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## IN THE UNITED STATES DISTRICT COURT DISTRICT OF UTAH

LUMIFORCE, LLC, a Utah limited liability company,  Plaintiff,  v.	SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT  Civil No. 2:21-cv-00610-RJS-DAO
<b>LIQUID LUMENS, LLC</b> , a Utah limited liability company,	
Defendant.	
LIQUID LUMENS, LLC a Utah limited liability company,	
Counterclaimant,	
V.	
LUMIFORCE, LLC, a Utah limited liability company, and TRENT BUTCHER, an individual,	
Counterclaim Defendants.	

#### **COMPLAINT**

Plaintiff, LUMIFORCE, L.L.C. ("Plaintiff" or "LUMIFORCE") files this Second Amended Complaint for patent infringement against Defendant LIQUID LUMENS, LLC ("Defendant" or "LL"), and alleges as follows:

- 1. This is an action for patent infringement based on the Patent Laws of the United States, 35 U.S.C. § 1, et seq.
- 2. This action arises out of Defendant's making, using, selling, and offering to sell underwater boat lighting packages that infringe the Asserted Patents (the "Accused Products").

#### I. THE PARTIES

- 3. LUMIFORCE is a limited liability company with a principal place of business in Sandy, Utah. LUMIFORCE owns the Asserted Patents (defined below).
- 4. Upon information and belief, LL is a limited liability company with a principal place of business at 2990 S Main Street Suite C, Salt Lake City, UT 84115. Upon information and belief, LL is owned by Robert Christensen, Eric Nofsinger, and Ryan Christensen.

#### II. JURISDICTION AND VENUE

- 5. This is an action for patent infringement under the United States Patent Act, specifically 35 U.S.C. § 271. This Court has subject matter jurisdiction over patent infringement claims in this action under 28 U.S.C. §§ 1331 and 1338(a).
- 6. Personal jurisdiction over LL is proper in Utah because, upon information and belief, LL is a registered Utah company, maintains a regular and established place of business in Utah, and resides in Utah.
  - 7. Venue is proper in this Court pursuant to 28 U.S.C. §§ 1391 and 1400. Upon

information and belief, LL is a registered Utah company, maintains a regular and established place of business in this district, and resides in this district. Upon information and belief, LL has a regular and established place of business in this district and has committed acts of infringement in this district, including selling Accused Products in this district.

#### III. ASSERTED PATENTS

- 8. Trent Butcher, a named inventor of 22 issued U.S. patents, solely invented and filed U.S. Provisional Patent application No. 62/218,556 on September 14, 2015 ("'556 Provisional Patent"), which is prior to LL being registered as a business. The '556 Provisional Patent describes high-powered underwater LED lighting for use on boats and other marine vehicles.
- 9. On July 27, 2021, the United States Patent and Trademark Office ("USPTO") duly and legally issued U.S. Patent No. 11,073,272 (the '272 Patent), entitled "LIGHTING DEVICES INCLUDING AT LEAST ONE LIGHT-EMITTING DEVICE, SYSTEMS INCLUDING AT LEAST ONE LIGHTING DEVICE, AND RELATED METHODS." The application that issued as the '272 Patent was filed on February 25, 2020, and claims priority to the '556 Provisional Patent. A true and correct copy of the '272 Patent is attached hereto as Exhibit A.
- 10. On July 27, 2021, the USPTO duly and legally issued U.S. Patent No.

  11,073,273 (the '273 Patent), entitled "LIGHTING DEVICES INCLUDING AT LEAST ONE
  LIGHT- EMITTING DEVICE, SYSTEMS INCLUDING AT LEAST ONE LIGHTING
  DEVICE, AND RELATED METHODS." The application that issued as the '273 Patent was

filed on March 5, 2020, and claims priority to the '556 Provisional Patent. A true and correct copy of the '273 Patent is attached hereto as Exhibit B.

- 11. On September 7, 2021, the USPTO duly and legally issued U.S. Patent No. 11,112,105 (the '105 Patent), entitled "LIGHTING DEVICES INCLUDING AT LEAST ONE LIGHT-EMITTING DEVICE, SYSTEMS INCLUDING AT LEAST ONE LIGHTING DEVICE, AND RELATED METHODS." The application that issued as the '105 Patent was filed on February 25, 2020, and claims priority to the '556 Provisional Patent. A true and correct copy of the '105 Patent is attached hereto as Exhibit C. A certificate of correction correcting minor clerical errors in the '105 Patent is attached hereto as Exhibit D
- 12. On December 22, 2021, LL filed requests for *ex parte* reexamination with the USPTO against all three patents in suit. LL alleged in each *ex parte* reexamination that there is at least one substantial new question of patentability in each of the patents in suit.
- 13. The USPTO granted *ex parte* reexaminations against all of the asserted patents on the following dates:
  - I. '272 Patent: Ex Parte Reexamination granted on February 2, 2022
  - II. '273 Patent: Ex Parte Reexamination granted on February 7, 2022
  - III. '105 Patent: Ex Parte Reexamination granted on February 9, 2022
- 14. As a result of the reexaminations, certain patent claims were altered. However, despite LL's patentability challenges at the USPTO, not a *single* claim was found unpatentable. The USPTO confirmed that all claims (some of which were amended) of the asserted patents are patentable. The *ex parte* reexamination certificates for each of the asserted patents are attached as Exhibits E–G.

