

**IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF DELAWARE**

SOLAR PASTE, LLC,

Plaintiff,

v.

CHANGZHOU FUSION NEW MATERIAL  
CO., LTD., RISEN ENERGY CO., LTD. and  
RISEN ENERGY AMERICA, INC.,

Defendants.

C.A. No. 1:21-cv-01257-JLH

**Jury Trial Demanded**

**THIRD AMENDED COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Solar Paste, LLC, by and through its attorneys, for its third amended complaint against Defendants Changzhou Fusion New Material Co., Ltd., Risen Energy Co., Ltd., and Risen Energy America, Inc. (collectively, “Defendants”), hereby alleges as follows:

**THE NATURE OF THE ACTION**

1. This is an action for infringement of U.S. Patent Nos. 7,767,254 (“the ’254 patent”), 8,497,420 (“the ’420 patent”), 8,889,979 (“the ’979 patent”), 8,889,980 (“the ’980 patent”), and 8,895,843 (“the ’843 patent”) (collectively, “the Asserted Patents”) arising under the Patent Laws of the United States, 35 U.S.C. § 1, *et seq.*

**THE PARTIES**

2. Solar Paste, LLC (“Solar Paste”) is a corporation organized and existing under the laws of the State of Delaware, having a place of business at Corporate Trust Center, 1209 Orange Street, Wilmington, DE 19801. Solar Paste is the assignee and sole owner of the Asserted Patents, and has the right to enforce (including for past infringement), each of the Asserted Patents.

3. On information and belief, defendant Changzhou Fusion New Material Co., Ltd. (“Fusion”) is a corporation organized and existing under the laws of The People’s Republic of China, with a principal place of business at 88 Xinzu 2nd Road, Xinbei District, Changzhou City, 213031 China.

4. On information and belief, defendant Risen Energy Co., Ltd. (“Risen Ltd.”) is a publicly traded company on the China Shenzhen Stock Exchange that is organized and exists under the laws of The People’s Republic of China, with a principal place of business at Tashan Industry Zone, Meilin, Ninghai, Ningbo, Zhejiang 315600 China.

5. On information and belief, defendant Risen Energy America, Inc. (“Risen America”) is a company organized and existing under the laws of the State of Delaware, with a principal place of business at 2570 North First Street, Second Floor, Silicon Valley Center, San Jose, CA 95131.

6. On information and belief, the infringing processes and products of Risen Ltd. and Risen America complained of herein were done at the instruction of and/or with the cooperation or assistance of Fusion.

### **JURISDICTION AND VENUE**

7. This Court has jurisdiction over the subject matter of this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).

8. Venue is proper in this Court under 28 U.S.C. §§ 1391 and 1400(b).

9. On information and belief, Risen Ltd. develops and manufactures solar panel products using Fusion’s thick film paste products, and, in concert with Risen America, offers for sale, sells, imports, and distributes such solar panel products for sale and use throughout the United States, including in this judicial district.

10. On information and belief, this Court has personal jurisdiction over defendants Risen Ltd. and Risen America.

11. As a foreign corporation, personal jurisdiction exists over Risen Ltd. at least by virtue of Federal Rule of Civil Procedure 4(k)(2).

12. This Court has personal jurisdiction over Risen America based on its incorporation in the State of Delaware.

13. Further, this Court has personal jurisdiction over defendants Risen Ltd. and Risen America because Risen Ltd.'s and Risen America's infringing products are regularly offered for sale, sold, and imported into the United States, including this jurisdiction, by Risen Ltd. in concert with Risen America, and Risen Ltd. and Risen America derive substantial revenue from those infringing products.

14. On information and belief, this Court has personal jurisdiction over defendant Fusion. Specifically, this Court has personal jurisdiction over Fusion because Fusion's conductive paste products are used with Fusion's knowledge and instruction to prepare infringing solar panel products that are regularly offered for sale, sold, and imported into the United States, including this jurisdiction.

15. On information and belief, Fusion works in concert with Risen Ltd. and instructs Risen Ltd. how to use its conductive paste products in an infringing manner.

16. As a foreign corporation, personal jurisdiction exists over Fusion at least by virtue of Federal Rule of Civil Procedure 4(k)(2).

17. Further, personal jurisdiction exists over Defendants based on the fact that, upon information and belief, Fusion is responsible, with Risen Ltd. and Risen America, for causing the tort of patent infringement to occur in this District.

## **FACTUAL BACKGROUND**

### **U.S. Patent No. 7,767,254**

18. U.S. Patent No. 7,767,254 (“the ’254 patent”) is entitled “Paste for Solar Cell Electrode and Solar Cell,” and was issued by the U.S. Patent and Trademark Office (the “PTO”) to inventors Takuya Konno, Takashi Kitagaki, and Hiroki Kojo on August 3, 2010. A copy of the ’254 patent is attached to this complaint as Exhibit A.

19. The PTO’s publicly accessible patent assignment records indicate that inventors Takuya Konno, Takashi Kitagaki, and Hiroki Kojo assigned the entire right, title, and interest in the ’254 patent to E.I. Du Pont de Nemours and Co., which assigned its rights to DuPont Electronics, Inc., which subsequently assigned the ’254 patent to Solar Paste. As a result, Solar Paste owns the entire right, title, and interest in the ’254 patent.

20. Claim 1 of the ’254 patent is directed to “[a] method of producing a light-receiving surface electrode of a solar cell comprising the steps of: applying a conductive paste on a silicon substrate; wherein the conductive paste comprises silver particles with a specific surface of 0.20-0.60 m<sup>2</sup>/g, and wherein the conductive paste further comprises glass frit, resin binder and thinner; and firing the applied conductive paste.” Exhibit A, col. 8:51-59.

### **U.S. Patent No. 8,497,420**

21. U.S. Patent No. 8,497,420 (“the ’420 patent”) is entitled “Thick-Film Pastes Containing Lead- And Tellurium-Oxides, and Their Use in the Manufacture of Semiconductor Devices,” and was issued by the PTO to inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernooy on July 30, 2013. A copy of the ’420 patent is attached to this complaint as Exhibit B.

22. The PTO's publicly accessible patent assignment records indicate that inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernoooy assigned the entire right, title, and interest in the '420 patent to E.I. Du Pont de Nemours and Co., which assigned its rights to DuPont Electronics, Inc., which subsequently assigned the '420 patent to Solar Paste. As a result, Solar Paste owns the entire right, title, and interest in the '420 patent.

