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22 ADVANCED SILICON GROUP TECHNOLOGIES, LLC

23 **UNITED STATES DISTRICT COURT**
24 **NORTHERN DISTRICT OF CALIFORNIA**

25 ADVANCED SILICON GROUP
26 TECHNOLOGIES, LLC,

27 Plaintiff,

28 v.

CANADIAN SOLAR, INC.; CANADIAN SOLAR
INTERNATIONAL LIMITED; CANADIAN
SOLAR SOLUTIONS, INC.; CANADIAN
SOLAR (USA) INC.; CANADIAN SOLAR
CONSTRUCTION (USA) LLC; CANADIAN
SOLAR MANUFACTURING (LUOYONG) INC.;
CANADIAN SOLAR MANUFACTURING
(CHANGSHU) CO. LTD; CANADIAN SOLAR
MANUFACTURING (THAILAND) CO. LTD;
CANADIAN SOLAR MANUFACTURING
VIETNAM CO. LTD; RECURRENT ENERGY
GROUP, INC.; RECURRENT ENERGY LLC;
and RECURRENT ENERGY PROCO LLC,
Defendants.

Case No.: 3:21-cv-04514

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

PARTIES

Plaintiff

4. ASGT is a limited liability company organized and existing under the laws of the State of Delaware with its principal place of business at 600 Suffolk Street, Lowell, Massachusetts.

Defendants

5. On information and belief, Canadian Solar, Inc. is a corporation existing under the federal laws of Canada with its principal place of business at 545 Speedvale Avenue, Guelph, Ontario, Canada.

6. On information and belief, Canadian Solar International Limited is wholly owned by Canadian Solar, Inc. and is a corporation existing under the laws of Hong Kong with a principal place of business at Unit 1520, 15/F, Tower 2, Grand Central Plaza, 293 Prince Edward Road West, MonKok, Kowloon, Hong Kong. Canadian Solar International Limited provides sales and marketing services for silicon photovoltaic cells and modules.

7. On information and belief, Canadian Solar Solutions, Inc. provides solar power generation consulting services including development, marketing, engineering, and project management. On information and belief, Canadian Solar Solutions, Inc. is wholly owned by Canadian Solar, Inc. and is a corporation existing under the federal laws of Canada with a principal place of business at 545 Speedvale Avenue, Guelph, Ontario, Canada.

8. On information and belief, Canadian Solar (USA) Inc. is wholly owned by Canadian Solar, Inc. On information and belief, Canadian Solar (USA) Inc. is a corporation existing under the laws of the State of Delaware with a principal place of business at 3000 Oak Road, Suite 400, Walnut Creek, California. Canadian Solar (USA) Inc. is registered with the Secretary of State of California to conduct business in California.

9. On information and belief, Canadian Solar Construction (USA) LLC is wholly owned by Canadian Solar, Inc. Canadian Solar Construction (USA) LLC is a limited liability company existing under the laws of the State of Delaware with a principal place of business at 3000 Oak Road, Suite 300, Walnut Creek, California. Canadian Solar Construction (USA)

1 provides operating and maintenance services for solar farms. Canadian Solar Construction (USA)
2 LLC is registered with the Secretary of State of California to conduct business in California.

3 10. On information and belief, Canadian Solar Manufacturing (Luoyong) Inc.
4 manufactures silicon photovoltaic cells and modules and is wholly owned by Canadian Solar, Inc.
5 Canadian Solar Manufacturing (Luoyong) Inc. is a corporation existing under the laws of the
6 People's Republic of China with a principal place of business at 2 Yingzhou Road, Luoyang
7 Science Park, Luoyang, Henan Province, People's Republic of China.

8 11. On information and belief, Canadian Solar Manufacturing (Changshu) Co. Ltd
9 manufactures silicon photovoltaic modules and is wholly owned by Canadian Solar, Inc. On
10 information and belief, Canadian Solar Manufacturing (Changshu) Co. Inc. is a corporation
11 existing under the laws of the People's Republic of China with a principal place of business at No.
12 2 Changsheng Road, Yanguan, Xinzhuang Town, Changshu, Jiangsu 215562, People's Republic
13 of China.

14 12. On information and belief, Canadian Solar Manufacturing (Thailand) Co. Ltd
15 manufactures silicon photovoltaic cells and modules and is wholly owned by Canadian Solar, Inc.
16 On information and belief, Canadian Solar Manufacturing (Thailand) Co. Ltd is a corporation
17 existing under the laws of the Kingdom of Thailand with a principal place of business at 168 Bo
18 Win, Si Racha District, Chon Buri, 20230, Kingdom of Thailand.

