IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

HI-DOW IPHC, INC., Plaintiff, v. **HONG QIANGXING (SHENZHEN) ELECTRONICS LIMITED,** Defendant.	**Civil Action No. _____** **JURY TRIAL DEMANDED**

COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Hi-Dow IPHC, Inc. ("Hi-Dow" or "Plaintiff"), by and through its undersigned counsel, files this Complaint for Patent Infringement against Hong Qiangxing (Shenzhen) Electronics Limited ("Hong Qiangxing" or "Defendant") and alleges as follows:

THE PARTIES

1. Plaintiff Hi-Dow IPHC, Inc. is a Missouri corporation with its principal place of business at 2555 Metro Boulevard, Maryland Heights, Missouri 63043.

2. Upon information and belief, Defendant Hong Qiangxing (Shenzhen) Electronics Limited is a limited company organized and existing under the laws of the People's Republic of China. Defendant designs, develops, manufactures, and exports transcutaneous electrical nerve stimulation (“TENS”) and electrical muscle stimulation (“EMS”) products, including devices manufactured on an original-equipment-manufacturer and/or contract-manufacturing basis for United States customers.

3. Defendant's current manufacturing and business address has been identified as 2F, Yongcheng Boulevard, Xicheng Industrial Area, Xixiang Road, Bao'an District, Shenzhen,

Guangdong 518126, China. Defendant has also used the address 4F, Jingcheng Building, Xicheng Industrial Zone, Xixiang Road, Bao'an District, Shenzhen City, Guangdong 518126, China. An FDA record associated with Defendant also lists Room 1706, No. 128 Songle Road, Songjiang Area, Shanghai 201600, China. Plaintiff pleads these addresses in the alternative pending confirmation through service and discovery.

4. Defendant may be served pursuant to Federal Rules of Civil Procedure 4(h)(2) and 4(f), including through the Hague Convention on the Service Abroad of Judicial and Extrajudicial Documents, at an address confirmed as valid for service, or by such other means as the Court may authorize.

5. Upon information and belief, Plexus Yoga, LLC d/b/a Chirp ("Chirp") markets the Chirp Halo Double Wireless Muscle & Nerve Stimulator. The products accused of infringement include, without limitation, the Chirp Halo Double and any other products, models, or versions that operate in a materially similar manner with respect to the asserted claims, whether presently known or identified through discovery (collectively, the "Accused Product"), as described more fully below.

JURISDICTION AND VENUE

6. This action arises under the patent laws of the United States, including 35 U.S.C. §§ 271, 281, 283, 284, and 285.

7. This Court has original subject-matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).

8. This Court has specific personal jurisdiction over Defendant under Federal Rule of Civil Procedure 4(k)(1)(A) and the Texas long-arm statute. Upon information and belief, Defendant purposefully directed activities toward Texas and this District by designing and

manufacturing the Accused Product for a United States customer, seeking FCC equipment authorization for the product, serving as the identified manufacturer of an FDA-cleared product intended for the United States market, and supplying the Accused Product for importation and nationwide distribution through established channels of commerce with the expectation and intent that it would be offered for sale, sold, and used in Texas, including within this District.

9. Upon information and belief, the Accused Product is offered for sale throughout the United States through Chirp's website and national retailers, and is available for purchase and delivery by consumers in Texas and this District. Upon information and belief, Defendant's contacts giving rise to this action include manufacturing the U.S.-authorized product bearing its FCC identifier, supplying that product to the United States brand owner and its distribution channels, and deriving revenue from the resulting United States sales. Plaintiff's claims arise directly from those contacts.

10. Alternatively, to the extent Defendant contends that it is not subject to personal jurisdiction in Texas or any other state, this Court has personal jurisdiction under Federal Rule of Civil Procedure 4(k)(2). Plaintiff's patent-infringement claims arise under federal law; Defendant is a foreign company; Defendant's purposeful contacts with the United States as a whole—including obtaining FCC authorization, manufacturing and supplying an FDA-cleared product for a United States customer, and placing the product into United States distribution channels—are sufficient to satisfy due process; and Defendant has not identified another state in which this action could have been brought at the time of filing. *See Synthes (U.S.A.) v. G.M. Dos Reis Jr. Ind. Com. de Equip. Medico*, 563 F.3d 1285, 1295-97 (Fed. Cir. 2009).

11. Exercising jurisdiction over Defendant comports with traditional notions of fair play and substantial justice. Defendant deliberately directed the relevant commercial activities

toward the United States, invoked United States regulatory processes for the Accused Product, and could reasonably anticipate being called into a United States court concerning the product it manufactured and supplied for the United States market.