23. Claim 9 of the '420 patent is directed to "[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one surface of a semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure, wherein the thick-film paste composition comprises: i) 85 to 99.5% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.5 to 15% by weight based on solids of a lead-tellurium-oxide, wherein the lead-tellurium-oxide comprises 30 to 65 mol % of lead oxide and 35 to 70 mol % of tellurium oxide; and iii) an organic medium; and (c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, forming an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate." Exhibit B, col. 21:41-54.

24. Claim 12 of the '420 patent is directed to "[a]n article comprising: a) a semiconductor substrate; b) one or more insulating layers on the semiconductor substrate; and c) an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-oxide wherein the lead-tellurium-oxide comprises 30 to 65 mol % of lead oxide and 35 to 70 mol % of tellurium oxide." Exhibit B, col. 22:52-61.

**U.S. Patent No. 8,889,979**

25. U.S. Patent No. 8,889,979 (“the ’979 patent”) is entitled “Thick-Film Pastes Containing Lead-Tellurium-Lithium-Titanium-Oxides, and Their Use in the Manufacture of Semiconductor Devices,” and was issued by the PTO to inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernoooy on November 18, 2014. A copy of the ’979 patent is attached to this complaint as Exhibit C.

26. The PTO’s publicly accessible patent assignment records indicate that inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernoooy assigned the entire right, title, and interest in the ’979 patent to E.I. Du Pont de Nemours and Co., which assigned its rights to DuPont Electronics, Inc., which subsequently assigned the ’979 patent to Solar Paste. As a result, Solar Paste owns the entire right, title, and interest in the ’979 patent.

27. Claim 11 of the ’979 patent is directed to “[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one surface of the semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure, wherein the thick-film paste composition comprises: i) 85 to 99.5% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.5 to 15% by weight, based on total solids in the composition, of a lead-tellurium-lithium-titanium oxide, wherein the lead-tellurium-lithium-titanium-oxide comprises 0.1-5 wt %  $\text{Li}_2\text{O}$ ; and iii) an organic medium; and (c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, forming an

electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate.” Exhibit C, col. 21:15-29.

28. Claim 14 of the '979 patent is directed to “[a]n article comprising: a) a semiconductor substrate; b) one or more insulating layers on the semiconductor substrate; and c) an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-lithium-titanium-oxide, wherein the lead-tellurium-lithium-titanium-oxide comprises 0.1-5 wt %  $\text{Li}_2\text{O}$ .” Exhibit C, col. 22:32-41.

**U.S. Patent No. 8,889,980**

29. U.S. Patent No. 8,889,980 (“the '980 patent”) is entitled “Thick-Film Pastes Containing Lead-Tellurium-Lithium-Titanium-Oxides, and Their Use in the Manufacture of Semiconductor Devices,” and was issued by the PTO to inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernooy on November 18, 2014. A copy of the '980 patent is attached to this complaint as Exhibit D.

30. The PTO’s publicly accessible patent assignment records indicate that inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernooy assigned the entire right, title, and interest in the '980 patent to E.I. Du Pont de Nemours and Co., which assigned its rights to DuPont Electronics, Inc., which subsequently assigned the '980 patent to Solar Paste. As a result, Solar Paste owns the entire right, title, and interest in the '980 patent.

31. Claim 11 of the '980 patent is directed to “[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one

surface of the semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure, wherein the thick-film paste composition comprises: i) 85 to 99.75% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.25 to 15% by weight, based on total solids in the composition, of a lead-tellurium-lithium-oxide, wherein the lead-tellurium-lithium-oxide comprises 0.1 to 5 wt %  $\text{Li}_2\text{O}$ ; and iii) an organic medium; and (c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, wherein the organic medium of the thick-film paste is volatilized, forming an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate.” Exhibit D, col. 25:1-22.

32. Claim 14 of the '980 patent is directed to “[a]n article comprising: a) a semiconductor substrate; b) one or more insulating layers on the semiconductor substrate; and c) an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-lithium-oxide, wherein the lead-tellurium-lithium-oxide comprises 0.1 to 5 wt %  $\text{Li}_2\text{O}$ .” Exhibit D, col. 26:1-11.

### **U.S. Patent No. 8,895,843**

33. U.S. Patent No. 8,895,843 (“the '843 patent”) is entitled “Thick-Film Pastes Containing Lead-Tellurium-Boron-Oxides, and Their Use in the Manufacture of Semiconductor Devices,” and was issued by the PTO to inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernooy on November 25, 2014. A copy of the '843 patent is attached to this complaint as Exhibit E.



34. The PTO's publicly accessible patent assignment records indicate that inventors Alan Frederick Carroll, Kenneth Warren Hang, Brian J. Laughlin, Richard Mikeska, Carmine Torardi, and Paul Douglas Vernoooy assigned the entire right, title, and interest in the '843 patent to E.I. Du Pont de Nemours and Co., which assigned its rights to DuPont Electronics, Inc., which subsequently assigned the '843 patent to Solar Paste. As a result, Solar Paste owns the entire right, title, and interest in the '843 patent.

35. Claim 11 of the '843 patent is directed to "[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one surface of the semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure, wherein the thick-film paste composition comprises: i) 85 to 99.5% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.5 to 15% by weight, based on total solids in the composition, of a lead-tellurium-boron-oxide, wherein the lead-tellurium-boron-oxide comprises 0.25 to 5 wt %  $B_2O_3$ ; and iii) an organic medium; and (c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, to form an electrode in contact with the insulating layer and in electrical contact with the semiconductor substrate." Exhibit E, col. 25:27-45.

36. Claim 15 of the '843 patent is directed to "[a]n article comprising: a) a semiconductor substrate; b) an insulating layer on the semiconductor substrate; and c) an electrode in contact with the insulating layer and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-boron-oxide, wherein the lead-tellurium-boron-oxide comprises 0.25 to 5 wt %  $B_2O_3$ ." Exhibit E, col. 26:8-16.

### **The Infringing Processes and Products**

37. Fusion was established in August 2015 and operates in the research, development, production, and sale of conductive pastes.<sup>1</sup> Upon information and belief, as of 2021 Fusion’s primary source of revenue is from the sale of conductive pastes for solar panels (i.e., solar cells).

38. According to a Prospectus for Fusion that was filed with the Chinese Securities Regulatory Commission dated June 21, 2021, in 2018 and 2019, Risen Ltd. was Fusion’s largest customer for conductive pastes, and in 2020, Risen Ltd. was Fusion’s second largest customer for conductive pastes. *See* Exhibit F at 149-150 (pp. 1-1-147 to 1-1-148); *see also* Exhibit G at 1-2 (English-language translation of portions of pp. 1-1-147 to 1-1-148 of Exhibit F). Fusion’s Prospectus also discloses a product procurement contract to supply Risen Ltd. with silver paste for the period of August 25, 2020 through August 24, 2021. *See* Exhibit F at 353 (p. 1-1-351; *see also* Exhibit G at 3 (English-language translation of p. 1-1-351 of Exhibit F).

