Defendants.

27

3 4

5

6

7 8

9

10

11 12

13

14 15

16 17

18

19 20

21

22

23

24

25 26

27

28

Plaintiff Shoals Technologies Group, LLC ("Shoals") hereby makes this Complaint against Hikam America, Inc. ("Hikam"), Hikam Electrónica de México, S.A. de C.V. ("Hikam Electrónica"), Hikam Tecnologia de Sinaloa ("Hikam Tecnologia"), Hewtech Philippines Corp. ("Hewtech Philippines"), Hewtech Philippines Electronics Corp. ("Hewtech Philippines") Electronics"), and Hewtech (Shenzhen) Electronics Co., Ltd. ("Hewtech Shenzhen") (collectively the "Hikam Defendants") as follows:

NATURE OF ACTION

1. This is a patent infringement action. Shoals seeks an injunction, damages and other relief for the Hikam Defendants' infringement of Shoals' United States patents relating to innovative connectors for solar panel installations.

PARTIES

- 2. Shoals is a limited liability company duly organized and existing under the laws of Tennessee with its principal place of business located at 1400 Shoals Way, Portland, Tennessee 37148.
- 3. Shoals is the owner by assignment of U.S. Patent No. 10,553,739 (the "'739 Patent").
- 4. On information and belief, Hikam is a California corporation, specializing in the business of photovoltaic cable solutions. Its headquarters and principal place of business is located at 3521 Main Street, # 501, Chula Vista, California 91911.
- 5. On information and belief, Hikam Electrónica is a company organized and existing under the laws of Mexico. Hikam Electrónica is a manufacturer of Hikam's products, and operates a factory in Mexicali, Baja California, Mexico. Hikam Electrónica is in the business of the manufacture, import and export of electrical and electronic cables, including products that infringe the '739 Patent. Its principal place of business is located at Cerrada a, San Luis Río Colorado - Mexicali Kilómetro 10.5, Las Californias, 21394 Mexicali, Baja California, Mexico.
- On information and belief, Hikam Tecnologia is a company organized and 6. existing under the laws of Mexico. Hikam Tecnologia is in the business of the manufacture,

• ^

- import and export of electrical and electronic cables, including products that infringe the '739 Patent. Its factory and principal place of business is located at 67638, Guasave, Sinaloa, Mexico.
- 7. On information and belief, Hewtech Philippines is a company organized and existing under the laws of the Republic of the Philippines. Hewtech Philippines manufactures and/or exports to the United States products that infringe the '739 Patent. Its principal place of business is located at Lot C2-9, Carmelray Industrial Park II, Calamba, 4027 Metro Manila, Philippines.
- 8. On information and belief, Hewtech Philippines Electronics is a company organized and existing under the laws of the Republic of the Philippines. Hewtech Philippines Electronics is a manufacturing company specializing in assembly, sub-assembly of various types of cables, power supply cords, tubes and wire harness, including products that infringe the '739 Patent, and exports those products to the United States. Its principal place of business is located at TECO Industrial Park, Ninoy Aquino Highway, Bundagul Mabalacat, 2010 Metro Manila, , Philippines.
- 9. On information and belief, Hewtech Shenzhen is a company organized and existing under the laws of the People's Republic of China. Hewtech Shenzhen manufactures and/or exports to the United States products that infringe the '739 Patent. Its principal place of business is located at Building 5 and Building 6, 172 Hengpailing Village, Wutongshan, Luohu District, Shenzhen, Guangdon, 518114, China.

JURISDICTION AND VENUE

- 10. This action arises under the U.S. Patent Act, codified at 35 U.S.C. § 1 et seq., and in particular, but not limited to, 35 U.S.C. §§ 271, 281, 283, 284 and 285.
- 11. This Court has original jurisdiction over the subject matter of this action under 28 U.S.C. §§ 1331 and 1338(a) because the claims arise under the patent laws of the United States.
- 12. This Court has personal jurisdiction over Hikam in this action because it is domiciled in the State of California.

