	10/4/2012	9830301	2017-11-28	United	SunPower
Estimation For Photovoitaic	,				States	Corporation
Arrays						
PV Module Mounting Method	11/776,316	7/11/2007	8,424,255	2013-04-23	United	SunPower
and Mounting Assembly	11,770,510	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	0,121,200	2010 0.25	States	Corporation
Rapid Shutdown of	15/642,134	7/5/2017	10,396,593	2019-08-27	United	SunPower
Photovoltaic Systems	13,012,131	,,,,,,,	10,570,575	2019 00 27	States	Corporation
Rapid Shutdown of	16/512,973	7/16/2019	10,998,761	2021-05-04	United	SunPower
Photovoltaic Systems	10/312,773	//10/2017	10,556,701	2021-03-04	States	Corporation
RECEIVER FOR	14/252,374	4/14/2014	9,353,973	2016-05-31	United	SunPower
CONCENTRATING	14/232,374	4/14/2014 	9,333,973	2010-03-31	States	Corporation
PHOTOVOLTAIC-					States	Corporation
THERMAL						
SYSTEM Remarks A green Magning	16/275 091	2/14/2010	10.002.700	2021 01 12	TTuited	CD
Remote Array Mapping	16/275,981	2/14/2019	10,892,708	2021-01-12	United	SunPower
D	15/120 454	12/22/2020	11.040.404	2022 07 21	States	Corporation
Remote Array Mapping	17/130,454	12/22/2020	11,349,434	2022-05-31	United	SunPower
DEL COMP GUMP GUIDANEA	15/500 156	1/01/0000	27/4	37/4	States	Corporation
REMOTE SITE SURVEY	17/589,176	1/31/2022	N/A	N/A	United	SunPower
FOR PHOTOVOLTAIC					States	Corporation
SYSTEM SITE	10/50 (100	10/01/00/0	0001=10	2011 12 00		2 2
Roof panel for supporting PV	13/726,439	12/24/2012	8904718	2014-12-09	United	SunPower
modules					States	Corporation
Serviceable Electrical Box	14/814,585	7/31/2015	9763360	2017-09-12	United	SunPower
Thermal Management					States	Corporation
Shingle Assembly	10/078,918	2/20/2002	7,178,295	2007-02-20	United	SunPower
					States	Corporation
Shingle Assembly with Support	10/872,126	6/18/2004	7,155,870	2007-01-02	United	SunPower
Bracket					States	Corporation
Shingle System	11/049,260	2/2/2005	7,328,534	2008-02-12	United	SunPower
					States	Corporation
Shingle System and Method	10/078,913	2/20/2002	6,883,290	2005-04-26	United	SunPower
					States	Corporation
SNAP-IN AND	13/539,051	6/29/2012	8,567,134	2013-10-29	United	SunPower
PROGRESSIVE LOCKING					States	Corporation
PHOTOVOLTAIC						
MODULE						
Snap-on Rail Assembly	15/497,748	4/26/2017	10,177,704	2019-01-08	United	SunPower
-					States	Corporation
Solar Collector Installation	16/003,788	6/8/2018	10,909,276	2021-02-02	United	SunPower
Design Including Exceptional	,				States	Corporation
Condition Management and						
Condition Management and						

