IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF TEXAS DALLAS DIVISION

COMARCO WIRELESS SYSTEMS LLC,

Plaintiff,

v.

Civil Action No.:

LG ELECTRONICS, INC., LG ELECTRONICS U.S.A., INC., and LG ELECTRONICS ALABAMA, INC.,

Defendants.

Jury Trial Demanded

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Comarco Wireless Systems LLC ("Comarco"), by its undersigned attorneys, alleges claims of utility patent infringement against Defendants LG Electronics, Inc. ("LGE"), LG Electronics U.S.A., Inc. ("LGEUSA"), and LG Electronics Alabama, Inc. ("LGEA") (collectively, "LG"), with knowledge of its own acts and upon information and belief as to other matters, as follows:

I. PARTIES

- 1. Plaintiff Comarco Wireless Systems LLC is a Texas limited liability company having its principal place of business at 1903 Toro Canyon Road, Austin, Texas 78746.
- 2. Defendant LGE is a corporation formed under the laws of the country of South Korea, with its principal place of business at LG Twin Tower 128, Yeoui-daero, Yeongdeungpogu, Seoul, South Korea. LGE does business in Texas directly or through intermediaries and offers its products and/or services, including the infringing products, to customers and potential customers located in Texas, including in the Northern District of Texas.

- 3. Defendant LGEUSA is a Delaware corporation having a principal place of business at 111 Sylvan Avenue, North Building, Englewood Cliffs, New Jersey 07632. LGEUSA is a wholly-owned subsidiary of LGE.
- 4. LGEA is a corporation organized under the laws of the State of Alabama, and has its principal place of business located at 201 James Record Road, Huntsville, Alabama, 35824. LGEA has regular and established places of business in Texas at least at 2151-2155 Eagle Parkway, Fort Worth, Texas 76177, and/or 14901 Beach St, Fort Worth, Texas 76177. Both of these locations are in the Northern District of Texas. Defendant LGEA is a wholly-owned subsidiary of LGEUSA.
- 5. LGE, LGEUSA and LGEA have acted in concert with respect to the facts alleged herein such that any act of one Defendant is attributable to all Defendants.

II. JURISDICTION AND VENUE

- 6. This action arises under the patent laws of the United States of America, 35 U.S.C. §§ 1 et seq. This Court has exclusive subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- 7. LG is subject to this Court's specific and general personal jurisdiction due at least to LG's substantial business in this forum, including (i) at least a portion of the infringements alleged herein; and (ii) regularly conducting or soliciting business, engaging in other persistent courses of conduct, or deriving substantial revenue from goods and services provided to individuals in Texas and in this District.
- 8. Specifically, LG intends to and does business in Texas, directly or through intermediaries and offers its products or services, including those accused herein of infringement, to customers and potential customers located in Texas, including in the Northern District of Texas.

- 9. LG maintains a regular and established place of business in this District.
- 10. Venue is proper in this District as to LGE pursuant to 28 U.S.C. § 1391(c)(3) because venue is proper in any judicial district against a foreign corporation. *See In re HTC Corp.*, 889 F.3d 1349, 1354 (Fed. Cir. 2018).
- 11. Venue is proper in this District as to LGEA pursuant to 28 U.S.C. § 1400(b), at least because LGEA has a regular and established place of business in this District, and has committed acts of patent infringement in this District. LGEA's acts of infringement in this District include but are not limited to the use, sale, offer for sale, and importation into the United States of LG USB chargers and LG portable electronic devices (including the Accused PEDs) compatible with LG USB chargers.