19 13. On information and belief, Canadian Solar Manufacturing Vietnam Co. Ltd
20 manufactures silicon photovoltaic modules and is wholly owned by Canadian Solar, Inc. On
21 information and belief, Canadian Solar Manufacturing Vietnam Co. Ltd is a corporation existing
22 under the laws of the Socialist Republic of Vietnam with a principal place of business at D11, No.
23 5, Dong Tay Road, VSIP Hai Phong Urban, Industrial and Service Park, Duong Quan Commune,
24 Thuy Nguyen District, Hai Phong City, Vietnam.

25 14. On information and belief, Recurrent Energy Group, Inc. is wholly owned by
26 Canadian Solar, Inc. and develops solar power projects. Recurrent Energy Group, Inc. is a
27 corporation existing under the laws of the State of Delaware and with its principal place of
28 business at 123 Mission Street, Floor 18, San Francisco, California and also maintaining offices at

1 3000 Oak Road, Suite 300, Walnut Creek, California. Recurrent Energy Group, Inc. is registered
2 with the Secretary of State of California to conduct business in California.

3 15. On information and belief, Recurrent Energy LLC is wholly owned by Canadian
4 Solar, Inc. and develops solar power projects. Recurrent Energy LLC is a limited liability
5 company existing under the laws of the State of Delaware and having a principal place of business
6 at 3000 Oak Road, Suite 300, Walnut Creek, California. Recurrent Energy LLC is registered with
7 the Secretary of State of California to conduct business in California.

8 16. On information and belief, Recurrent Energy PRoCo LLC is a limited liability
9 company existing under the laws of the State of Delaware and having a principal place of business
10 at 3000 Oak Road, Suite 300, Walnut Creek, California. Recurrent Energy PROCO LLC is
11 registered with the Secretary of State of California to conduct business in California.

12 **INTRADISTRICT ASSIGNMENT**

13 17. Pursuant to Civil L.R. 3-2(c) and 3-5(b), this is an intellectual property case subject
14 to district-wide assignment. Defendants are located in San Francisco County, Contra Costa
15 County, or are foreign companies. ASGT requests assignment to any of the San Francisco,
16 Oakland, or San Jose Divisions.

17 **NOTICE OF RELEVANT CASES**

18 18. Although not rising to the definition of “related case” under Civil L.R. 3-12, ASGT
19 gives notice of the following civil and administrative actions that may be relevant to this

20 Complaint:

- 21 a. simultaneous with filing this Complaint, ASGT is filing in the Central District of
22 California a complaint for patent infringement of the Asserted Patents by Hanwha-
23 Q Cells and related companies;
- 24 b. simultaneous with filing this Complaint, ASGT is filing a complaint in the
25 Northern District of California for patent infringement of the Asserted Patents by
26 Boviet Solar Technology Co., Ltd. and related companies; and

1 c. simultaneous with filing this Complaint, ASGT is filing a petition in the United
2 States International Trade Commission under section 337 of the Tariff Act of 1930
3 for an investigation of unfair trade practices where the petition names Defendants.

4 **COMPLIANCE WITH LOCAL RULE 3-15**

5 19. In compliance with Civil L.R. 3-15, ASGT discloses that TRGP Operating
6 Company LP, a Delaware limited liability partnership, may be considered to have a financial
7 interest in the matter in controversy.

8 20. ASGT will file a “Certification of Interested Entities or Persons according to Civil
9 L.R. 3-15(a).

10 **SUBJECT MATTER JURISDICTION**

11 21. This lawsuit is a civil action for patent infringement arising under the patent laws
12 of the United States, 35 U.S.C. §§ 1 *et seq.* The Court has subject matter jurisdiction pursuant to
13 at least 28 U.S.C. §§ 1331, 1332, 1338(a), and/or 1367.

14 **PERSONAL JURISDICTION**

15 22. The Court has personal jurisdiction over each of the Defendants because, on
16 information and belief, Defendants direct their infringing activities to the United States and to
17 California. Infringing sales have occurred in the United States and in California. Defendants have
18 purposefully availed themselves of the privileges and benefits of doing business in the United
19 States, in California, and in this Judicial District in connection with their infringing activities.

20 **Canadian Solar, Inc.**

21 23. The Court at least has specific *in personam* jurisdiction over Canadian Solar, Inc.
22 because, on information and belief, Canadian Solar, Inc. has deliberately imported into the United
23 States, sold in California, and offered to sell in California the Accused Products. Canadian Solar,
24 Inc. owns and controls a large network of companies around the world that design, manufacture,
25 sell, offer to sell, and import into the United States silicon photovoltaic cells including the
26 Accused Products. Canadian Solar, Inc. has deliberately imported silicon photovoltaic cells into
27 California as shown through its website: <https://www.canadiansolar.com/>.

1 24. For example, Canadian Solar, Inc. admits that it was the “Module Supplier” for the
 2 Tranquility Solar Plant in California



13 and was the “Module Supplier” for the Gaskell West 1 Solar Plant again in California.