- 13. On information and belief, this Court has personal jurisdiction over Hikam Electrónica because it has availed itself of the rights and benefits of the laws of the State of California, the claims in this Complaint arise out of or relate to Hikam Electrónica's activities within and/or directed to the State of California, and it has systematic and continuous business contacts with the State of California. Specifically, Hikam Electrónica is an affiliate of Hikam, which is domiciled in this forum, and regularly manufactures and exports products that infringe the '739 Patent to this forum. Hikam Electrónica has purposefully and voluntarily placed the Accused Products into the stream of commerce with the intention and expectation that they will be purchased and used by consumers, including in the Southern District of California.
- 14. On information and belief, this Court has personal jurisdiction over Hikam Tecnologia because it has availed itself of the rights and benefits of the laws of the State of California, the claims in this Complaint arise out of or relate to Hikam Tecnologia's activities within and/or directed to the State of California, and it has systematic and continuous business contacts with the State of California. Specifically, Hikam Tecnologia is an affiliate of Hikam, which is domiciled in this forum, and regularly manufactures and exports products that infringe the '739 Patent to this forum. Hikam Tecnologia has purposefully and voluntarily placed the Accused Products into the stream of commerce with the intention and expectation that they will be purchased and used by consumers, including in the Southern District of California.
- 15. On information and belief, this Court has personal jurisdiction over Hewtech Philippines because it has availed itself of the rights and benefits of the laws of the State of California, the claims in this Complaint arise out of or relate to Hewtech Philippines' activities within and/or directed to the State of California, and it has systematic and continuous business contacts with the State of California. Specifically, Hewtech Philippines is an affiliate of Hikam, which is domiciled in this forum, and regularly manufactures and exports products that infringe the '739 Patent to this forum. Hewtech Philippines has purposefully and voluntarily placed the Accused Products into the stream of commerce with the intention and expectation that they will be purchased and used by consumers, including in the Southern District of California.

- 16. On information and belief, this Court has personal jurisdiction over Hewtech Philippines Electronics because it has availed itself of the rights and benefits of the laws of the State of California, the claims in this Complaint arise out of or relate to Hewtech Electronics' activities within and/or directed to the State of California, and it has systematic and continuous business contacts with the State of California. Specifically, Hewtech Philippines Electronics is an affiliate of Hikam, which is domiciled in this forum, and regularly manufactures and exports products that infringe the '739 Patent to this forum. Hewtech Philippines Electronics has purposefully and voluntarily placed the Accused Products into the stream of commerce with the intention and expectation that they will be purchased and used by consumers, including in the Southern District of California.
- 17. On information and belief, this Court has personal jurisdiction over Hewtech Shenzhen because it has availed itself of the rights and benefits of the laws of the State of California, the claims in this Complaint arise out of or relate to Hewtech Shenzhen's activities within and/or directed to the State of California, and it has systematic and continuous business contacts with the State of California. Specifically, Hewtech Shenzhen is an affiliate of Hikam, which is domiciled in this forum, and regularly manufactures and exports products that infringe the '739 Patent to this forum. Hewtech Shenzhen has purposefully and voluntarily placed the Accused Products into the stream of commerce with the intention and expectation that they will be purchased and used by consumers, including in the Southern District of California.
- 18. Venue is proper in this Court under 28 U.S.C. §§ 1391 and 1400(b). Hikam resides in this District as it maintains physical offices with employees in this District and is registered to do business in California. Hikam, Hikam Electrónica, Hikam Tecnologia, Hewtech Philippines, Hewtech Electronics, and Hewtech Shenzhen have also transacted business in this District and have committed acts of infringement in this District by, among other things, making, using, offering to sell, selling, and/or importing products that infringe the '739 Patent. Hikam Electrónica and Hikam Tecnologia are Mexican companies, Hewtech Philippines and Hewtech Philippines Electronics are Philippines companies, and Hewtech Shenzhen is a Chinese company, so venue is proper as to them in any judicial district in the United States.