III. FACTUAL ALLEGATIONS UNDERLYING ALL CLAIMS

- 12. The patents at issue in this matter arose from the pioneering work of Thomas W. Lanni, an accomplished electrical engineer. Mr. Lanni began working in the field of power supply and conversion in the early 1980s. In 1994, Mr. Lanni joined Comarco, Inc. as Vice President and Chief Technology Officer.
- 13. Through his work at Comarco, Inc., Mr. Lanni recognized that the increasing use of a variety of portable devices and myriad power sources (*e.g.*, automobile outlets and wall sockets) created the problem of a given device receiving the wrong level of power from a given power source. This mismatch could result in a failure to charge, or could cause damage to the device being charged by causing the battery to overheat or even catch fire.
- 14. To address this shortcoming in the prior art, Mr. Lanni invented a charging system whereby the charger and the portable device engage in a "handshake" process in order to determine the appropriate level of power to be delivered to the portable device. Mr. Lanni's power supply

system includes a charger comprising power circuitry to provide power along with data circuitry to receive a signal from the device to be charged and to provide a signal in response. Conductors within the power supply transfer DC power and a ground reference voltage to the portable electronic device. A third conductor receives the signal from the portable electronic device and a fourth conductor transmits the response signal to the portable electronic device. The portable electronic device is able to use this responsive signal to determine the power level of the power supply system. This system enables the portable electronic device to receive the appropriate power level from the charger.

- 15. Mr. Lanni's work led to a large family of patent applications claiming priority to U.S. Patent Application No. 10/758,933 ("the '933 Application") filed on January 15, 2004. Mr. Lanni is the sole named inventor on these patents.
- 16. On July 16, 2013, U.S. Patent Application No. 13/943,453 was filed, claiming priority to the '933 Application. After examination, the United States Patent and Trademark Office ("USPTO") issued U.S. Patent No. 9,413,187 ("the '187 Patent"), entitled "Power Supply System Providing Power and Analog Data Signal for Use by Portable Electronic Device to Control Battery Charging" on August 9, 2016. A true and correct copy of the '187 Patent is attached as Exhibit 1.
- 17. On August 12, 2020, U.S. Patent Application No. 16/991,295 was filed, claiming priority to the '933 Application. After examination, the USPTO issued U.S. Patent No. 10,855,087 ("the '087 Patent"), entitled "Power Supply Systems" on December 1, 2020. A true and correct copy of the '087 Patent is attached as Exhibit 2.
- 18. On October 22, 2020, U.S. Patent Application No. 17/077,699 was filed, claiming priority to the '933 Application. After examination, the USPTO issued U.S. Patent No. 10,951,042

("the '042 Patent"), entitled "Power Supply Systems" on March 16, 2021. A true and correct copy of the '042 Patent is attached as Exhibit 3.

- 19. The '187 Patent, the '087 Patent, and the '042 Patents are collectively referred to as "the Patents-in-Suit."
- 20. Comarco is the owner by assignment of all right, title, and interest in and to the Patents-in-Suit, including the right to recover past damages for infringement.

A. LG's Infringing Conduct

- 21. LG makes (or has made), uses, sells, offers for sale, and/or imports in the United States, and has made, used, sold, offered for sale, and/or imported into the United States, products that infringe the Patents-in-Suit. LG's infringing products include power adapters that are compliant with USB Battery Charging Specification (including errata and ECNs through March 15, 2012), Revision 1.2, March 15, 2012 ("the USB BC 1.2 specification") ("the Accused Chargers"). The Accused Chargers include, but are not limited to, the LG Travel Power Adapter and any other LG battery charging device that provides battery charging functionality through a USB-C connection. The Accused Chargers are also referred to as the LG USB chargers.
- 22. LG's infringing products further include portable electronic devices comprising rechargeable batteries and USB-C (USB 3.1) ports which are compliant with the USB BC 1.2 specification ("the Accused PEDs"). The Accused PEDs include, but are not limited to, LG G7 fit, LG G8X Thin Dual Screen, LG K30, LG K51, LG K92, LG Phoenix 4, LG Prime 2, LG Q70, LG Q70, LG Stylo 5x, LG Stylo 6, LG V30, LG V35 ThinQ, LG V40 ThinQ, LG V60 ThinQ 5G Dual Screen, LG VELVET 5G, LG WING 5G, LG Xpression Plus 3, LG V40 5G, LG V40 Lite, LG V50S ThinQ 5G, LG V50 ThinQ 5G, and any other LG PED comprising a rechargeable battery charged via a USB-C connection.