39. Front-side conductive paste is a functional material that contains silver powder as well as oxides of various metals, and is a key material for the manufacture of metal electrodes for solar cells. The Asserted Patents claim specific conductive paste compositions, methods of using the conductive paste compositions to form electrodes on solar cells, as well as solar cell products that are prepared using the inventive conductive paste compositions. *See* Exhibits A-E; *see also* ¶¶ 18-36 *supra*.

40. Upon information and belief, Defendants know of the Asserted Patents. *First*, upon information and belief, Defendants regularly survey the patent literature—and especially that of their competitors—for relevant patents and have encountered the Asserted Patents. Solar

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<sup>1</sup> *See, e.g.*, <http://www.fusion-cz.com/english/>, “About Fusion Company” (last accessed November 6, 2021).

Paste is a wholly-owned subsidiary of Jiangsu Suote Electronic Materials Co., Ltd. (D.E. 4), which is a direct competitor of Fusion in the conductive paste field. *Second*, the complaint in this Action (D.E. 1) informed Defendants of the Asserted Patents. Shortly after the complaint in this Action was filed, Fusion and Risen Ltd. sent letters to their customers informing them of their awareness of the complaint. *Third*, Defendants have made pronouncements through the press concerning their awareness of this Action.<sup>2</sup> *Fourth*, on August 30, 2021, Jiangsu Suote Electronic Materials Co., Ltd. commenced a patent infringement suit against Fusion in the People's Republic of China asserting infringement of Chinese Patent Application No. 201180032701.8, which is a foreign counterpart to U.S. Patent No. 8,889,980 asserted in this Action. *See* Exhibit H (copy of complaint for patent infringement lodged by Jiangsu Suote Electronic Materials Co., Ltd., along with an English-language translation of the complaint). On information and belief, Fusion has informed Risen Ltd. and Risen America of that co-pending, related action.

41. Analysis of ten (10) of Fusion's conductive paste products by an independent laboratory, Shanghai Weipu Chemical Technology Service Co., Ltd., demonstrates that, on information and belief, Fusion knowingly and intentionally provides conductive paste products to Risen Ltd. and Risen America with instructions for their use in performing infringing processes to manufacture infringing solar panel products. *See* Exhibits I-R (Analysis Reports dated June 17, 2021). Fusion's conductive pastes were analyzed in a single-blind fashion such

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<sup>2</sup> *See, e.g.,*

[https://www.toutiao.com/i7009266457813090824/?tt\\_from=weixin&utm\\_campaign=client\\_share&wxshare\\_count=1&timestamp=1631975350&app=news\\_article&utm\\_source=weixin&utm\\_medium=toutiao\\_android&use\\_new\\_style=1&req\\_id=202109182229100102120562131A12F60B&share\\_token=3e12cf66-c79c-41e7-8e31-d5310a2dfa9e&group\\_id=7009266457813090824](https://www.toutiao.com/i7009266457813090824/?tt_from=weixin&utm_campaign=client_share&wxshare_count=1&timestamp=1631975350&app=news_article&utm_source=weixin&utm_medium=toutiao_android&use_new_style=1&req_id=202109182229100102120562131A12F60B&share_token=3e12cf66-c79c-41e7-8e31-d5310a2dfa9e&group_id=7009266457813090824) (last accessed November 6, 2021).

that the analysis laboratory was not aware of the product identities. A summary of the correlation between sample numbers in Exhibits I-R with Fusion product numbers is provided in the following Table:

<b>Sample No.</b>	<b>Exhibit</b>	<b>Fusion Product No.</b>
1	I	M3H3 ST095C
2	J	S6021 V253S
3	K	M3H1 ST204G
4	L	M3D ST204EV61
5	M	M3H1 ST004A
6	N	M3H1 ST204G
7	O	M3H1
8	P	M3H1 WL698
9	Q	M3D S107A
10	R	M3H3 AL1086

42. The Asserted Patents are the subject of a non-exclusive Patent License Agreement to Samsung SDI Co. Ltd. having an effective date of November 1, 2019.

43. Fusion attempted to obtain a non-exclusive license to the Asserted Patents from Samsung SDI Co. Ltd. in late-2020. However, upon information and belief Fusion was and is not a successor of all or substantially all of Samsung SDI Co. Ltd.'s photovoltaic paste business and assets. Specifically, Samsung SDI Co. Ltd. still operates in the solar panel business and retained its trademarks and trade dress associated with its photovoltaic business. *See, e.g.,* <https://www.samsung.com/semiconductor/sustainability/the-energy-that-keeps-life-going/>; *see also* <https://www.solarelectricsupply.com/solar-panels/samsung>. Further, Samsung SDI Co. Ltd., retained its equity in its photovoltaic paste business and personnel associated with its photovoltaic paste business. As such, Fusion, along with Risen Ltd. and Risen America, have no rights under the non-exclusive Patent License Agreement having an effective date of November 1, 2019.

44. Fusion knowingly and intentionally supplies conductive paste products to Risen Ltd. with instructions for their use in the preparation of solar panel products by processes that infringe at least claim 1 of the '254 patent, claim 9 of the '420 patent, claim 11 of the '979 patent, claim 11 of the '980 patent, and claim 11 of the '843 patent, and the resulting solar panel products are offered for sale, sold, imported, and distributed in the United States. Specifically, Fusion's conductive pastes, for example, under product nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086, were and are provided to Risen Ltd. with instructions for their use in the preparation of solar panel products, the manufacture of which in China and subsequent offer for sale, sale, importation into, and distribution throughout the United States by Risen Ltd. and Risen America, for example, under the trade names "Jager" and/or "Titan," infringes at least claim 1 of the '254 patent, claim 9 of the '420 patent, claim 11 of the '979 patent, claim 11 of the '980 patent, and claim 11 of the '843 patent. *See* Exhibit S (Claim Chart); *see also* Exhibit F at 149-150 (pp. 1-1-147 to 1-1-148); Exhibit G at 1-2 (stating that Risen Ltd. was Fusion's largest customer for conductive pastes in 2018-2019 and second largest customer in 2020).