- 15. The '272 Patent, the '273 Patent, and the '105 Patent claim novel and non-obvious LED lighting inventions that provide unprecedented and powerful underwater LED lighting.
- 16. On December 31, 2021, LUMIFORCE was assigned all rights and interest in the '272 Patent, in the '273 Patent, and in the '105 Patent (together, the "Asserted Patents"), including the right to recover damages for any infringements occurring prior to the assignment. Accordingly, LUMIFORCE possesses the exclusive right and standing to prosecute the present action for infringement of the Asserted Patents.

#### IV. INFRINGING ACTS

17. Upon information and belief, LL uses, offers for sale, and sells in the United States "Lumen-Boost"<sup>TM</sup> underwater lighting packages, each of which include two highpower COB LEDs, two lens elements, and a step-up voltage converter enclosure. Pictures of exemplary Accused Products (from LL's website, liquidlumens.com) are shown below.

#### **SURFRIDER PACKAGE**

#### PIPELINE PACKAGE





### **MAVERICKS PACKAGE**



18. The housing(s) of such Accused Products is/are typically installed onto the rear surfaces of boats (e.g., on the transom below the waterline) to achieve lighting effects when the boat is in the water. Examples of underwater lighting effects during wakesurfing and while floating are shown below (from LL's website):





- 19. Upon information and belief, Defendant has offered for sale and has sold the Accused Products in the United States including through its distributors and the following exemplary websites:
  - <a href="https://liquidlumens.com/where-to-buy/">https://liquidlumens.com/where-to-buy/</a>;
  - <u>https://marine-products.com/pages/liquid-lumens;</u>
  - https://www.swellwake.com/collections/lighting;
  - <u>https://scwake.com/product-category/lighting/underwater-lights-all-products/</u>
- 20. Defendant offers and sells the Accused Products through its website including at <a href="https://liquidlumens.com/underwater/">https://liquidlumens.com/underwater/</a>.
- 21. At no time has Defendant received any express or implied authorization, license, or permission to practice the inventions claimed in the Asserted Patents.

## COUNT 1 – INFRINGEMENT OF THE '272 PATENT

- 22. LUMIFORCE incorporates the allegations of paragraphs 1-21 as if fully set forth herein.
- 23. LL infringes, at least, claim 1 of the '272 Patent literally and/or through the doctrine of equivalents. For example, the PIPELINE and SURFRIDER Accused Products include two aluminum housings with an outer surface of the housing being generally cylindrical, the housing including housing mounting holes for attaching the housing to a marine vehicle, wherein the housing has a generally flat back face for mounting. Within each of the housings, a high-powered COB LED is attached, wherein the COB LED comprises a substrate, a light-emitting area, and a raised template surrounding the light-emitting area, wherein the substrate extends beyond the template. A lens element is retained by a ring-shaped retaining element to each housing. Also, a sealing element is compressed by each ring-shaped retaining element to create a waterproof seal. A reflector element is positioned between each of the COB LEDs and its associated lens element. Further, a protection circuitry protects each COB LED from overheating. The PIPELINE and SURFRIDER Accused Products include a voltage converter to convert lower voltages (e.g., provided by a marine battery) to higher voltages for operating each COB LED.
- 24. LL also infringes, at least, claim 4 of the '272 Patent literally and/or through the doctrine of equivalents via the MAVERICKS Accused Products. An exemplary MAVERICKS Accused Products includes one aluminum housing within which and to which two high-powered COB LEDs are attached to the housing. Wherein the COB LED comprises a substrate, a light-emitting area which is sealed from an ambient environment, and two lens elements that are

positioned adjacent to the housing. Also, a sealing element is compressed by each ring-shaped retaining element to create a waterproof seal. A reflector element is positioned between each of the COB LEDs and its associated lens element. Further, a thermal cutoff protects each COB LED from overheating. The MAVERICKS Accused Products include a voltage converter, external to the housing, to convert lower voltages (e.g., provided by a marine battery) to higher voltages for operating each COB LED. The MAVERICKS Accused Products further include a heat sink in thermal connection with the chip-on-board light-emitting device.

- 25. Defendant has infringed the '272 Patent directly and/or through the doctrine of equivalents by making or having made, using, offering, and selling the LL Accused Products in the United States.
- 26. As a direct and proximate result of Defendant's patent infringement of the '272 Patent, LUMIFORCE is entitled to recover actual damages in an amount to be proven at trial, in no event less than a reasonable royalty.
- 27. Defendant's infringement of the '272 Patent constitutes an exceptional case under 35 U.S.C. § 285, entitling LUMIFORCE to attorney's fees and costs incurred in this action.