22 All images are from Canadian Solar, Inc.’s website - [https://www.canadiansolar.com/successful-](https://www.canadiansolar.com/successful-projects/)
 23 [projects/](https://www.canadiansolar.com/successful-projects/) and were captured on February 23, 2021. On information and belief, the silicon
 24 photovoltaic cells and modules that Canadian Solar, Inc. supplied to the Tranquility Solar Plant
 25 and to the Gaskell West 1 Solar Plant were Accused Products.

26 25. On information and belief, Canadian Solar, Inc. has imported Accused Products
 27 through the Port of Los Angeles in California.

28

1 **Canadian Solar International Ltd**

2 26. The Court at least has specific *in personam* jurisdiction over Canadian Solar
3 International Ltd. because, on information and belief, it has deliberately imported into the United
4 States and has sold and offered to sell the Accused Products in California. On information and
5 belief, Canadian Solar International Ltd. has imported Accused Products through the Ports of Los
6 Angeles and Oakland, both in California.

7 **Canadian Solar Solutions, Inc.**

8 27. The Court at least has specific *in personam* jurisdiction over Canadian Solar
9 Solutions, Inc. because, on information and belief, it has deliberately imported into the United
10 States and has sold and offered to sell the Accused Products in California. On information and
11 belief, Canadian Solar Solutions, Inc. has imported Accused Products through the Ports of Los
12 Angeles and Oakland, both in California.

13 **Canadian Solar (USA) Inc.**

14 28. The Court has general personal jurisdiction over Canadian Solar (USA) Inc.
15 because, on information and belief, Canadian Solar (USA) Inc. maintains its principal place of
16 business at 3000 Oak Road, Suite 400, Walnut Creek, California. On information and belief,
17 Canadian Solar (USA) has imported Accused Products through the Ports of Los Angeles, Long
18 Beach, and Oakland, all in California.

19 **Canadian Solar Construction (USA) LLC**

20 29. The Court has general personal jurisdiction over Canadian Solar Construction
21 (USA) LLC because, on information and belief, Canadian Solar Construction (USA) LLC
22 maintains its principal place of business at 3000 Oak Road, Suite 400, Walnut Creek, California.
23 On information and belief, Canadian Solar Construction (USA) has imported Accused Products
24 through the Port of Delaware.

25 **Canadian Solar Manufacturing (Luoyong) Inc.**

26 30. The Court at least has specific *in personam* jurisdiction over Canadian Solar
27 Manufacturing (Luoyong) Inc. because, on information and belief, it has imported Accused
28

1 Products into the United States through the Ports of Los Angeles and Long Beach, both in
2 California and has sold and has offered to sell the Accused Products in California.

3 **Canadian Solar Manufacturing (Changshu) Inc.**

4 31. The Court at least has specific *in personam* jurisdiction over Canadian Solar
5 Manufacturing (Changshu) Inc. because, on information and belief, it has imported Accused
6 Products into the United States through the Ports of Long Beach and Oakland, both in California,
7 and has sold and has offered to sell the Accused Products in California.

8 **Canadian Solar Manufacturing (Thailand) Co. Ltd**

9 32. The Court at least has specific *in personam* jurisdiction over Canadian Solar
10 Manufacturing (Thailand) Co. Ltd because, on information and belief, it has imported Accused
11 Products into the United States through the Ports of Long Beach and Oakland, both in California,
12 and has sold and has offered to sell the Accused Products in California.

13 **Canadian Solar Manufacturing Vietnam Co. Ltd**

14 33. The Court at least has specific *in personam* jurisdiction over Canadian Solar
15 Manufacturing Vietnam Co. Ltd because, on information and belief, it has imported Accused
16 Products into the United States through the Ports of Los Angeles and Oakland, both in California,
17 and has sold and has offered to sell the Accused Products in California.

18 **Recurrent Energy Group, Inc.**

19 34. The Court has general personal jurisdiction over Recurrent Energy Group, Inc.
20 because, on information and belief, Recurrent Energy Group, Inc. maintains its principal place of
21 business at 23 Mission Street, Floor 18, San Francisco, California and also maintains offices at
22 3000 Oak Road, Suite 400, Walnut Creek, California.

23 **Recurrent Energy Group LLC**

24 35. The Court has general personal jurisdiction over Recurrent Energy LLC because,
25 on information and belief, Recurrent Energy LLC maintains its principal place of business at 3000
26 Oak Road, Suite 400, Walnut Creek, California.

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1 **Recurrent Energy Group PProCo LLC**

2 36. The Court has general personal jurisdiction over Recurrent Energy PProCo LLC
3 because, on information and belief, Recurrent Energy LLC maintains its principal place of
4 business at 3000 Oak Road, Suite 400, Walnut Creek, California.