12. Venue is proper in this District under 28 U.S.C. § 1391(c)(3) because Defendant is not resident in the United States and may therefore be sued in any judicial district. The patent venue statute, 28 U.S.C. § 1400(b), does not limit venue as to alien defendants; suits against aliens are outside the operation of the federal venue laws, general and special. *Brunette Mach. Works, Ltd. v. Kockum Indus., Inc.*, 406 U.S. 706, 714 (1972); *In re HTC Corp.*, 889 F.3d 1349, 1354–58 (Fed. Cir. 2018).

BACKGROUND

13. Hi-Dow develops and supplies TENS and EMS devices that provide drug-free relief from muscle soreness, stiffness, and chronic pain by delivering electrical impulses to muscles and nerves.

14. Hi-Dow's founder and inventor, Eric Ye Chen, recognized that conventional electrical stimulation systems commonly required a control unit hard-wired to electrodes, thereby restricting movement, limiting simultaneous treatment, and providing limited information about the therapy being delivered. He developed a wireless electrical stimulation system that permits a single remote to control multiple stimulation units and treatment modes.

15. On August 16, 2016, the United States Patent and Trademark Office ("USPTO") duly and legally issued U.S. Patent No. 9,415,217, titled "Wireless Electrical Stimulation System" (the "'217 Patent" or the "Asserted Patent"). A true and correct copy of the '217 Patent, together with the reexamination certificate described below, is attached hereto as Exhibit A.

16. On July 20, 2026, the USPTO issued Ex Parte Reexamination Certificate U.S. Patent No. 9,415,217 C1 in Reexamination Control No. 90/015,346 (the "Reexamination Certificate"). The Reexamination Certificate confirms that claims 1 and 15 are patentable as amended, and that claims 2–14 and 16–23, which depend from amended claims 1 and 15, are patentable. Unless otherwise indicated, references in this Complaint to the '217 Patent and to the claims of the '217 Patent are to the '217 Patent as amended by the Reexamination Certificate.

17. The reexamination amendments to claim 1 consisted of two insertions, neither of which changed the scope of the claim. First, the word "communication" was inserted before "frequencies" in the limitation reciting that operating instructions are transmitted to each of the electrical stimulation units "on separate channels at different communication frequencies." Original claim 1 already recited that the transmitter transmits the operating instructions "on separate channels at different frequencies," and the only frequencies to which that limitation could refer are the frequencies of the communication channels used by the transmitter — the same claim separately and expressly recites "pulse frequencies" as among the parameters contained within the operating instructions. The inserted word distinguishes between two uses of "frequencies" already present in original claim 1 and does not alter what the claim covers.

18. Second, the phrase "control each of the electrical stimulation units to" was inserted before "selectively apply a time-varying electric potential to the electrodes." Original claim 1 already recited that each electrical stimulation unit has "electrodes connected to the electrical stimulation unit," and that the transmitter remotely and wirelessly controls "each of the electrical stimulation units" by transmitting operating instructions "to each of the electrical stimulation units." The electrical stimulation units were therefore the only structure recited in original claim 1 capable of applying a time-varying electric potential to the electrodes in response to the operating

instructions, and the inserted phrase makes explicit a requirement that original claim 1 already imposed.

19. Neither amendment added, deleted, or narrowed any structural or functional limitation of claim 1, and no other claim language was changed. Claim 1 as confirmed by the Reexamination Certificate is therefore substantially identical in scope to original claim 1 within the meaning of 35 U.S.C. §§ 252 and 307(b), as are claims 2–9, 11, and 13, which depend from claim 1 and were not themselves amended.

20. Because the claims of the '217 Patent as confirmed by the Reexamination Certificate are substantially identical to the original claims, those claims have had continuous effect from the date the '217 Patent issued. 35 U.S.C. §§ 252, 307(b). Plaintiff is accordingly entitled to recover damages for infringement occurring both before and after issuance of the Reexamination Certificate, beginning on the earlier of (a) the date on which Defendant received actual notice of the '217 Patent and of its infringement, and (b) the date from which Plaintiff is entitled to constructive notice under 35 U.S.C. § 287, and continuing through the date of judgment, subject to 35 U.S.C. § 286.

21. In the alternative, and solely to the extent the Court determines that any amended claim is not substantially identical to its original counterpart, Plaintiff seeks damages for infringement of that claim occurring on and after July 20, 2026, the date the Reexamination Certificate issued. 35 U.S.C. § 307(b). Plaintiff pleads in the alternative as permitted by Federal Rules of Civil Procedure 8(d)(2) and 8(d)(3), and does not concede that any intervening right, absolute or equitable, arises under 35 U.S.C. § 252 as to any claim, any accused article, or any period.