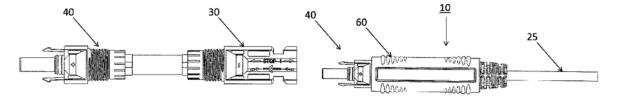
19. On information and belief, Hikam has regular and established places of business in this District. For example, Hikam maintains its principal place of business at 3521 Main Street, # 501, Chula Vista, California 91911.

FACTUAL BACKGROUND

- 20. Shoals was founded in 1996 by Dean Solon, the inventor of the '739 Patent and the founder and former President and CEO of Shoals. Shoals is a leading provider of electrical balance of system, or EBOS, solutions for solar energy projects, primarily in the United States. EBOS encompasses components that are necessary to carry electric current produced by solar panels to an inverter and ultimately to a power grid. All of Shoals' products are manufactured in plants in Tennessee, Alabama, and California. Shoals' products are sold principally to engineering, procurement and construction firms that build solar energy projects. Shoals has also begun to offer its EBOS products in the market for electric vehicle charging systems.
- 21. Shoals is built on a foundation of American ingenuity, with manufacturing facilities in Portland, Tennessee, Muscle Shoals, Alabama, and Poway, California. Since its founding, Shoals has had an unwavering commitment to quality, reliability, and safety in the products it develops and delivers for its customers. As a tier-1 supplier to the solar, energy storage, and eMobility sectors, Shoals' commitment to sustainability and responsible business practices is foundational to the company.
- 22. Shoals is a technological leader in the field of EBOS solutions and one of the industry's top innovators. Shoals maintains its position as one of the top innovators in the industry by making substantial investments in the research, development, and acquisition of cutting-edge technologies. Shoals is constantly innovating to find new ways to make EBOS safer and more reliable, while also less expensive and easier to install and maintain. Shoals' innovations, including in particular the inventions claimed in the '739 Patent, also increase efficiency by reducing energy loss in solar installations. Many of Shoals' technological innovations, products, and concepts are protected by Shoals' valuable intellectual-property portfolio, which includes more than 20 issued United States patents and many pending patent applications. Shoals' BLA (Big Lead Assembly) product won first prize in the Balance of

Systems category in *PV Magazine*'s 2019 awards (https://www.pv-magazine.com/magazine-archive/pv-magazine-annual-awards/) (*PV Magazine* is the leading global solar photovoltaic ("PV") trade magazine).

23. The '739 Patent is directed to a photovoltaic connector assembly that has an integral in-line fuse, and is double molded to provide electrical insulation, UV protection, strain relief, impact resistance and thermal stability. The innovative undermold and overmold structure, in particular, surrounds and seals the fuse to provide environmental protection reducing the risk of moisture infiltration. The assembly can be integrated with, or added to, a wiring harness for a photovoltaic installation, thereby providing one fuse per solar panel. The assembly may include zero, one, or two connectors that are male, female, or one of each. The invention's integration of a fuse has the advantage of moving circuit protection from a combiner box to the wiring harness, thereby reducing the number of combiner boxes required in a solar field and permitting a more simplified component configuration. One embodiment from the '739 Patent is illustrated below:



24. Shoals products that employ the technology protected by the '739 Patent include, but are not limited to, the Shoals' Big Lead Assembly ("BLA"), BLA parallel harness, branch connectors, and First Solar interconnect system.

A. The '739 Patent

25. On February 4, 2020, the United States Patent & Trademark Office duly and lawfully issued the '739 Patent, entitled "Photovoltaic In Line Fuse Connector Assembly Having An Integral Fuse," to inventor Dean Solon. The '739 Patent issued from U.S. Application No. 14/295,132, filed on June 3, 2014, and claims priority to U.S. Provisional Patent Application No. 61/830,284, filed on June 3, 2013. The '739 Patent expires on December 29, 2034. A true and correct copy of the '739 Patent is attached hereto as **Exhibit 1.**

26. Shoals is the assignee of all rights, title, and interest in and to the '739 Patent with full rights to enforce the '739 Patent and sue to recover for past, present, and future damages.