5 **VENUE**

6 37. As for defendants Canadian Solar, Inc., Canadian Solar International Limited,
7 Canadian Solar Solutions, Inc., Canadian Solar Manufacturing (Luoyong) Inc., Canadian Solar
8 Manufacturing (Changshu) Inc., Canadian Solar Manufacturing (Thailand) Co. Ltd, and Canadian
9 Solar Manufacturing Vietnam Co. Ltd, venue is proper in this Judicial District because under 28
10 U.S.C. § 1391(b)(3) and (c)(3) and 1400(b) all of these defendants as foreign defendants may be
11 sued in any judicial district.

12 38. As for defendants Canadian Solar (USA) Inc., Canadian Solar Construction (USA)
13 LLC, Recurrent Energy Group, Inc., Recurrent Energy LLC, and Recurrent Energy PProCo LLC,
14 venue is proper as each of these defendants maintains physical places of business and has
15 committed acts of infringement in this Judicial District.

16 **GENERAL ALLEGATIONS**

17 **U.S. Patent No. 8,450,599**

18 39. The '599 Patent issued May 28, 2013 and is entitled "Nanostructured Devices" and
19 issued from U.S. Patent Application No. 12/619,092. The '599 Patent claims priority to
20 provisional application No. 61/114,896, filed on Nov. 14, 2008; provisional application No.
21 61/157.386, filed on Mar. 4, 2009; and provisional application No. 61/250,418, filed on Oct. 9,
22 2009. The '599 Patent identifies Brent A. Buchine, Marcie R. Black, and Faris Modawar as the
23 inventors.

24 40. ASGT is the sole owner by assignment of all right, title, and interest in the '599
25 Patent. The '599 Patent is valid, enforceable, and is currently in full force and effect.

26 41. The '599 Patent relates to an improved version of a photovoltaic cell, also known
27 as a "solar cell." '599 Patent, 2:53-55. A photovoltaic cell is made of a special type of silicon that
28 absorbs light, typically sunlight, to produce electricity. The photovoltaic cells of the '599 Patent

1 have extremely small protruding features called “nanostructures” on the surface of the silicon that
2 enhance the absorption of light by the silicon, thereby increasing the amount of electricity that is
3 produced. *Id.*, 1:52-54. One type of nanostructure is a “nanowire,” so named because the
4 protruding feature has at least two dimensions in the nanometer scale.

5 42. The ’599 Patent discloses a nanostructured photovoltaic device that can be
6 manufactured at a lower cost while still exhibiting high efficiency compared to prior photovoltaic
7 cells. In one exemplary embodiment, the photovoltaic device includes a crystalline semiconductor
8 substrate with a bottom p-doped region and a top n-doped region adjacent to and in contact with
9 the p-doped region. N-doped nanowires are in contact with the top n-doped region of the
10 crystalline semiconductor substrate. Furthermore, the n-doped and the p-doped regions form a p-n
11 junction within the bulk of the crystalline semiconductor substrate, such that the p-n junction is
12 located at least about 30 nm from the bottom of the nanowires.

13 **U.S. Patent No. US 8,852,981**

14 43. The ’981 Patent issued October 7, 2014 and is entitled “Electrical Contacts to
15 Nanostructured Areas,” and it issued from U.S. Patent Application No. 13/622,864, filed
16 September 19, 2012. The ’981 Patent claims priority to provisional application No. 61/536,243,
17 filed on Sep. 19, 2011, and identifies Marcie R. Black, Joanne Forziati, Michael Jura, Jeff Miller,
18 Brian Murphy, and Adam Standley as the inventors.

19 44. ASGT is the sole owner by assignment of all right, title, and interest in the ’981
20 Patent. The ’981 Patent is valid, enforceable, and is currently in full force and effect.

21 45. The ’981 Patent discloses an improved process for forming electrical contacts on
22 nanostructured silicon surfaces. In an embodiment of the invention, the process begins with a
23 conductive substrate (*e.g.*, doped silicon) having a nanostructured surface that may be coated with
24 an electrically insulating material. The nanostructures are removed (either completely or partially)
25 from a portion of the surface of the substrate, and an electrically conductive contact is deposited in
26 the area where the nanostructures were removed.

1 **U.S. Patent No. 9,601,640**

2 46. US Patent No. 9,911,640 issued March 21, 2017 and is entitled “Electrical Contacts
3 to Nanostructured Areas,” was filed on August 25, 2014 as U.S. Patent Application No.
4 14/468,219 and issued on March 21, 2017. The ’640 Patent claims the benefit of priority to U.S.
5 Provisional Application No. 61/536,243, filed on September 19, 2011. The ’640 Patent is subject
6 to 249 days of patent term adjustment with no terminal disclaimers. The ’640 Patent identifies
7 Marcie R. Black, Joanne Forziati, Michael Jura, Jeffrey Miller, Brian Murphy, and Adam Standley
8 as the inventors.

9 47. ASGT is the sole owner by assignment of all right, title, and interest in the ’640
10 Patent. The ’640 Patent is valid, enforceable, and is currently in full force and effect.