45. Fusion intentionally and knowingly provides instructions to Risen Ltd. to perform crucial steps in using the supplied conductive paste products to prepare solar panel products. Specifically, upon information and belief, Fusion provides a marketing brochure to Risen Ltd. with the sale of its conductive paste products, which includes specific instructions on baking temperatures and time needed to form electrodes using PERC/TOPCon and HJT conductive pastes. *See* Exhibit T. Upon information and belief, Fusion's marketing brochure provides specific instructions to prepare and manufacture solar panel products that are subsequently offered for sale, sold, imported into, and distributed throughout the United States by Risen Ltd.

and Risen America, for example, under the trade names “Jager” and/or “Titan,” which infringes at least claim 1 of the ’254 patent, claim 9 of the ’420 patent, claim 11 of the ’979 patent, claim 11 of the ’980 patent, and claim 11 of the ’843 patent.

46. Upon information and belief, Fusion’s marketing brochure provides specific instructions on baking temperatures and time needed to form electrodes using PERC/TOPCon and HJT conductive pastes, which subsequently allows Risen Ltd. to practice the “firing the applied conductive paste” and/or “firing the semiconductor substrate” in direct infringement of at least claim 1 of the ’254 patent, claim 9 of the ’420 patent, claim 11 of the ’979 patent, claim 11 of the ’980 patent, and claim 11 of the ’843 patent.

47. Risen Ltd. and Risen America, in concert with Fusion, knowingly and intentionally manufacture solar panels, for example, that are offered for sale, sold, imported, and distributed in the United States, for example, under the trade names “Jager” and “Titan” (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products), that infringe at least claim 12 of the ’420 patent, claim 14 of the ’979 patent, claim 14 of the ’980 patent, and claim 15 of the ’843 patent. *See* Exhibit S; *see also* Exhibit F at 149-150 (pp. 1-1-147 to 1-1-148); Exhibit G at 1-2, which show that Risen Ltd. was Fusion’s largest customer for conductive pastes in 2018-2019 and second largest customer in 2020); *see also* Exhibit G at 3 (English-language translation of a portion of p. 1-1-351 of Exhibit F); *see also* <https://www.risenenergy.com/indExhibitphp?c=show&id=676> (June 30, 2021 announcement concerning a contract to sell and import Risen Ltd.’s and Risen America’s solar panels for the Mammoth renewable energy project in the state of Indiana) (last accessed November 6, 2021); *see also* <https://www.risenenergy.com/indExhibitphp?c=show&id=352> (December 21, 2018

announcement concerning an agreement to sell and import Risen Ltd.'s and Risen America's infringing solar panels for a power station in South Carolina) (last accessed November 6, 2021).

48. Risen Ltd. and Risen America are aware that the use of Fusion's conductive paste products results in the production of solar panel products, the offer for sale, sale, importation, and distribution of which in the United States and in this judicial district. Specifically, at least Risen Ltd.'s and Risen America's solar panel products offered for sale, sold, and imported in the United States under the trade names "Jager Plus" and "Titan" (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products) directly infringe at least claim 12 of the '420 patent, claim 14 of the '979 patent, claim 14 of the '980 patent, and claim 15 of the '843 patent. *See* Exhibits F, G, and S; *see also* ¶ 40.

**COUNT I**  
**(Infringement of the '254 Patent Under 35 U.S.C. § 271(g))**

49. Paragraphs 1-48 are incorporated herein as set forth above.

50. The PTO thoroughly examined the '254 patent, and it is currently in force and presumed valid. 35 U.S.C. § 282.

51. Risen Ltd. manufactures solar panels in China using conductive paste(s) supplied by Fusion with instructions for their use (e.g., conductive pastes provided under the Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086). Risen Ltd.'s and Risen America's solar panels, including those under the trade names "Jager" and "Titan" (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products) have been and are prepared by processes that infringe one or more claims of the '254 patent, and their offer for sale, sale, importation, and/or distribution in

the United States by Risen Ltd. and/or Risen America results in infringement by Defendants of one or more claims of the '254 patent under 35 U.S.C. § 271(g).

52. For example, claim 1 of the '254 patent recites “applying a conductive paste on a silicon substrate; wherein the conductive paste comprises silver particles with a specific surface of 0.20-0.60 m<sup>2</sup>/g, and wherein the conductive paste further comprises glass frit, resin binder and thinner; and firing the applied conductive paste. *See* Exhibit A.

53. On information and belief, Fusion provides a “conductive paste” (e.g., conductive pastes provided under the Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) comprising “silver particles with a specific surface of 0.20-0.60 m<sup>2</sup>/g” as well as “glass frit, resin binder and thinner” to Risen Ltd., which then applies the conductive paste to a silicon substrate and then fires the conductive paste according to instructions and under conditions specified by Fusion. *See* Exhibit S.

54. Risen Ltd.’s and Risen America’s solar panels prepared by infringing methods using conductive paste provided by Fusion and in collaboration with Fusion have been and are offered for sale, sold, imported, and used in the United States by Risen Ltd. and/or Risen America, including those under the trade names “Jager” and “Titan” (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products).

55. Risen Ltd.’s and Risen America’s solar panels are not materially changed by a subsequent process following firing of Fusion’s conductive paste and are not “trivial and nonessential components” of another product. 35 U.S.C. § 271(g). As such, Fusion, Risen Ltd. and Risen America share liability as joint infringers of at least claim 1 of the '254 patent based



on the importation, offer to sell, sale, or use of Risen Ltd.'s and Risen America's solar panel products that are prepared by the process of at least claim 1 of the '254 patent.

56. Solar Paste has been and continues to be damaged by Defendants' infringement of the '254 patent.

57. Solar Paste has suffered and continues to suffer irreparable harm with no adequate remedy at law unless this Court enjoins Defendants and their agents, servants, employees, attorneys, representatives, and all other acting on their behalf from infringing the '254 patent.

58. The balance of hardships favors an injunction and such injunction would not disserve the public interest.

59. Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, permitting Solar Paste to seek enhanced damages under 35 U.S.C. § 284. Indeed, Fusion has had knowledge of the '254 patent at least since December 2020, and such knowledge can be imputed to Risen Ltd. and Risen America which are amongst Fusion's largest customers for its infringing products.

60. Because Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, Solar Paste is entitled to seek its attorneys' fees and costs under 35 U.S.C. § 285.

61. Solar Paste seeks a judgment that Defendants infringe one or more claims of the '254 patent by the importation of solar panels from China that are manufactured by Defendants using an infringing process.

**COUNT II**  
**(Infringement of the '420 Patent Under 35 U.S.C. §§ 271(a) and (g))**

62. Paragraphs 1-48 are incorporated herein as set forth above.

63. The PTO thoroughly examined the '420 patent, and it is currently in force and presumed valid. 35 U.S.C. § 282.

64. Risen Ltd. manufactures solar panels in China using conductive paste(s) supplied by Fusion with instructions for their use (e.g., conductive pastes provided under the Product Nos. S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086). Risen Ltd.'s and Risen America's solar panels, including those under the trade names "Jager" and "Titan" (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products) have been and are prepared by processes that infringe one or more claims of the '420 patent, and offer for sale, sale, importation, and/or distribution in the United States by Risen Ltd. and/or Risen America results in infringement by Defendants of one or more claims of the '420 patent under 35 U.S.C. §§ 271(a) and/or (g).