- 23. As shown in Exhibit 4, which is incorporated by reference as though fully set forth herein, the Accused Chargers and Accused PEDs (or any combination of an Accused Charger and an Accused PED) comprise a system that meets each and every element of at least Claim 1 of the '187 Patent.
- 24. As shown in Exhibit 5, which is incorporated by reference as though fully set forth herein, the Accused Chargers meet each and every element of at least Claim 1 of the '087 Patent.
- 25. As shown in Exhibit 6, which is incorporated by reference as though fully set forth herein, the Accused PEDs meet each and every element of at least Claim 1 of the '042 Patent.

COUNT I - INFRINGEMENT OF THE '187 PATENT

- 26. Comarco repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
- 27. LG directly infringes and has directly infringed one or more claims of the '187 Patent without authority by making (or having made), using, selling, offering for sale, and/or importing the Accused Chargers and the Accused PEDs packaged together. A detailed claim chart showing a representative example of LG's infringement of the '187 Patent is attached as Exhibit 4.
- 28. LG's acts of infringement have occurred within this District and elsewhere throughout the United States.
- 29. On information and belief, at least as of the filing of this Complaint, LG is aware of the '187 Patent, has knowledge of the infringing nature of its activities, and nevertheless continues to perform its infringing activities.
- 30. LG's infringement of the '187 Patent is deliberate and willful, and thus Comarco is entitled to treble damages under 35 U.S.C. § 284.

31. Comarco has been damaged and will suffer additional damages due to LG's infringement.

COUNT II - INFRINGEMENT OF THE '087 PATENT

- 32. Comarco repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
- 33. LG directly infringes and has directly infringed one or more claims of the '087 Patent without authority by making (or having made), using, selling, offering for sale, and/or importing the Accused Chargers. A detailed claim chart showing a representative example of LG's infringement of the '087 Patent is attached as Exhibit 5.
- 34. LG's acts of infringement have occurred within this District and elsewhere throughout the United States.
- 35. On information and belief, at least as of the filing of this Complaint, LG is aware of the '087 Patent, has knowledge of the infringing nature of its activities, and nevertheless continues to perform its infringing activities.
- 36. LG's infringement of the '087 Patent is deliberate and willful, and thus Comarco is entitled to treble damages under 35 U.S.C. § 284.
- 37. Comarco has been damaged and will suffer additional damages due to LG's infringement.

COUNT III - INFRINGEMENT OF THE '042 PATENT

- 38. Comarco repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.
- 39. LG directly infringes and has directly infringed one or more claims of the '042 Patent without authority by making (or having made), using, selling, offering for sale, and/or

importing the Accused PEDs. A detailed claim chart showing a representative example of LG's infringement of the '042 Patent is attached as Exhibit 6.

- 40. LG's acts of infringement have occurred within this District and elsewhere throughout the United States.
- 41. On information and belief, at least as of the filing of this Complaint, LG is aware of the '042 Patent, has knowledge of the infringing nature of its activities, and nevertheless continues to perform its infringing activities.
- 42. LG's infringement of the '042 Patent is deliberate and willful, and thus Comarco is entitled to treble damages under 35 U.S.C. § 284.
- 43. Comarco has been damaged and will suffer additional damages due to LG's infringement.

PRAYER FOR RELIEF

WHEREFORE, Comarco respectfully requests that the Court enter judgment as follows:

- A. Declaring that LG has infringed the Patents-in-Suit;
- B. Awarding damages in an amount to be proven at trial, but in no event less than a reasonable royalty, for LG's infringement, including pre-judgment and post-judgment interest at the maximum rate permitted by law;
- C. Ordering an award of reasonable attorneys' fees against LG to Comarco as provided by 35 U.S.C. § 285 or other relevant law or provision;
- D. Awarding expenses, costs, and disbursements in this action against LG to Comarco, including prejudgment interest; and
 - E. Awarding such other and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Rule 38 of the Federal Rules of Civil Procedure, Comarco hereby demands a trial by jury in this action of all claims so triable.

Dated: April 20, 2022 Respectfully submitted,

By: /s/ Michael C. Smith

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