11 48. The ’640 Patent provides an improved process for forming electrical contacts on
12 nanostructured silicon surfaces. In an embodiment of the invention, the process begins with a
13 conductive substrate (*e.g.*, doped silicon) having a nanostructured surface that may be coated with
14 an electrically insulating material. The nanostructures are removed (either completely or partially)
15 from a portion of the surface of the substrate, and an electrically conductive contact is deposited in
16 the area where the nanostructures were removed. ’640 Patent, 2:43-57.

17 49. Silicon surfaces with nanostructure features are used in a variety of applications
18 including photovoltaic cells, and require electrical contacts to an external circuit. ’640 Patent,
19 1:13-15. One contact must be connected to the surface with the nanostructures, on one side of a p-
20 n junction, and another contact connected to the substrate below the nanostructures, on the other
21 side of the p-n junction, so that the cell can deliver electricity to a home, a business, or an
22 electrical grid. *Id.*, at 1:46-52. The ’640 Patent provides an improved process for contacting
23 nanostructures on a surface of an optoelectronic device. *Id.*, 2: 38-39.

24 **U.S. Patent No. 9,768,331**

25 50. The ’331 Patent issued September 9, 2017 and is entitled “Screen Printing
26 Electrical Contact to Nanowire Areas,” and it issued from U.S. Patent Application No.
27 14/338,752, filed on Jul. 23, 2014. The ’331 Patent is a continuation of application No.
28 PCT/US2013/025958, filed on Feb. 13, 2013, and claims priority to provisional application No.

1 61/598,717 filed on Feb. 14, 2012. The '331 Patent identifies Michael Jura, Marcie R. Black,
2 Jeffrey B. Miller, Joanne Yim, Joanne Forziati, Brian P. Murphy, and Richard Chleboski as the
3 inventors.

4 51. ASGT is the sole owner by assignment of all right, title, and interest in the '331
5 Patent. The '331 Patent is valid, enforceable, and is currently in full force and effect.

6 52. The '331 Patent discloses to a nanostructured silicon device with screen printed
7 electrical contacts. The '331 Patent discloses that relatively short nanowires provide desirable
8 anti-reflection and scattering properties, while being compatible with a screen printing process.
9 *Id.*, 3:57-63. The '331 Patent describes a device which has a nanostructured area that is in contact
10 with the surface of the substrate. *Id.*, 8:21-29. The nanostructured area has a passivating layer and
11 one or more contacts comprising a comb-like pattern of metal that directly contacts the
12 nanostructured area. *Id.* A p-n junction is located below the nanostructured area. *Id.*

13 **U.S. Patent No. 10,269,995**

14 53. The '995 Patent issued April 23, 2019 and is entitled "Screen Printing Electrical
15 Contact to Nanowire Areas," and it issued from U.S. Patent Application No. 15/622,422, filed on
16 Jun. 14, 2017. The '995 Patent is a continuation of application No. 14/338,752, filed on July 23,
17 2014 and issued as the '331 Patent, which is a continuation of application No.
18 PCT/US2013/025958, filed on Feb. 13, 2013. The '995 Patent claims priority to provisional
19 application No. 61/598,717 filed on Feb. 14, 2012. The '995 Patent identifies Michael Jura,
20 Marcie R. Black, Jeffrey B. Miller, Joanne Yim, Joanne Forziati, Brian P. Murphy, and Richard
21 Chleboski as the inventors.

22 54. ASGT is the sole owner by assignment of all right, title, and interest in the '995
23 Patent. The '995 Patent is valid, enforceable, and is currently in full force and effect.

24 55. When a silicon substrate with a nanostructured surface is used in a photovoltaic
25 cell, electrical contacts to an external circuit are required to collect the electricity generated by the
26 nanostructured silicon. '995 Patent, 1:63-66. The '995 Patent provides an improved device with
27 robust electrical contacts to a nanostructured silicon substrate. *Id.*, 8:9-21.

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1 56. For example, the '995 Patent discloses a silicon device with nanostructures
2 disposed on the surface of the substrate. The nanostructures are coated with a passivating layer
3 that comprises either aluminum oxide, silicon dioxide, or silicon nitride. A p-n junction is located
4 below the nanostructures. A first contact comprising a comb-like pattern of metal is in contact
5 with the nanostructures, and a second contact in electrical contact with the substrate. *Id.*, 8:9-20.
6 The comb-like pattern may be formed by screen printing. *Id.*, 2:52-57.