65. Specifically, upon information and belief, Risen Ltd. and Risen America offer for sale, sell, import, and use solar panels in the United States (e.g., under the trade names "Jager" and "Titan") that are prepared using conductive pastes provided by Fusion (e.g., product nos. S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) and are "[a]n article comprising: a) a semiconductor substrate; b) one or more insulating layers on the semiconductor substrate; and c) an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-oxide wherein the lead-tellurium-oxide comprises 30 to 65 mol % of lead oxide and 35 to 70 mol % of tellurium oxide," as required by at least claim 12 of the '420 patent. *See* Exhibit S.

66. Further, upon information and belief, Risen Ltd. manufactures solar panels (including those offered for sale, sold, imported, and/or distributed in the United States under the trade names “Jager” and “Titan”) by using conductive pastes provided by Fusion (e.g., under the product nos. S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) along with instructions for using the conductive pastes to perform “[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one surface of the semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure,” using a conductive paste supplied by Fusion that “comprises: i) 85 to 99.5% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.5 to 15% by weight, based on total solids in the composition, of a lead-tellurium-lithium-titanium oxide, wherein the lead-tellurium-lithium-titanium-oxide comprises 0.1-5 wt %  $\text{Li}_2\text{O}$ ; and iii) an organic medium,” as required by at least claim 9 of the ’420 patent. Further, upon information and belief Risen Ltd.’s manufacturing process includes “(c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, forming an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate,” as required by at least claim 9 of the ’420 patent according to instructions and under conditions specified by Fusion.

67. Risen Ltd.’s and Risen America’s solar panels are not materially changed by a subsequent process following firing of Fusion’s conductive paste and are not “trivial and nonessential components” of another product. 35 U.S.C. § 271(g). As such, Fusion, Risen Ltd., and Risen America share liability as joint infringers of at least claim 9 of the ’420 patent based

on the importation, offer to sell, sale, or use of Risen Ltd.'s and Risen America's solar panel products that are prepared by the process of at least claim 9 of the '420 patent.

68. On information and belief, Risen Ltd.'s and Risen America's infringing solar panels prepared by infringing methods using conductive paste provided by Fusion and in collaboration with Fusion have been and are offered for sale, sold, imported, and used in the United States.

69. Solar Paste has been and continues to be damaged by Defendants' infringement of the '420 patent.

70. Solar Paste has suffered and continues to suffer irreparable harm with no adequate remedy at law unless this Court enjoins Defendants and their agents, servants, employees, attorneys, representatives, and all other acting on their behalf from infringing the '420 patent.

71. The balance of hardships favors an injunction and such injunction would not disserve the public interest.

72. Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, permitting Solar Paste to seek enhanced damages under 35 U.S.C. § 284. Indeed, Fusion has had knowledge of the '420 patent at least since December 2020, and such knowledge can be imputed to Risen Ltd. and Risen America which are amongst Fusion's largest customers for its infringing products. *See* Exhibits F and G.

73. Because Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, Solar Paste is entitled to seek its attorneys' fees and costs under 35 U.S.C. § 285.

74. Solar Paste seeks a judgment that Risen Ltd. and Risen America directly infringe one or more claims of the '420 patent by the offer for sale, sale, importation and/or use of its

solar panel products, and a judgment that Defendants infringe one or more claims of the '420 patent by the offer for sale, sale, importation and/or use of solar panels from China that are manufactured by Defendants' use of an infringing process.

**COUNT III**  
**(Infringement of the '979 Patent Under 35 U.S.C. §§ 271(a) and (g))**

75. Paragraphs 1-48 are incorporated herein as set forth above.

76. The PTO thoroughly examined the '979 patent, and it is currently in force and presumed valid. 35 U.S.C. § 282.

77. Risen Ltd. manufactures solar panels in China using conductive paste(s) supplied by Fusion with instructions for their use (e.g., conductive pastes provided under the product nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086). Risen Ltd.'s and Risen America's solar panels, including those under the trade names "Jager" and "Titan" (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products) have been and are prepared by processes that infringe one or more claims of the '979 patent, and offer for sale, sale, importation, and/or distribution in the United States by Risen Ltd. and/or Risen America results in infringement by Defendants of one or more claims of the '979 patent under 35 U.S.C. §§ 271(a) and/or (g).

78. Specifically, upon information and belief, Risen Ltd. and Risen America offer for sale, sell, import, and use solar panels in the United States (e.g., under the trade names "Jager" and "Titan") that are prepared using conductive pastes provided by Fusion (e.g., Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) and are "[a]n article comprising: a) a semiconductor substrate; b) one or more insulating layers on the semiconductor substrate; and c)

an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-lithium-titanium-oxide, wherein the lead-tellurium-lithium-titanium-oxide comprises 0.1-5 wt %  $\text{Li}_2\text{O}$ ,” as required by at least claim 14 of the ’979 patent. *See* Exhibit S.

79. Further, upon information and belief, Risen Ltd. manufactures solar panels (including those offered for sale, sold, imported, and/or distributed in the United States under the trade names “Jager” and “Titan”) by using conductive pastes provided by Fusion (e.g., under the Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) along with instructions for using the conductive pastes to perform “[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one surface of the semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure,” using a conductive paste supplied by Fusion that “comprises: i) 85 to 99.75% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.25 to 15% by weight, based on total solids in the composition, of a lead-tellurium-lithium-oxide, wherein the lead-tellurium-lithium-oxide comprises 0.1 to 5 wt %  $\text{Li}_2\text{O}$ ; and iii) an organic medium,” as required by at least claim 11 of the ’979 patent. Further, upon information and belief Risen Ltd.’s manufacturing process includes “(c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, wherein the organic medium of the thick-film paste is volatilized, forming an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate,” as required by at least claim 11 of the ’979 patent according to instructions and under conditions specified by Fusion. *See* Exhibit S.

80. Risen Ltd.'s and Risen America's solar panels are not materially changed by a subsequent process following firing of Fusion's conductive paste and are not "trivial and nonessential components" of another product. 35 U.S.C. § 271(g). As such, Fusion, Risen Ltd., and Risen America share liability as joint infringers of at least claim 11 of the '979 patent based on the importation, offer to sell, sale, or use of Risen Ltd.'s and Risen America's solar panel products that are prepared by the process of at least claim 11 of the '979 patent.