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	Number	Date	Number			
Solar Energy Metering,	14/810,423	7/27/2015	10466282	2019-11-05	United	SunPower
Communications, and Control					States	Corporation
System						
Solar Energy Metering,	16/671,817	11/1/2019	11,231,446	2022-01-25	United	SunPower
Communications, and Control					States	Corporation
System						
Solar Module Mounting	09/975,572	10/12/2001	6,672,018	2004-01-06	United	SunPower
Method and Clip	16/500 105	0/24/2010	11.010.620	2021.05.25	States	Corporation
Solar Module Skirt Clip	16/580,125	9/24/2019	11,018,620	2021-05-25	United	SunPower
Assembly	62/079 197	2/18/2020	N/A	N/A	States United	Corporation SunPower
Solar power system rapid commissioning using machine	62/978,187	2/18/2020	IN/A	IN/A	States	Corporation
vision					States	Corporation
Solar power system rapid	62/987,036	3/9/2020	N/A	N/A	United	SunPower
commissioning using machine	02/76/,030	3/7/2020	IN/A	IN/A	States	Corporation
vision					States	Corporation
SOLAR SYSTEM	13/631,775	9/28/2012	8,881,415	2014-11-11	United	SunPower
ALIGNMENT TOOL AND	13,031,775	7/20/2012	0,001,115		States	Corporation
METHOD						Corporation
SOLAR SYSTEM WIRE	15/057,942	3/1/2016	10,003,298	2018-06-19	United	SunPower
SUPPORT TRAY			, ,		States	Corporation
SOLAR TRACKER DRIVE	14/317,548	6/27/2014	10,006,665	2018-06-26	United	SunPower
					States	Corporation
SOLAR TRACKER SYSTEM	15/261,378	9/9/2016	10,938,218	2021-03-02	United	SunPower
					States	Corporation
SOLAR-TRACKING	15/254,976	9/1/2016	10,469,025	2019-11-05	United	SunPower
SYSTEM DRIVE HAVING					States	Corporation
AN OFFSET GEAR						
Stackable Tracking Solar	12/021,682	1/29/2008	9,243,818	2016-01-26	United	SunPower
Collector Assembly	1.5/200.555	10/20/2016		2010 07 10	States	Corporation
STRING INVERTER	15/389,667	12/23/2016	10020754	2018-07-10	United	SunPower
SYSTEM STEP STEP	16/025 401	7/2/2019	10409252	2019-12-03	States	Corporation
STRING INVERTER	16/025,401	7/2/2018	10498253	2019-12-03	United	SunPower
SYSTEM SUN TRACKING SOLAR	15/081,320	3/25/2016	10,804,837	2020-10-13	States United	Corporation SunPower
ENERGY COLLECTION	13/081,320	3/23/2010	10,804,837	2020-10-13	States	Corporation
SYSTEM AND					States	Corporation
METHOD OF ASSEMBLY						
SUN TRACKING SOLAR	14/143,893	12/30/2013	9184324	2015-11-10	United	SunPower
POWER SYSTEM	1.,1.5,555	12,00,2010	710.02.	2010 11 10	States	Corporation
HARDWARE AND						F
METHOD OF ASSEMBLY						
SUN TRACKING SOLAR	14/877,651	10/7/2015	9,998,064	2018-06-12	United	SunPower
POWER SYSTEM					States	Corporation
HARDWARE AND						
METHOD OF ASSEMBLY						
Support Base for Solar	29/278,258	3/23/2007	D562,225	2008-02-19	United	SunPower
Collector Assembly					States	Corporation
Support Base for Solar	29/278,260	3/23/2007	D564,958	2008-03-25	United	SunPower
Collector Assembly	14/000000	0/10/000	0.010.501	0015 1111	States	Corporation
SUPPORT FOR SOLAR	14/209,996	3/13/2014	9,819,301	2017-11-14	United	SunPower
ENERGY COLLECTION					States	Corporation

<u>Title</u>	Application	Application	<u>Patent</u>	Issue Date	Country	Owner
	Number	<u>Date</u>	<u>Number</u>			
SUPPORT FOR SOLAR	13/730,648	12/28/2012	9,322,437	2016-04-26	United	SunPower
ENERGY COLLECTION	,				States	Corporation
SUPPORT FOR SOLAR	13/176,276	7/5/2011	9,482,449	2016-11-01	United	SunPower
ENERGY COLLECTORS					States	Corporation
Support for Solar Energy	13/333,964	12/21/2011	9,035,168	2015-05-19	United	SunPower
Collectors			, ,		States	Corporation
SUPPORT FOR SOLAR	14/714,002	5/15/2015	9,455,664	2016-09-27	United	SunPower
ENERGY COLLECTORS	,		,,,,,,,,,,,		States	Corporation
Support Structure for Tracking	29/304,041	2/22/2008	D586,737	2009-02-17	United	SunPower
Solar Collectors	257501,011	2,22,2000	2500,757	2009 02 17	States	Corporation
System and Method for	12/540,290	8/12/2009	8,108,081	2012-01-31	United	SunPower
Associating a Load Demand	12/3/10,230	0,12,2007	0,100,001	2012 01 91	States	Corporation
with a Variable Power					States	Corporation
Generation						
System and Method for	13/354,217	1/19/2012	8548637	2013-10-01	United	SunPower
Associating a Load Demand	13/334,217	1/17/2012	0340037	2013-10-01	States	Corporation
with a Variable Power					States	Corporation
Generation						
System and Method for	14/012,887	8/28/2013	9,020,653	2015-04-28	United	SunPower
Associating a Load Demand	14/012,007	0/20/2013	9,020,033	2013-04-28	States	Corporation
with a Variable Power					States	Corporation
Generation						
System and Method for	14/690 445	4/7/2015	10,749,349	2020-08-18	United	SunPower
	14/680,445	4///2013	10,749,349	2020-08-18		
Associating a Load Demand with a Variable Power					States	Corporation
Generation						
	17/129 120	12/20/2020	N/A	N/A	United	SunPower
SYSTEMS AND METHOD	17/138,130	12/30/2020	N/A	N/A		
FOR DETERMINING SOLAR					States	Corporation
PANEL DI ACEMENT AND ENERGY						
PLACEMENT AND ENERGY						
OUTPUT	16/604 172	11/25/2010	10.760.210	2020 00 00	TT '4 1	C D
SYSTEMS AND METHOD	16/694,173	11/25/2019	10,769,318	2020-09-08	United	SunPower
FOR DETERMINING SOLAR					States	Corporation
PANEL						
PLACEMENT AND ENERGY						
OUTPUT	15/200 005	0/00/0016	10 102 600	2010 10 16	** ** 1	G B
SYSTEMS AND METHODS	15/280,987	9/29/2016	10,103,688	2018-10-16	United	SunPower
FOR IMPROVED					States	Corporation
INSTALLATION AND						
GROUNDING OF						
PHOTOVOLTAIC						
ASSEMBLIES	1.5/2.12.25	0/10/10/16	27/4	27/1	**	2 2
SYSTEMS AND METHODS	15/242,275	8/19/2016	N/A	N/A	United	SunPower
FOR IMPROVED					States	Corporation
INSTALLATION OF						
PHOTOVOLTAIC						
ASSEMBLIES						
Systems And Methods For	63/144,256	2/1/2021	N/A	N/A	United	SunPower
Photovoltaic Production					States	Corporation
Curtailment And Autonomous						
Load Breaking						