В. The Hikam Defendants' Infringing Activities and Product

- 27. On information and belief, the Hikam Defendants use, sell, and/or offer for sale wire harnesses and in-line fuse kits including, but not limited to, the Hikam Wire Harness and the Hikam Replacement In-Line Fuse (RILF) Kit in the United States and in this District (the "Accused Products"). In Hikam's product catalog posted on its website, Hikam touts its "three" decades of experience as a turnkey manufacturer of wiring harnesses, and 6 years of specialized experience with Solar Harness Assemblies."
- On information and belief, the Accused Products are manufactured on behalf of 28. Hikam by its affiliated manufacturing facilities Hikam Electrónica and Hikam Tecnologia in México, Hewtech Shenzhen China, and Hewtech Philippines and Hewtech Philippines Electronics in the Philippines.
- 29. The Hikam Defendants' products, including at least, the Accused Products, infringe one or more claims of the '739 Patent.
- 30. The Accused Products include, inter alia, an in-line fuse structure with an outer surface, a first end, second end, middle section, overmold and undermold, as well as a photovoltaic connector. The following images show these components within the Hikam Wire Harness and the Hikam Replacement In-Line Fuse (RILF) Kit:

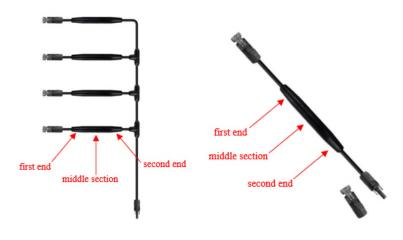
23

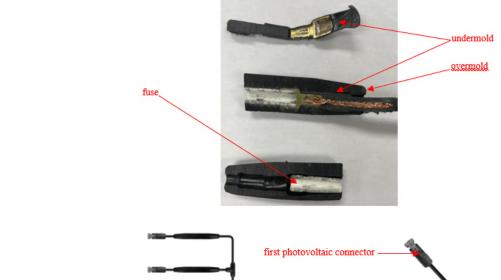
24

25

26

27 28 ¹ Shoals reserves the right to identify additional categories of products if it learns of such products through discovery or other means.







- 31. Shoals has lost sales of its competing products due to the Hikam Defendants' infringement of the '739 Patent.
- 32. The Hikam Defendants have been on notice of their infringement of the '739 Patent since at least the date of the filing of this Complaint.
- 33. Shoals has satisfied the statutory requirement to mark its products in accordance with 35 U.S.C. § 287.

FIRST CLAIM FOR RELIEF

2

3

(Infringement of U.S. Patent No. 10,553,739)

4

5

6

7 8

9

10 11

12

13

14 15

16 17

18

19

20 21

22

23

24 25

26

27

28

34. Shoals incorporates by reference the allegations contained in the foregoing paragraphs.

- 35. The Hikam Defendants infringe the '739 Patent, literally or under the doctrine of equivalents, in violation of at least 35 U.S.C. § 271(a) by making, using, selling, offering for sale and/or importing into the United States products, such as the Accused Products, that incorporate an in-line fuse assembly for solar installation that infringe one or more claims of the '739 Patent, including at least claims 1, 10, and 15.
- 36. Upon information and belief, the Hikam Defendants infringe the '739 Patent, literally or under the doctrine of equivalents, in violation of at least 35 U.S.C. § 271(b) by actively and knowingly inducing others to make, use, sell, offer for sale, or import into the United States products, such as the Accused Products, that incorporate an in-line fuse assembly for solar installation that infringe one or more claims of the '739 Patent, including at least claims 1, 10, and 15.
- 37. Upon information and belief, the Hikam Defendants infringe the '739 Patent, literally or under the doctrine of equivalents, in violation of at least 35 U.S.C. § 271(c) by contributing to the infringement of the '739 Patent by actively encouraging, promoting, distributing, providing instructions for, and supporting the assembly and use of products such as the Accused Products, that incorporate an in-line fuse assembly for solar installation that infringe one or more claims of the '739 Patent, including at least claims 1, 10, and 15...
- 38. A claim chart showing how the Hikam Wire Harness meets each of the elements of claims 1, 10, and 15 of the '739 Patent is attached hereto as **Exhibit 2.**
- 39. As shown in Exhibit 2, the Hikam Wire Harness meets all elements of claim 1 of the '739 Patent as follows:
 - a. The Hikam Wire Harness includes an in-line photovoltaic fuse within a segment of the wire harness. The fuse structure has a solid outer surface that includes a