81. On information and belief, Risen Ltd.'s and Risen America's infringing solar panels prepared by infringing methods using conductive paste provided by Fusion and in collaboration with Fusion have been and are offered for sale, sold, imported, and used in the United States.

82. Solar Paste has been and continues to be damaged by Defendants' infringement of the '979 patent.

83. Solar Paste has suffered and continues to suffer irreparable harm with no adequate remedy at law unless this Court enjoins Defendants and their agents, servants, employees, attorneys, representatives, and all other acting on their behalf from infringing the '979 patent.

84. The balance of hardships favors an injunction and such injunction would not disserve the public interest.

85. Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, permitting Solar Paste to seek enhanced damages under 35 U.S.C. § 284. Indeed, Fusion has had knowledge of the '979 patent at least since December 2020, and such knowledge can be imputed to Risen Ltd. and Risen America which are amongst Fusion's largest customers for its infringing products.

86. Because Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, Solar Paste is entitled to seek its attorneys' fees and costs under 35 U.S.C. § 285.

87. Solar Paste seeks a judgment that Risen Ltd. and Risen America directly infringe one or more claims of the '979 patent by the offer for sale, sale, importation and/or use of its solar panel products, and a judgment that Defendants infringe one or more claims of the '979 patent by the offer for sale, sale, importation and/or use of solar panels from China that are manufactured by Defendants' use of an infringing process.

**COUNT IV**  
**(Infringement of the '980 Patent Under 35 U.S.C. §§ 271(a) and (g))**

88. Paragraphs 1-48 are incorporated herein as set forth above.

89. The PTO thoroughly examined the '980 patent, and it is currently in force and presumed valid. 35 U.S.C. § 282.

90. Risen Ltd. manufactures solar panels in China using conductive paste(s) supplied by Fusion with instructions for their use (e.g., conductive pastes provided under the product nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086). Risen Ltd.'s and Risen America's solar panels, including those under the trade names "Jager" and "Titan" (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products) have been and are prepared by processes that infringe one or more claims of the '980 patent, and offer for sale, sale, importation, and/or distribution in the United States by Risen Ltd. and/or Risen America results in infringement by Defendants of one or more claims of the '980 patent under 35 U.S.C. §§ 271(a) and/or (g).



91. Specifically, upon information and belief, Risen Ltd. and Risen America offer for sale, sell, import, and use solar panels in the United States (e.g., under the trade names “Jager” and “Titan”) that are prepared using conductive pastes provided by Fusion (e.g., Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) and are “[a]n article comprising: a) a semiconductor substrate; b) one or more insulating layers on the semiconductor substrate; and c) an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-lithium-oxide, wherein the lead-tellurium-lithium-oxide comprises 0.1 to 5 wt %  $\text{Li}_2\text{O}$ ,” as required by at least claim 14 of the ’980 patent.

92. Further, upon information and belief, Risen Ltd. manufactures solar panels (including those offered for sale, sold, imported, and/or distributed in the United States under the trade names “Jager” and “Titan”) by using conductive pastes provided by Fusion (e.g., under the Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) along with instructions for using the conductive pastes to perform “[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one surface of the semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure,” using a conductive paste supplied by Fusion that “comprises: i) 85 to 99.5% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.5 to 15% by weight, based on total solids in the composition, of a lead-tellurium-lithium-titanium oxide, wherein the lead-tellurium-lithium-titanium-oxide comprises 0.1-5 wt %  $\text{Li}_2\text{O}$ ; and iii) an organic medium,” as

required by at least claim 11 of the '980 patent. Further, upon information and belief Risen Ltd.'s manufacturing process includes "(c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, forming an electrode in contact with the one or more insulating layers and in electrical contact with the semiconductor substrate," as required by at least claim 11 of the '980 patent according to instructions and under conditions specified by Fusion. *See* Exhibit S.

93. Risen Ltd.'s and Risen America's solar panels are not materially changed by a subsequent process following firing of Fusion's conductive paste and are not "trivial and nonessential components" of another product. 35 U.S.C. § 271(g). As such, Fusion, Risen Ltd., and Risen America share liability as joint infringers of at least claim 11 of the '980 patent based on the importation, offer to sell, sale, or use of Risen Ltd.'s and Risen America's solar panel products that are prepared by the process of at least claim 11 of the '980 patent.

94. On information and belief, Risen Ltd.'s and Risen America's infringing solar panels prepared by infringing methods using conductive paste provided by Fusion and in collaboration with Fusion have been and are offered for sale, sold, imported, and used in the United States.

95. Solar Paste has been and continues to be damaged by Defendants' infringement of the '980 patent.

96. Solar Paste has suffered and continues to suffer irreparable harm with no adequate remedy at law unless this Court enjoins Defendants and their agents, servants, employees, attorneys, representatives, and all other acting on their behalf from infringing the '980 patent.

97. The balance of hardships favors an injunction and such injunction would not disserve the public interest.

98. Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, permitting Solar Paste to seek enhanced damages under 35 U.S.C. § 284. Indeed, Fusion has had knowledge of the '980 patent at least since December 2020, and such knowledge can be imputed to Risen Ltd. and Risen America which are amongst Fusion's largest customers for its infringing products.

99. Because Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, Solar Paste is entitled to seek its attorneys' fees and costs under 35 U.S.C. § 285.

100. Solar Paste seeks a judgment that Risen Ltd. and Risen America directly infringe one or more claims of the '980 patent by the offer for sale, sale, importation and/or use of their solar panel products, and a judgment that Defendants infringe one or more claims of the '980 patent by the offer for sale, sale, importation and/or use of solar panels from China that are manufactured by Defendants' use of an infringing process.

**COUNT V**  
**(Infringement of the '843 Patent Under 35 U.S.C. §§ 271(a) and (g))**

101. Paragraphs 1-48 are incorporated herein as set forth above.

102. The PTO thoroughly examined the '843 patent, and it is currently in force and presumed valid. 35 U.S.C. § 282.

103. Risen Ltd. manufactures solar panels in China using conductive paste(s) supplied by Fusion with instructions for their use (e.g., conductive pastes provided under the product nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086). Risen Ltd.'s and Risen America's solar panels, including those under the trade names "Jager" and "Titan" (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40

monocrystalline solar panel products) have been and are prepared by processes that infringe one or more claims of the '843 patent, and offer for sale, sale, importation, and/or distribution in the United States by Risen Ltd. and/or Risen America results in infringement by Defendants of one or more claims of the '843 patent under 35 U.S.C. §§ 271(a) and/or (g).