# COUNT 2 – INFRINGEMENT OF THE '273 PATENT

- 28. LUMIFORCE incorporates the allegations of paragraphs 1-27 as if fully set forth herein.
- 29. LL infringes, at least, claim 1 of the '273 Patent literally and/or through the doctrine of equivalents. For example, the PIPELINE and SURFRIDER Accused Products include two aluminum housings with an outer surface of the housing being generally cylindrical,

and having holes formed through each housing, wherein the holes are configured for accepting fasteners for attaching each of the housing to a hull of a marine vehicle. Within each of the housing, a high-powered COB LED is attached, wherein each of the COB LEDs comprise a substrate, a light-emitting area, and a generally square template surrounding the light-emitting area. Each substrate of the COB LEDs extends beyond the template and includes mounting holes. A lens element is retained by a ring-shaped retaining element to each housing. Also, a sealing element is compressed by the ring-shaped retaining element to create a waterproof seal. A reflector element is positioned between each of the COB LEDs and its associated lens element. The PIPELINE and SURFRIDER Accused Products include a voltage converter to convert lower voltages (e.g., provided by a marine battery) to higher voltages for operating each COB LED.

- 30. LL also infringes, at least, claim 11 of the '273 Patent literally and/or through the doctrine of equivalents via the MAVERICKS Accused Products. An exemplary MAVERICKS Accused Product includes one aluminum housing, within which and to which two high-powered COB LED are attached. Two lens elements are respectively retained to the housing by two ring-shaped retaining elements. Also, a sealing element is compressed by each ring-shaped retaining element to create a waterproof seal. A reflector element is positioned between each of the COB LEDs and its associated lens element. The MAVERICKS Accused Product includes a voltage converter to convert lower voltages (e.g., provided by a marine battery) to higher voltages for operating each COB LED.
- 31. Defendants have infringed the '273 Patent directly and/or through the doctrine of equivalents by making or having made, using, offering, and selling the Accused Products in the United States.

- 32. As a direct and proximate result of Defendant's patent infringement of the '273 Patent, LUMIFORCE is entitled to recover actual damages in an amount to be proven at trial, in no event less than a reasonable royalty.
- 33. Defendant's infringement of the '273 Patent constitutes an exceptional case under 35 U.S.C. § 285, entitling LUMIFORCE to attorney's fees and costs incurred in this action.

### COUNT 3 – INFRINGEMENT OF THE '105 PATENT

- 34. LUMIFORCE incorporates the allegations of paragraphs 1-33 as if fully set forth herein.
- 35. LL infringes, at least, claim 1 of the '105 Patent literally and/or through the doctrine of equivalents. For example, the PIPELINE and SURFRIDER Accused Products include two aluminum housings, wherein each housing is a single body and has a generally flat back face for mounting against a hull of a marine vehicle. Within each of the housings, a high-powered COB LED is attached. Each COB LED comprises a metal substrate, a light emitting area, a template surrounding the light-emitting area, solder pads positioned within the template, and access holes extending through the substrate, each of the access holes positioned adjacent to a respective solder pad of the solder pads. A lens element is retained by a ring-shaped retaining element to each housing. Also, a sealing element is compressed by the ring-shaped retaining element to create a waterproof seal. A reflector element is positioned between each of the COB LEDs and its associated lens element. The PIPELINE and SURFRIDER Accused Products

include a voltage converter to convert lower voltages (e.g., provided by a marine battery) to higher voltages for operating each COB LED.

- 36. Defendants have infringed the '105 Patent directly and/or through the doctrine of equivalents by making or having made, using, offering, and selling the Accused Products in the United States.
- 37. As a direct and proximate result of Defendant's patent infringement of the '105 Patent, LUMIFORCE is entitled to recover actual damages in an amount to be proven at trial, in no event less than a reasonable royalty.
- 38. Defendant's infringement of the '105 Patent constitutes an exceptional case under 35 U.S.C. § 285, entitling LUMIFORCE to attorney's fees and costs incurred in this action.

#### PRAYER FOR RELIEF

WHEREFORE, LUMIFORCE requests that this Court enter judgment against Defendant as follows:

- 1. That Defendant has infringed the Asserted Patents in violation of 35 U.S.C. § 271;
  - 2. That Defendant is liable for damages no less than a reasonable royalty;
- 3. That this case is exceptional and LUMIFORCE is awarded its attorneys' fees and costs pursuant to 35 U.S.C. § 285;
- 4. That Defendant is liable for pre-judgment and post-judgment interest and costs on all sums awarded;

5. Any other and further relief as the Court may deem just and proper under the circumstances.

#### **JURY DEMAND**

LUMIFORCE demands a jury trial on all claims and issues so triable.

DATED: December 22, 2022 FOLEY & LARDNER

/s/ Wesley F. Harward

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