first end, a second end and a middle section. The outer surface of the fuse defines an outline.

- b. The fuse structure of the Hikam Wire Harness has an undermold surrounding and sealing the fuse, which defines an outer surface that is substantially parallel relative to the outline of the solid outer surface of the fuse.
- c. The fuse structure of the Hikam Wire Harness includes an overmold surrounding the undermold. The undermold and the overmold are each constructed of a single unit and of dissimilar materials, and the outline of the overmold is substantially parallel relative to the outline of the undermold.
- d. The fuse structure of the Hikam Wire Harness includes a first photovoltaic connector engaged with the first end of the fuse (via a cable). The undermold and overmold structures of the assembly provide electrical insulation surrounding the fuse. The Hikam Wire Harness is certified as a UL 4703 PV Wire. The UL 4703 standards cover *insulated* photovoltaic wires.
- 40. As shown in Exhibit 2, the Hikam Wire Harness meets all elements of claim 10 of the '739 Patent as follows:
 - a. The Hikam Wire Harness consists of a trunk wire with a plurality of branch wires extending in pairs. The branch wires and trunk wire form angles having vertices of approximately 90 degrees.
 - b. The Hikam Wire Harness consists of a plurality of fuse assemblies engaged with the branch wires. There is one fuse assembly per branch wire.
 - c. The Hikam Wire Harness includes an in-line photovoltaic fuse within a segment of the wire harness. The fuse structure has a solid outer surface that includes a first end, a second end and a middle section. The outer surface of the fuse defines an outline.
 - d. The fuse structure of the Hikam Wire Harness has an undermold surrounding and sealing the fuse, which defines an outer surface that is substantially parallel relative to the outline of the solid outer surface of the fuse.

- e. The fuse structure of the Hikam Wire Harness includes an overmold surrounding the undermold. The undermold and the overmold are each constructed of a single unit and of dissimilar materials, and the outline of the overmold is substantially parallel relative to the outline of the undermold.
- f. The fuse structure of the Hikam Wire Harness includes a first photovoltaic connector engaged with the first end of the fuse (via a cable). The undermold and overmold structures of the assembly provide electrical insulation surrounding the fuse. The Hikam Wire Harness is certified as a UL 4703 PV Wire. The UL 4703 standards cover *insulated* photovoltaic wires.
- 41. As shown in Exhibit 2, the Hikam Wire Harness meets all elements of claim 15 of the '739 Patent as follows:
 - a. The trunk of the Hikam Wire Harness is designed, intended and used to be engaged with a combiner box, which lacks fuses and circuit breakers.
 - b. Hikam Wire Harnesses are aggregated as "strings in parallel." Each terminal branch of the Wire Harness has one in-line fuse assembly.
 - c. The Hikam Wire Harness includes an in-line photovoltaic fuse within a segment of the wire harness. The fuse structure has a solid outer surface that includes a first end, a second end and a middle section. The outer surface of the fuse defines an outline.
 - d. The fuse structure of the Hikam Wire Harness has an undermold surrounding and sealing the fuse, which defines an outer surface that is substantially parallel relative to the outline of the solid outer surface of the fuse.
 - e. The fuse structure of the Hikam Wire Harness includes an overmold surrounding the undermold. The undermold and the overmold are each constructed of a single unit and of dissimilar materials, and the outline of the overmold is substantially parallel relative to the outline of the undermold.
 - f. The fuse structure of the Hikam Wire Harness includes a first photovoltaic connector engaged with the first end of the fuse (via a cable). The undermold and