104. Specifically, upon information and belief, Risen Ltd. and Risen America offer for sale, sell, import, and use solar panels in the United States (e.g., under the trade names “Jager” and “Titan”) that are prepared using conductive pastes provided by Fusion (e.g., under the Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) and are “[a]n article comprising: a) a semiconductor substrate; b) an insulating layer on the semiconductor substrate; and c) an electrode in contact with the insulating layer and in electrical contact with the semiconductor substrate, the electrode comprising an electrically conductive metal and lead-tellurium-boron-oxide, wherein the lead-tellurium-boron-oxide comprises 0.25 to 5 wt %  $B_2O_3$ ,” as required by at least claim 15 of the '843 patent. *See* Exhibit S.

105. Further, upon information and belief, Risen Ltd. manufactures solar panels (including those offered for sale, sold, imported, and/or distributed in the United States under the trade names “Jager” and “Titan”) by using conductive pastes provided by Fusion (e.g., under the Product Nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) along with instructions for using the conductive pastes to perform “[a] process comprising: (a) providing a semiconductor substrate comprising one or more insulating films deposited onto at least one surface of the semiconductor substrate; (b) applying a thick-film paste composition onto at least a portion of the insulating film to form a layered structure,” using a conductive paste supplied by

Fusion that “comprises: i) 85 to 99.5% by weight of an electrically conductive metal or derivative thereof, based on total solids in the composition; ii) 0.5 to 15% by weight, based on total solids in the composition, of a lead-tellurium-boron-oxide, wherein the lead-tellurium-boron-oxide comprises 0.25 to 5 wt %  $B_2O_3$ ; and iii) an organic medium,” as required by at least claim 11 of the ’843 patent. Further, upon information and belief Risen Ltd.’s manufacturing process includes “(c) firing the semiconductor substrate, one or more insulating films, and thick-film paste, to form an electrode in contact with the insulating layer and in electrical contact with the semiconductor substrate,” as required by at least claim 11 of the ’843 patent according to instructions and under conditions specified by Fusion. *See* Exhibit S.

106. Risen Ltd.’s and Risen America’s solar panels are not materially changed by a subsequent process following firing of Fusion’s conductive paste and are not “trivial and nonessential components” of another product. 35 U.S.C. § 271(g). As such, Fusion, Risen Ltd., and Risen America share liability as joint infringers of at least claim 11 of the ’843 patent based on the importation, offer to sell, sale, or use of Risen Ltd.’s and Risen America’s solar panel products that are prepared by the process of at least claim 11 of the ’843 patent.

107. On information and belief, Risen Ltd.’s and Risen America’s infringing solar panels prepared by infringing methods using conductive paste provided by Fusion and in collaboration with Fusion have been and are offered for sale, sold, imported, and used in the United States.

108. Solar Paste has been and continues to be damaged by Defendants’ infringement of the ’843 patent.

109. Solar Paste has suffered and continues to suffer irreparable harm with no adequate remedy at law unless this Court enjoins Defendants and their agents, servants, employees, attorneys, representatives, and all other acting on their behalf from infringing the '843 patent.

110. The balance of hardships favors an injunction and such injunction would not disserve the public interest.

111. Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, permitting Solar Paste to seek enhanced damages under 35 U.S.C. § 284. Indeed, Fusion has had knowledge of the '843 patent at least since December 2020, and such knowledge can be imputed to Risen Ltd. and Risen America which are amongst Fusion's largest customers for its infringing products. *See* Exhibits F and G.

112. Because Defendants' infringement has been and continues to be deliberate, willful, and unlicensed, Solar Paste is entitled to seek its attorneys' fees and costs under 35 U.S.C. § 285.

113. Solar Paste seeks a judgment that Risen Ltd. and Risen America directly infringe one or more claims of the '843 patent by the offer for sale, sale, importation and/or use of their solar panel products, and a judgment that Defendants infringe one or more claims of the '843 patent by the offer for sale, sale, importation and/or use of solar panels from China that are manufactured by Defendants' use of an infringing process.

**COUNT VI**  
**(Infringement of the '420, '979, '980, and '843 Patents Under 35 U.S.C. § 271(b))**

114. Paragraphs 1-48 are incorporated herein as set forth above.

115. The PTO thoroughly examined the '420, '979, '980, and '843 patents, and they are currently in force and presumed valid. 35 U.S.C. § 282.

116. Upon information and belief, Fusion knows of the '420, '979, '980, and '843 patents, as Fusion regularly surveys the patent literature for relevant patents and have encountered the Asserted Patents. Fusion attempted to obtain a non-exclusive license to the Asserted Patents from Samsung SDI Co. Ltd. in late-2020. Additionally, Fusion has been aware of the Asserted Patents since the time of filing this complaint in this Action, and has further made pronouncements through the press concerning their awareness of the complaint.

117. Fusion has been and are actively inducing others, including Risen Ltd. and Risen America, to infringe at least claim 12 of the '420 patent, claim 14 of the '979 patent, claim 14 of the '980 patent, and claim 14 of the '843 patent, in this District and elsewhere in the United States by supplying conductive paste(s) with instructions for their use (e.g., conductive pastes provided under the product nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) in the manufacture of solar panels.

118. Fusion intentionally and knowingly provides instructions for the use of its conductive pastes to Risen Ltd. for the manufacture of solar panels that are offered for sale, sold, imported, and distributed in the United States, for example, under the trade names "Jager" and "Titan" (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products). Upon information and belief, Fusion intentionally and knowingly provides instructions to Risen Ltd. on the necessary baking temperatures and times to form electrodes using the supplied conductive pastes, which actively encourages and induces Risen Ltd. and Risen America to directly infringe the '420, '979, '980, and '843 patents. *See* Exhibit T.

119. Fusion possesses specific intent to encourage Risen Ltd. and Risen America to directly infringe the '420, '979, '980, and '843 patents by providing instructions for the use of its conductive pastes for the manufacture of solar panels that are offered for sale, sold, imported, and distributed in the United States.

120. Fusion knew or should have known that its actions would induce Risen Ltd. and Risen America to make, use, sell, offer to sell and/or import the solar panel products into the United States manufactured using Fusion's conductive pastes.

121. On information and belief, Risen Ltd.'s and Risen America's infringing solar panels are prepared by infringing methods using conductive pastes and instructions provided by Fusion and in collaboration with Fusion, which have been and are offered for sale, sold, imported, and used in the United States.

122. As such, Fusion is liable for induced infringement of one or more claims of the '420, '979, '980, and '843 patents under 35 U.S.C. § 271(b).

123. Solar Paste has been and continues to be damaged by Fusion's induced infringement of the '420, '979, '980, and '843 patents.