7 **U.S. Patent No. 10,692,971**

8 57. The '971 Patent issued June 23, 2020 and is entitled "Process for Fabricating
9 Silicon Nanostructures," and it issued from U.S. Patent Application No. 16/054,457, filed on Aug.
10 03, 2018. The '971 Patent is a continuation of application No. 15/826,005, fled on No. 29, 2017
11 and now abandoned, which is a division of application No. 14/924,273, filed on Oct. 27, 2015 and
12 issued as U.S. Patent No. 9,859,366, which is a continuation of application No. 14/444,361, filed
13 on July 28, 2014 and issued as U.S. Patent No. 9,202,868, which is a continuation of application
14 No. 13/305,649, filed on Nov. 28, 2011 and issues as U.S. Patent No. 8,791,449, which is a
15 continuation of application No. 12/423,623, filed on April 14, 2009 and issued as U.S. Patent No.
16 8,143,143. The '971 Patent claims priority to provisional application No. 61/114,082, filed on
17 Dec. 29, 2008 and provisional application No. 61/044,573, filed on Apr. 14, 2008. The '971
18 Patent identifies Brent A. Buchine, Marcie R. Black, and Faris Modawar as the inventors.

19 58. ASGT is the sole owner by assignment of all right, title, and interest in the '971
20 Patent. The '971 Patent is valid, enforceable, and is currently in full force and effect.

21 59. The '971 Patent discloses to a chemical process for forming nanostructures on the
22 surface of a polycrystalline silicon (*i.e.*, polysilicon) substrate. *Id.*, 2:48-51. The process is
23 advantageous at least because "[p]olysilicon is a cheaper material than crystalline silicon." *Id.*,
24 6:31-32. The process of the '971 Patent "can be used to texture the surface of and/or form
25 nanowires in polysilicon." *Id.*, 6:29-31.

LEGAL CLAIM I
(Infringement Of U.S. Patent No. 8,450,599)

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2
3 60. ASGT incorporates by reference the allegations of paragraphs 1-59 above,
4 inclusive, as if fully set forth here.

5 61. Defendants have infringed and continue to infringe one or more claims of the '599
6 Patent, including, but not limited to, claim 15 at least by importing the Accused Products into the
7 United States, selling the Accused Products in the United States, and offering the Accused
8 Products for sale in the United States without ASGT's license or other permission. A claim chart
9 that illustrates Defendants' infringement of claim 15 is attached as **Exhibit A** that is incorporated
10 herein by reference as if fully set forth herein.

11 62. Defendants have indirectly infringed and continue to indirectly infringe one or
12 more claims of the '599 Patent, including, but not limited to, claim 15 at least by inducing the
13 infringement by others in the United States, including, but not limited to, Defendants' customers
14 and Defendants' related companies who purchase and/or use the Accused Products in the United
15 States without ASGT's license or other permission.

16 63. Defendants' infringement includes, but is not limited to, making, selling, offering
17 to sell, and/or importing into the United States Canadian Solar Models CS3W-410PB-AG and
18 CS3U-350PB-AG.

19 64. Defendants' acts of inducement include advertising the Accused Products on its
20 website - <https://www.csisolar.com/> - and offering to sell Accused Products to customers in the
21 United States through its dedicated store on Alibaba.com -
22 <https://csisolar.en.alibaba.com/index.html?spm=a2700.icbuShop.88.11.14fd4863e1IG4U> - through
23 which customers in the United States may purchase the Accused Products, delivering the Accused
24 Products to customers in the United States, and providing such customers with instructions for use
25 of the Accused Products.

26 65. On information and belief, Defendants' infringement of the '599 Patent has been
27 willful in view of Defendants' actual knowledge of the ASGT's patent portfolio entitling ASGT to
28 enhanced damages pursuant to 35 U.S.C. § 284.

1 66. ASGT has been damaged by Defendants' infringement in an amount to be
2 determined through discovery. ASGT is entitled, at a minimum, to a reasonable royalty on
3 Defendants' infringing sales and other acts, together with prejudgment and post-judgment interest.

4 67. The harm suffered by ASGT is irreparable, and ASGT has no adequate remedy at
5 law, warranting injunctive relief.

6 68. This is an exceptional case such that ASGT is entitled to recover its reasonable
7 attorney fees pursuant to 35 U.S.C. § 285.

8 **LEGAL CLAIM II**
9 **(Infringement Of U.S. Patent No. 8,852,981)**

10 69. ASGT incorporates by reference the allegations of paragraphs 1-59 above,
11 inclusive, as if fully set forth here.

12 70. Defendants have infringed and continue to infringe one or more claims of the '981
13 Patent, including, but not limited to, claim 1 at least by importing the Accused Products into the
14 United States, selling the Accused Products in the United States, and offering the Accused
15 Products for sale in the United States without ASGT's license or other permission. A claim chart
16 that illustrates Defendants' infringement of claim 1 is attached as **Exhibit B** that is incorporated
17 herein by reference as if fully set forth herein.

18 71. Defendants have indirectly infringed and continue to indirectly infringe one or
19 more claims of the '981 Patent, including, but not limited to, claim 1 at least by inducing the
20 infringement by others in the United States, including, but not limited to, Defendants' customers
21 and Defendants' related companies who purchase and/or use the Accused Products in the United
22 States without ASGT's license or other permission.