22. Plaintiff is the owner by assignment of all right, title, and interest in the '217 Patent, including the '217 Patent as amended by the Reexamination Certificate, and including the exclusive right to enforce the '217 Patent and to recover damages for past, present, and future infringement. The assignment to Plaintiff was recorded with the USPTO at Reel/Frame 068815/0617.

23. The '217 Patent, including as amended by the Reexamination Certificate, is valid, enforceable, and in full force and effect. Plaintiff has complied with the requirements of 35 U.S.C. § 287 to the extent applicable, including by marking, or causing to be marked, products covered by the '217 Patent.

THE ACCUSED PRODUCT AND DEFENDANT'S MANUFACTURING ROLE

24. The Accused Product includes the Chirp Halo Double Wireless Muscle & Nerve Stimulator, including the two wireless stimulation units, handheld remote, electrode pads, charging case, cables, firmware, instructions, and any other products, models, or versions that operate in a materially similar manner with respect to the asserted claims, whether presently known or identified through discovery. Chirp markets the currently identified product as the “Halo Wireless Muscle Stim” and the packaging identifies it as the “HALO Wireless Muscle & Nerve Stimulator - Double.”

Figure 1. Chirp Halo Double packaging depicting two wireless stimulation units and a single remote.

25. Plaintiff obtained and inspected an Accused Product. Each round Halo stimulation unit is labeled "Halo Double | Model: SM9109A," "Made in China," and "FCCID: 2AMYMSM9109BA."

Figure 2. Label on an Accused Product unit identifying the product as Halo Double, Model SM9109A.

26. FDA 510(k) No. K241509 identifies the cleared device as "TENS&EMS units (SM9109A, SM9109B)" and identifies Plexus Yoga, LLC d/b/a Chirp as the applicant. The FDA issued the substantial-equivalence decision on June 27, 2024. A copy of the Premarket Notification associated with 510(k) No. K241509 is attached hereto as Exhibit C.

27. Public FCC equipment-authorization materials for FCC ID 2AMYMSM9109BA identify Defendant as the applicant, manufacturer, and factory for "TENS&EMS units," Model SM9109A main unit, and list Defendant's 2F Yongcheng Boulevard address. The associated FCC test report identifies FSK modulation, operation from 2402 MHz to 2481 MHz, 80 channels, and 1 MHz channel separation. A copy of the FCC equipment-authorization database record for FCC ID 2AMYMSM9109BA is attached hereto as Exhibit D.

28. The matching SM9109A model designation on the Accused Product, the Chirp 510(k) record, and the FDA's inspection findings concerning Defendant's SM9109A design and production records support the allegation that Defendant designed, developed, manufactured, and/or contract-manufactured the Accused Product for Chirp.

29. Upon information and belief, Defendant manufactures the Accused Product in China and sells, offers to sell, supplies, ships, and/or causes the Accused Product to be imported into the United States for Chirp and its distributors and retailers. Defendant's domestic acts include at least importing or causing importation, and selling or offering for sale the Accused Product within the United States through its established supply arrangements.

THE ACCUSED PRODUCT PRACTICES THE '217 PATENT

30. The Accused Product is a wireless electrical stimulation system comprising at least two electrical stimulation units. Each unit connects releasably to external adhesive electrodes and delivers TENS/EMS electrical pulses to muscles or nerve areas adjacent the body surface.

31. The Accused Product includes a single wireless handheld remote used to pair with, select, program, start, pause, and adjust the Halo stimulation units. The manual expressly provides instructions for “Controlling 2 Units Separately.” The remote selects among multiple treatment programs, including Pain Relief, Squeeze, Thump, Massage, Stretch, and Woah Nelly, and controls the power and treatment time applied by the units.

32. Upon information and belief, the remote and the two Halo units communicate on separate channels at different communication frequencies within the disclosed 2.4 GHz operating range. Before sending operating instructions, the system pairs or synchronizes each unit with the remote by matching a code sent by the unit with a predetermined code. The remote then causes

each selected unit to apply a time-varying electrical potential to its electrodes according to the selected operating mode.

33. The remote includes a unit selector, a mode selector, intensity-increase and intensity-decrease controls, a time selector, and a display that indicates selected units, modes, intensities, and treatment time. The stimulation units are carried on flexible adhesive electrode-pad substrates applied to the body. The supplied charging case and USB-C cable provide a USB connection configured to charge the remote and stimulation units.

34. The Accused Product therefore practices at least claims 1-9, 11, and 13 of the '217 Patent, literally and/or under the doctrine of equivalents. A preliminary exemplary claim chart comparing these claims to the Accused Product is attached hereto as Exhibit B. The chart is based on information currently available, and Plaintiff reserves the right to supplement its infringement contentions after discovery concerning Defendant's source code, firmware, radio-frequency implementation, pairing protocol, design records, and manufacturing documents.