124. Solar Paste has suffered and continues to suffer irreparable harm with no adequate remedy at law unless this Court enjoins Fusion and their agents, servants, employees, attorneys, representatives, and all other acting on their behalf from inducing infringing the '420, '979, '980, and '843 patents.

125. The balance of hardships favors an injunction and such injunction would not disserve the public interest.

126. Fusion's infringement has been and continues to be deliberate, willful, and unlicensed, permitting Solar Paste to seek enhanced damages under 35 U.S.C. § 284. Indeed,



Fusion has had knowledge of the '420, '979, '980, and '843 patents at least since December 2020. *See* Exhibits F and G.

127. Because Fusion's infringement has been and continues to be deliberate, willful, and unlicensed, Solar Paste is entitled to seek its attorneys' fees and costs under 35 U.S.C. § 285.

128. Solar Paste seeks a judgment that Fusion induces infringement of one or more claims of the '420, '979, '980, and '843 patents by actively encouraging Risen Ltd. and Risen America to infringe one or more claims of the '420, '979, '980, and '843 patents through offering for sale, selling, importing and/or using the solar panels in the United States.

#### **COUNT VII**

#### **(Infringement of the '420, '979, '980, and '843 Patents Under 35 U.S.C. § 271(c))**

129. Paragraphs 1-48 are incorporated herein as set forth above.

130. The PTO thoroughly examined the '420, '979, '980, and '843 patents, and they are currently in force and presumed valid. 35 U.S.C. § 282.

131. Upon information and belief, Fusion knows of the '420, '979, '980, and '843 patents, as Fusion regularly surveys the patent literature for relevant patents and have encountered the Asserted Patents. Fusion attempted to obtain a non-exclusive license to the Asserted Patents from Samsung SDI Co. Ltd. in late-2020. Additionally, Fusion has been aware of the Asserted Patents since the time of filing this complaint in this Action, and has further made pronouncements through the press concerning their awareness of the complaint.

132. Upon information and belief, Fusion has been, and currently is, indirectly infringing at least claim 12 of the '420 patent, claim 14 of the '979 patent, claim 14 of the '980 patent, and claim 14 of the '843 patent, in this District and elsewhere in the United States by actively contributing to Risen Ltd. and Risen America's direct infringement within the United States.

133. Fusion intentionally and knowingly provides instructions for the use of its conductive pastes (e.g., conductive pastes provided under the product nos. M3H3 ST095C, S6021 V253S, M3H1 ST204G, M3D ST204EV61, M3H1 ST004A, M3H1 ST204G, M3H1, M3H1 WL698, and M3H3 AL1086) to Risen Ltd. for the manufacture of solar panels that are offered for sale, sold, imported, and distributed in the United States, for example, under the trade names “Jager” and “Titan” (e.g., Titan 110 High Performance, Titan 120 High Performance Titan 150 High Performance, and Titan 40 monocrystalline solar panel products). Upon information and belief, Fusion intentionally and knowingly provides instructions to Risen Ltd. on the necessary baking temperatures and times to form electrodes using the supplied conductive pastes, which actively encourages and induces Risen Ltd. and Risen America to directly infringe the ’420, ’979, ’980, and ’843 patents. *See* Exhibit T.

134. Fusion knew or should have known that its actions would contribute to Risen Ltd. and Risen America directly infringing the Asserted Patents by making, using, selling, offering to sell and/or importing the solar panel products into the United States manufactured using Fusion’s conductive pastes.

135. On information and belief, Risen Ltd.’s and Risen America’s infringing solar panels are prepared by infringing methods using conductive pastes and instructions provided by Fusion and in collaboration with Fusion, which have been and are offered for sale, sold, imported, and used in the United States.

136. Fusion’s actions, namely providing instructions, its conductive pastes to Risen Ltd., and Fusion’s knowledge of the ’420, ’979, ’980, and ’843 patents, show that Fusion sells or offers to sell its conductive pastes knowing it is especially made or especially adapted for

practicing the invention of the '420, '979, '980, and '843 patents and is not a staple article or commodity of commerce suitable for substantial non-infringing use.

137. As such, Fusion is liable for contributory infringement of one or more claims of the '420, '979, '980, and '843 patents under 35 U.S.C. § 271(c).

138. Solar Paste has been and continues to be damaged by Fusion's contributory infringement of the '420, '979, '980, and '843 patents.

139. Solar Paste has suffered and continues to suffer irreparable harm with no adequate remedy at law unless this Court enjoins Fusion and their agents, servants, employees, attorneys, representatives, and all other acting on their behalf from contributorily infringing the '420, '979, '980, and '843 patents.

140. The balance of hardships favors an injunction and such injunction would not disserve the public interest.

141. Fusion's infringement has been and continues to be deliberate, willful, and unlicensed, permitting Solar Paste to seek enhanced damages under 35 U.S.C. § 284. Indeed, Fusion has had knowledge of the '420, '979, '980, and '843 patents at least since December 2020. *See* Exhibits F and G.

142. Because Fusion's infringement has been and continues to be deliberate, willful, and unlicensed, Solar Paste is entitled to seek its attorneys' fees and costs under 35 U.S.C. § 285.

143. Solar Paste seeks a judgment that Fusion contributorily infringes one or more claims of the '420, '979, '980, and '843 patents by contributing to Risen Ltd. and Risen America directly infringing one or more claims of the '420, '979, '980, and '843 patents through offering for sale, selling, importing and/or using the solar panels in the United States.

**JURY TRIAL DEMAND**

144. Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiffs hereby demand a trial by jury of all issues so triable.

**PRAYER FOR RELIEF**

WHEREFORE, Solar Paste respectfully requests the following relief:

- A. A Judgment be entered that Defendants have infringed and are infringing the Asserted Patents;
- B. That the court enter a permanent injunction enjoining Defendants, their officers, employees, agents, and all others acting in concert with them or participating with them from further acts that infringe the Asserted Patents;
- C. That Defendants be ordered by this Court to account for and pay to Solar Paste damages adequate to compensate Solar Paste for Defendants' infringement of the Asserted Patents;
- D. That the Court treble the damages for Defendants' willful infringement of the Asserted Patents;
- E. That the Court award pre-judgment interest on the damages;
- F. A Judgment be entered that this case is exceptional, and that Plaintiffs are entitled to their reasonable attorneys' fees pursuant to 35 U.S.C. § 285;
- G. Costs and expenses in this action; and
- H. Such other and further relief as the Court may deem just and proper.

Respectfully submitted,

Date: August 19, 2022

By: /s/ Kaan Ekiner

Kaan Ekiner (#5607)

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