23 72. Defendants' infringement includes, but is not limited to, making, selling, offering
24 to sell, and/or importing into the United States Canadian Solar Models CS3W-410PB-AG and
25 CS3U-350PB-AG.

26 73. Defendants' acts of inducement include advertising the Accused Products on its
27 website - <https://www.csisolar.com/> - and offering to sell Accused Products to customers in the
28 United States through its dedicated store on Alibaba.com -

1 <https://csisolar.en.alibaba.com/index.html?spm=a2700.icbuShop.88.11.14fd4863c1lG4U> - through
2 which customers in the United States may purchase the Accused Products, delivering the Accused
3 Products to customers in the United States, and providing such customers with instructions for use
4 of the Accused Products.

5 74. On information and belief, Defendants' infringement of the '981 Patent has been
6 willful in view of Defendants' actual knowledge of the ASGT's patent portfolio entitling ASGT to
7 enhanced damages pursuant to 35 U.S.C. § 284.

8 75. ASGT has been damaged by Canadian Solar's infringement in an amount to be
9 determined through discovery. ASGT is entitled, at a minimum, to a reasonable royalty on
10 Defendants' infringing sales and other acts, together with prejudgment and post-judgment interest.

11 76. The harm suffered by ASGT is irreparable, and ASGT has no adequate remedy at
12 law, warranting injunctive relief.

13 77. This is an exceptional case such that ASGT is entitled to recover its reasonable
14 attorney fees pursuant to 35 U.S.C. § 285.

15 **LEGAL CLAIM III**
16 **(Infringement Of U.S. Patent No. 9,601,640)**

17 78. ASGT incorporates by reference the allegations of paragraphs 1-59 above,
18 inclusive, as if fully set forth here.

19 79. Defendants have infringed and continue to infringe one or more claims of the '640
20 Patent, including, but not limited to, claim 1 at least by importing the Accused Products into the
21 United States, selling the Accused Products in the United States, and offering the Accused
22 Products for sale in the United States without ASGT's license or other permission. A claim chart
23 that illustrates Defendants' infringement of claim 1 is attached as **Exhibit C** that is incorporated
24 herein by reference as if fully set forth herein.

25 80. Defendants have indirectly infringed and continue to indirectly infringe one or
26 more claims of the '640 Patent, including, but not limited to, claim 1 at least by inducing the
27 infringement by others in the United States, including, but not limited to, Defendants' customers
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1 and Defendants' related companies who purchase and/or use the Accused Products in the United
2 States without ASGT's license or other permission.

3 81. Defendants' infringement includes, but is not limited to, making, selling, offering
4 to sell, and/or importing into the United States Canadian Solar Models CS3W-410PB-AG and
5 CS3U-350PB-AG.

6 82. Defendants' acts of inducement include advertising the Accused Products on its
7 website - <https://www.csisolar.com/> - and offering to sell Accused Products to customers in the
8 United States through its dedicated store on Alibaba.com -
9 <https://csisolar.en.alibaba.com/index.html?spm=a2700.icbuShop.88.11.14fd4863c1lG4U> - through
10 which customers in the United States may purchase the Accused Products, delivering the Accused
11 Products to customers in the United States, and providing such customers with instructions for use
12 of the Accused Products.

13 83. On information and belief, since at least the '640 Patent issued, Defendants'
14 infringement of the '640 Patent has been willful in view of Defendants' actual knowledge of the
15 ASGT's patent portfolio entitling ASGT to enhanced damages pursuant to 35 U.S.C. § 284.

16 84. ASGT has been damaged by Canadian Solar's infringement in an amount to be
17 determined through discovery. ASGT is entitled, at a minimum, to a reasonable royalty on
18 Defendants' infringing sales and other acts, together with prejudgment and post-judgment interest.

19 85. The harm suffered by ASGT is irreparable, and ASGT has no adequate remedy at
20 law, warranting injunctive relief.

21 86. This is an exceptional case such that ASGT is entitled to recover its reasonable
22 attorney fees pursuant to 35 U.S.C. § 285.

23 **LEGAL CLAIM IV**
24 **(Infringement Of U.S. Patent No. 9,768,331)**

25 87. ASGT incorporates by reference the allegations of paragraphs 1-59 above,
26 inclusive, as if fully set forth here.

27 88. Defendants have infringed and continue to infringe one or more claims of the '331
28 Patent, including, but not limited to, claim 1 at least by importing the Accused Products into the

1 United States, selling the Accused Products in the United States, and offering the Accused
2 Products for sale in the United States without ASGT's license or other permission. A claim chart
3 that illustrates Defendants' infringement of claim 1 is attached as **Exhibit D** that is incorporated
4 herein by reference as if fully set forth herein.