<u>Tule</u>	Application Number	Application Date	<u>Patent</u> Number	Issue Date	Country	Owner
Systems And Methods For Photovoltaic Production Curtailment And Autonomous Load Breaking	17/587,482	1/28/2022	N/A	N/A	United States	SunPower Corporation
THERMAL MANAGEMENT	14/673,733	3/30/2015	9,735,300	2017-08-15	United States	SunPower Corporation
Thermal Management of Systems with Electric Components	14/810,424	7/27/2015	9985582	2018-05-29	United States	SunPower Corporation
Thermal Tracking for Solar Systems	14/099,739	12/6/2013	9,281,431	2016-03-08	United States	SunPower Corporation
Thermal Tracking for Solar Systems	13/250,825	9/30/2011	8,796,535	2014-08-05	United States	SunPower Corporation
Tilt Assembly for Tracking Solar Collector Assembly	12/021,727	1/29/2008	8,101,849	2012-01-24	United States	SunPower Corporation
Torque Arm Assembly and Method	13/044,047	3/9/2011	8,230,850	2012-07-31	United States	SunPower Corporation
TORQUE TUBE COUPLER	15/254,971	9/1/2016	10,305,418	2019-05-28	United States	SunPower Corporation
Tracking Solar Collector Assembly	10/802,116	3/16/2004	7,554,030	2009-06-30	United States	SunPower Corporation
Tracking Solar Collector Assembly	12/473,163	5/27/2009	7,888,588	2011-02-15	United States	SunPower Corporation
Tracking Solar Collector Assembly	29/278,262	3/23/2007	D565,505	2008-04-01	United States	SunPower Corporation
UNIVERSAL PHOTOVOLTAIC LAMINATE	14/752,836	6/27/2015	11,056,997	2021-07-06	United States	SunPower Corporation
USER CONFIGURABLE ELECTRICAL SUBPANEL SYSTEM WITH BACK FEED PREVENTION	14/288,465	5/28/2014	9627892	2017-04-18	United States	SunPower Corporation
VARIABLE PROFILE SOLAR-TRACKING PHOTOVOLTAIC SYSTEM	15/387,151	12/21/2016	10,594,252	2020-03-17	United States	SunPower Corporation
Variable Tilt Tracker for Photovoltaic Arrays	12/182,537	7/30/2008	8,776,781	2014-07-15	United States	SunPower Corporation
Variable Tilt Tracker for Photovoltaic Arrays	14/302,054	6/11/2014	9455661	2016-09-27	United States	SunPower Corporation
VERIFYING STATUS OF A TERMINATION END CAP OF A MICROINVERTER CHAIN	15/163,359	5/24/2016	10447043	2019-10-15	United States	SunPower Corporation
VERIFYING STATUS OF A TERMINATION END CAP OF A MICROINVERTER CHAIN	16/398,698	4/30/2019	11,088,548	2021-08-10	United States	SunPower Corporation
Water-Resistant Apparatuses for Photovoltaic Modules	12/882,793	9/15/2010	8,661,753	2014-03-04	United States	SunPower Corporation

<u>Title</u>	Application Number	Application Date	Patent Number	Issue Date	Country	Owner
ENERGY CONTROL	63/054,517	7/21/2020	N/A	N/A	United	SunPower
SYSTEMS AND LOAD MANAGEMENT					States	Corporation
Commissioning for Energy Storage	63/066,043	8/14/2020	N/A	N/A	United States	SunPower Corporation
EnergyLink Home App	62/986,423	3/6/2020	N/A	N/A	United States	SunPower Corporation
Machine Learning Algorithm for Remote Home Survey	63/143,208	1/29/2021	N/A	N/A	United States	SunPower Corporation
Photovoltaic System Monitoring and Analysis	16/994,195	8/14/2020	N/A	N/A	United States	SunPower Corporation
Solar Module Skirt Clip Assembly	17/240,270	4/26/2021	N/A	N/A	United States	SunPower Corporation
SOLAR POWER SYSTEM	16/864,736	5/1/2020	11,121,668	2021-09-14	United States	SunPower Corporation

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