

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

COMARCO WIRELESS SYSTEMS LLC,

Plaintiff,

v.

ANKER INNOVATIONS LTD.,

Defendant,

Civil Action No.: 2:22-cv-00266-JRG-RSP

Jury Trial Demanded

FIRST AMENDED COMPLAINT FOR PATENT INFRINGEMENT

Plaintiff Comarco Wireless Systems LLC (“Comarco”), by its undersigned attorneys, for its First Amended Complaint for Patent Infringement, alleges claims of utility patent infringement against Defendant Anker Innovations Ltd. (“Defendant” or “Anker”), 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 Anker Ltd. is a corporation organized under the laws of Hong Kong, S.A.R., with a principal place of business at Rooms 1318-19, 13/F, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong, S.A.R.

II. JURISDICTION AND VENUE

3. 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).

4. Anker is subject to this Court’s specific and general personal jurisdiction due at least to Anker’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.

5. Specifically, Anker 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 Eastern District of Texas.

6. Venue is proper in this District as to Anker 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).

III. FACTUAL ALLEGATIONS UNDERLYING ALL CLAIMS

7. 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.

8. 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.

9. 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.

10. 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.

11. 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 1.

12. 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 2.

13. The '087 Patent and the '042 Patent are collectively referred to as "the Patents-in-Suit."

14. Comarco is the owner by assignment of all rights, title, and interest in and to the Patents-in-Suit, including the right to recover past damages for infringement.

A. Anker's Infringing Conduct

15. Anker makes, 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. Anker's infringing products include charging devices which are compliant with the USB Battery Charging Specification (including errata and ECNs through March 15, 2012), Revision 1.2, March 15, 2012 ("the USB BC 1.2 specification"), including charging devices that are compliant with the USB4 standard, which requires backward-compatibility with the USB BC 1.2 specification ("the Accused BC 1.2 Chargers"). The Accused BC 1.2 Chargers include, but are not limited to, the Anker 7-Port USB 3.0 Hub and the USB 3.0 SuperSpeed 10-Port Hub products.

16. Anker's infringing products further include charging devices that are compliant with Universal Serial Bus Type-C Cable and Connector Specification, Release 1.0 August 2014 (along with other subsequent revisions of the Type-C specification), and Universal Serial Bus Power Delivery Specification, Revision 2.0 January 2017 ("the Accused PD Chargers"). The Accused PD Chargers include, but are not limited to, the Anker 3-in-1 Premium USB C Hub with Power Delivery, PowerExpand 9-in-1 USB-C PD Dock, PowerPort PD 2 (30W), Anker 543 USB-C Hub (6-in-1, Slim), PowerExpand+ 7-in-1 USB-C PD Ethernet Hub, PowerPort Atom III Slim, 553 USB-C Hub (8-in-1), Anker 341 USB-C Hub (7-in-1), PowerExpand 6-in-1 USB-C 10 Gbps Hub, 555 USB-C Hub (8-in-1), 551 USB-C Hub (8-in-1, Tablet Stand), 563 USB-C Docking Station (10-in-1), 521 Car Charger (32W), Anker 777 Thunderbolt Docking Station (Apex, 12-in-1, Thunderbolt 4), 633 Magnetic Battery, 323 Charger (32W), PowerDrive Speed+ 2

Car Charger, 533 Magnetic Wireless Charger (3-in-1 Stand), 533 Wireless Charger (3-in-1 Stand), PowerExtend USB-C Plug 3 Cube, 524 Power Strip, PowerExpand 9-in-2 USB-C Media Hub, PowerExpand 12-in-1 USB-C PD Media Dock, 335 Power Strip, PowerPort Atom PD 4, 563 USB-C Hub (11-in-1), 577 Thunderbolt Docking Station (13-in-1, Thunderbolt 3), PowerPort Strip PD 2 Mini, 565 USB-C Hub (11-in-1), 655 USB-C Hub (8-in-1), PowerCore 20000 PD, 575 USB-C Docking Station (13-in-1), PowerCore III Sense 10K, PowerCore Slim 10000 PD, and PowerCore 10000 PD Redux products.