COUNT I – INFRINGEMENT OF U.S. PATENT NO. 9,415,217

35. Plaintiff incorporates by reference and realleges the preceding paragraphs as though fully set forth herein.

36. Without license or authority from Plaintiff, Defendant has directly infringed and continues to directly infringe at least claims 1-9, 11, and 13 of the '217 Patent under 35 U.S.C. § 271(a) by importing, selling, and/or offering to sell the Accused Product within the United States. Defendant is liable for acts that it performs itself and for acts performed through agents or entities acting at its direction and control.

37. Defendant also has induced and continues to induce infringement under 35 U.S.C. § 271(b), at least after receiving actual notice of the ’217 Patent and the infringement allegations

through service of this Complaint, and earlier if discovery establishes pre-suit knowledge. Defendant supplies the Accused Product to Chirp, distributors, retailers, and end users with the intent that they import, sell, offer for sale, and use the Accused Product in the United States. Defendant provides and/or supports the product firmware, operating instructions, pairing process, treatment programs, and user controls that cause the Accused Product to be used in an infringing manner.

38. Defendant also contributorily infringes under 35 U.S.C. § 271(c), at least after actual notice. The paired Halo stimulation units, dedicated remote, firmware, and associated components constitute material parts of the patented system, are specially made or adapted for use in infringing the '217 Patent, and are not staple articles or commodities of commerce suitable for substantial noninfringing use in their supplied configuration.

39. Defendant will have actual knowledge of the ’217 Patent and Plaintiff’s infringement allegations no later than service of this Complaint. If Defendant continues infringing conduct after receiving actual notice, Plaintiff alleges that such conduct is deliberate and intentional and may warrant enhanced damages under 35 U.S.C. § 284.

40. Defendant's infringement has caused and will continue to cause Plaintiff monetary damage. Plaintiff is entitled to damages adequate to compensate for the infringement, in an amount no less than a reasonable royalty, for the full period during which the claims of the '217 Patent have had effect under 35 U.S.C. §§ 252, 286, 287, and 307(b), together with interest and costs as provided by 35 U.S.C. § 284.

41. Defendant's continuing infringement has caused and, unless enjoined, will continue to cause Plaintiff irreparable harm for which there is no adequate remedy at law. Plaintiff is entitled

to injunctive relief under 35 U.S.C. § 283, subject to proof of the equitable factors governing such relief.

PRAYER FOR RELIEF

WHEREFORE, Plaintiff respectfully requests that the Court enter judgment:

A. That Defendant has directly infringed, induced infringement of, and contributorily infringed one or more claims of the '217 Patent, literally and/or under the doctrine of equivalents;

B. That Defendant and those acting in concert with it be permanently enjoined under 35 U.S.C. § 283 from further infringement of the '217 Patent, or, if an injunction is not granted, that Plaintiff receive an ongoing royalty for post-judgment infringement;

C. Awarding Plaintiff damages adequate to compensate for Defendant's infringement under 35 U.S.C. § 284, in no event less than a reasonable royalty, together with an accounting for all infringing acts;

D. Enhancing damages under 35 U.S.C. § 284 for any infringement found to be willful;

E. Declaring this case exceptional under 35 U.S.C. § 285 and awarding Plaintiff its reasonable attorney fees;

F. Awarding Plaintiff its costs and expenses;

G. Awarding Plaintiff prejudgment and post-judgment interest; and

H. Awarding such other and further relief as the Court deems just and proper.

DEMAND FOR JURY TRIAL

Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiff respectfully demands a trial by jury on all issues so triable.

DATED: July 31, 2026

Respectfully submitted,

/s/ Geoff Culbertson

Shen Wang (Lead Counsel)
Hao Tan
Peter James Curtin
Zhangyuan Ji
Chen Li
ARCH & LAKE LLP
203 N. LaSalle Street, Suite 2100
Chicago, Illinois 60601
Telephone: (636) 236-5390
Facsimile: (312) 614-1873
Email: shenwang@archlakelaw.com
Email: haotan@archlakelaw.com
Email: pete_curtin@archlakelaw.com
Email: ellen@archlakelaw.com
Email: chenli@ archlakelaw.com
(Applications for admission pro hac vice to be filed)

Geoff Culbertson TX Bar No. 24045732
Kelly Tidwell TX Bar No. 20020580
PATTON, TIDWELL & CULBERTSON, LLP
2800 Texas Boulevard (75503)
Post Office Box 5398
Texarkana, TX 75505-5398
Telephone: (903) 792-7080
Facsimile: (903) 792-8233
gpc@texarkanalaw.com
kbt@texarkanalaw.com

COUNSEL FOR PLAINTIFF