5 89. Defendants have indirectly infringed and continue to indirectly infringe one or
6 more claims of the '331 Patent, including, but not limited to, claim 1 at least by inducing the
7 infringement by others in the United States, including, but not limited to, Defendants' customers
8 and Defendants' related companies who purchase and/or use the Accused Products in the United
9 States without ASGT's license or other permission.

10 90. Defendants' infringement includes, but is not limited to, making, selling, offering
11 to sell, and/or importing into the United States Canadian Solar Models CS3W-410PB-AG and
12 CS3U-350PB-AG.

13 91. Defendants' acts of inducement include advertising the Accused Products on its
14 website - <https://www.csisolar.com/> - and offers to sell Accused Products to customers in the
15 United States through its dedicated store on Alibaba.com -
16 <https://csisolar.en.alibaba.com/index.html?spm=a2700.icbuShop.88.11.14fd4863cIIIG4U> - through
17 which customers in the United States may purchase the Accused Products, delivering the Accused
18 Products to customers in the United States, and providing such customers with instructions for use
19 of the Accused Products.

20 92. On information and belief, Defendants' infringement of the '331 Patent has been
21 willful in view of Defendants' actual knowledge of the ASGT's patent portfolio entitling ASGT to
22 enhanced damages pursuant to 35 U.S.C. § 284.

23 93. ASGT has been damaged by Canadian Solar's infringement in an amount to be
24 determined through discovery. ASGT is entitled, at a minimum, to a reasonable royalty on
25 Defendants' infringing sales and other acts, together with prejudgment and post-judgment interest.

26 94. The harm suffered by ASGT is irreparable, and ASGT has no adequate remedy at
27 law, warranting injunctive relief.

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1 109. Defendants' acts of inducement include advertising the Accused Products on its
2 website - <https://www.csisolar.com/> - and offers to sell Accused Products to customers in the
3 United States through its dedicated store on Alibaba.com -
4 <https://csisolar.en.alibaba.com/index.html?spm=a2700.icbuShop.88.11.14fd4863cIIIG4U> - through
5 which customers in the United States may purchase the Accused Products, delivering the Accused
6 Products to customers in the United States, and providing such customers with instructions for use
7 of the Accused Products.

8 110. On information and belief, Defendants' infringement of the '971 Patent has been
9 willful in view of Defendants' actual knowledge of the ASGT's patent portfolio entitling ASGT to
10 enhanced damages pursuant to 35 U.S.C. § 284.

11 111. ASGT has been damaged by Canadian Solar's infringement in an amount to be
12 determined through discovery. ASGT is entitled, at a minimum, to a reasonable royalty on
13 Defendants' infringing sales and other acts, together with prejudgment and post-judgment interest.

14 112. The harm suffered by ASGT is irreparable, and ASGT has no adequate remedy at
15 law, warranting injunctive relief.

16 113. This is an exceptional case such that ASGT is entitled to recover its reasonable
17 attorney fees pursuant to 35 U.S.C. § 285.

18 **PRAYER FOR RELIEF**

19 **WHEREFORE**, ASGT respectfully prays for the following against Defendants:

- 20 1. entry of judgment in favor of ASGT and against Defendants for direct and indirect
21 infringement of one or more claims of the '599 Patent;
- 22 2. entry of judgment in favor of ASGT and against Defendants for direct and indirect
23 infringement of one or more claims of the '981 Patent;
- 24 3. entry of judgment in favor of ASGT and against Defendants for direct and indirect
25 infringement of one or more claims of the '640 Patent;
- 26 4. entry of judgment in favor of ASGT and against Defendants for direct and indirect
27 infringement of one or more claims of the '331 Patent;

- 1 5. entry of judgment in favor of ASGT and against Defendants for direct and indirect
- 2 infringement of one or more claims of the '995 Patent;
- 3 6. entry of judgment in favor of ASGT and against Defendants for direct and indirect
- 4 infringement of one or more claims of the '971 Patent;
- 5 7. compensatory damages in an amount to be proven at trial for Defendants' past
- 6 infringement and any future infringement up to the date that Defendants are finally
- 7 and permanently enjoined from further infringement;
- 8 8. enhanced damages pursuant to 35 U.S.C. § 284;
- 9 9. prejudgment and post-judgment interest at the maximum rate permitted by law;
- 10 10. attorney fees pursuant to 35 U.S.C. § 285;
- 11 11. ASGT's costs of suit;
- 12 12. an order enjoining Defendants, their direct or indirect parents, subsidiaries,
- 13 affiliates, divisions, successors, and assigns, their respective directors, officers,
- 14 employees, and agents, and those acting in privity or concert with any of them,
- 15 from further acts of direct or indirect infringement of the Asserted Patents; and
- 16 13. such other relief as the Court may deem just and proper.
- 17

18 DATED: June 11, 2021

By: /s/ Michael F. Heafey

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DEMAND FOR JURY TRIAL

Plaintiff ASGT hereby demands a trial by jury of all issues so triable.

DATED: June 11, 2021

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