> 4 5

6 7

9

8

10 11

12 13

14

15 16

17

18

19

20 21

22

23

24 25

26

28

- overmold structures of the assembly provide electrical insulation surrounding the fuse. The Hikam Wire Harness is certified as a UL 4703 PV Wire. The UL 4703 standards cover insulated photovoltaic wires.
- 42. A claim chart showing how the Hikam Replacement In-Line Fuse (RILF) Kit meets each of the elements of claim 1 of the '739 Patent is attached hereto as **Exhibit 3.**
- 43. As shown in Exhibit 3, the Hikam Replacement In-Line Fuse (RILF) Kit meets all elements of claim 1 of the '739 Patent as follows:
 - a. The Hikam RILF Kit includes a photovoltaic fuse. The fuse structure has a solid outer surface that includes a first end, a second end and a middle section. The outer surface of the fuse defines an outline.
 - b. The Hikam RILF Kit has an undermold surrounding and sealing the fuse, which defines an outer surface that is substantially parallel relative to the outline of the solid outer surface of the fuse.
 - c. The Hikam RILF Kit has an overmold surrounding the undermold. The undermold and the overmold are each constructed of a single unit and of dissimilar materials, and the outline of the overmold is substantially parallel relative to the outline of the undermold.
 - d. The Hikam RILF Kit includes a first photovoltaic connector engaged with the first end of the fuse (via a cable). The undermold and overmold structures of the assembly provide electrical insulation surrounding the fuse. The Hikam RILF Kit is certified as a UL 4703 PV Wire. The UL 4703 standards cover insulated photovoltaic wires.
- 44. On information and belief, the Hikam Defendants have profited from and will continue to profit from their infringing activities. Shoals has been damaged by, and will continue to be damaged by, the Hikam Defendants' infringement of the '739 Patent, and thus is entitled to recover damages from Hikam to compensate for the infringement, including lost profits and a reasonable royalty. The Hikam Defendants' infringement of the '739 Patent will continue to

- damage Shoals' business and cause immediate and irreparable harm for which there is no adequate remedy at law, unless enjoined by this Court.
- 45. Shoals is entitled to damages adequate to compensate it for the infringement but in no event less than a reasonable royalty.
- 46. The Hikam Defendants' infringement is deliberate and willful at least because they have had notice of infringement of the '739 Patent since at least the date of the filing of this Complaint.

JURY DEMAND

Pursuant to Federal Rule of Civil Procedure 38(b) and CivLR 38.1, Shoals hereby demands a trial by jury on all issues and claims so triable.

PRAYER FOR RELIEF

WHEREFORE, Shoals respectfully prays for the following relief:

- 1. A judgment that the Hikam Defendants are liable for infringement of at least one claim of the '739 Patent.
- 2. An award to Shoals of monetary damages adequate to compensate it for the Hikam Defendants' infringement of the '739 Patent, pursuant to 35 U.S.C. § 284, in an amount to be proven at trial.
- 3. A permanent injunction prohibiting the Hikam Defendants and their officers, agents, representatives, assigns, licensees, distributors, employees, related entities, and all those acting in privity or acting in concert with them from infringing, inducing, or contributing to the infringement of the '739 Patent.
- 4. A finding that the Hikam Defendants' infringement is willful, as set forth in the above claims, and pursuant to 35 U.S.C. § 284, increase the damages awarded up to three times the amount found or assessed because of, at least, the Hikam Defendants' willful conduct.
- 5. A finding that this case is exceptional under 35 U.S.C. § 285 and awarding Shoals its reasonable attorneys' fees accordingly.
 - 6. An award to Shoals of pre-judgment and post-judgment interest.
 - 7. An award taxing Shoals' costs and expenses of this suit to the Hikam Defendants.

Case \$ 23-cv-00811-AGS-MSB Document 1 Filed 05/04/23 PageID.15 Page 15 of 15