17. Anker's infringing products further include portable electronic devices ("PEDs") comprising rechargeable batteries and USB-C ports that are compliant with Universal Serial Bus Type-C Cable and Connector Specification, Release 1.0 August 2014 (along with other subsequent revisions of the Type-C specification), and Universal Serial Bus Power Delivery Specification, Revision 2.0, January 2017 ("the Accused PEDs"). Anker's Accused PEDs include, but are not limited to, the Anker PowerHouse 200, 537 Power Bank (PowerCore 26K for Laptop), PowerCore 20000 PD, PowerCore III Sense 10K, PowerCore Slim 10000 PD, and PowerCore 10000 PD Redux products.

18. As shown in Appendix A, which is incorporated by reference as though fully set forth herein, the Accused BC 1.2 Chargers meet each and every element of at least Claim 1 of the '087 Patent. For example, Appendix A demonstrates that the Accused BC 1.2 Chargers include a D+ pin that constitutes the claimed "third conductor" that transfers the claimed "first signal" and a D- pin that constitutes the claimed "fourth conductor" that transfers the claimed "second signal." The D+ pin receives a signal ("first signal" or "D+ signal") from a portable device connected to the charging port, passes the D+ signal through a resistor (R_{DCP_DAT}), and outputs a new signal on the D- pin ("second signal" or "D- signal") to the portable device. The D+ signal and the D- signal

are separate signals. The D+ signal originates at the portable device and is received by the Accused BC 1.2 Charger. When the D+ signal passes through the resistor R_{DCP_DAT} , the resistance causes the voltage to drop, creating a new D- signal to be transmitted to the portable device via the D- pin. Thus, the D+ signal is received by the Accused BC 1.2 Charger at one voltage and the D- signal is transmitted to the portable device at a second voltage. A person of ordinary skill in the art would understand that the D+ signal and the D- signal are the claimed “first signal” and “second signal,” respectively, of Claim 1 of the '087 Patent.

19. To the extent the Accused BC 1.2 Chargers are deemed not to literally infringe Claim 1 of the '087 Patent because the “second signal” is a modified signal originating in the portable device, the Accused BC 1.2 Chargers infringe Claim 1 of the 087 Patent under the doctrine of equivalents. The purpose of the D- signal is to inform the portable device that the portable device is to receive current from the Accused BC 1.2 Charger and charge its battery. Provided the D- signal is of the appropriate voltage, the portable device interprets the D- signal received from the Accused BC 1.2 Charger as enabling battery charging regardless of the initial origin of the D- signal. The D- signal therefore performs the same function (informing the portable device that it can receive current from the charger for the purposes of charging its battery) in the same way (by receiving a signal from the charger) with the same result (the portable device is able to charge its battery using the current from the charger) as in Claim 1. A person of ordinary skill in the art would thus understand that the Accused BC 1.2 Chargers infringe Claim 1 of the '087 Patent at least under the doctrine of equivalents.

20. As shown in Appendix B, which is incorporated by reference as though fully set forth herein, the Accused PD Chargers meet each and every element of at least Claim 1 of the '087 Patent.

21. As shown in Appendix C, 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.

22. In Appendices B and C the “portable electronic device” is considered to be the portable device to be charged (*e.g.*, a mobile phone) combined with a full featured USB Type-C cable. As explained in Appendices B and C, a full featured USB Type-C cable has a connector that comprises VBUS (“first conductor”), GND (“second conductor”), and two Configuration Channel conductors, *i.e.*, CC1/CC2 (“third conductor” / “fourth conductor”). A “first signal” is received at one of the CC pins by the charger and a “second signal” is received at the other CC pin on the cable, which is designated as the “ V_{conn} ” pin. Thus, a portable device combined with a full featured USB Type-C connector constitutes a “portable electronic device” according to the asserted claims of the '087 Patent and the '042 Patent. A person of ordinary skill in the art would understand the term “portable electronic device” to encompass not only a unitary device such as a mobile phone but also such a device combined with a cable having the claimed conductors. No lexicography, disavowal or disclaimer as to the term “portable electronic device” in the intrinsic evidence of the '087 Patent or the '042 Patent limits the term “portable electronic device” to a unitary device, and the plain and ordinary meaning of “portable electronic device” encompasses a device connected to a cable.

23. Further, the “second signal” has “a parameter level that is usable by the portable electronic device in connection with control of the charging.” The parameter, in one example, is the voltage of the signal received on the V_{conn} pin which informs the portable electronic device that it is able to receive current from the charger and charge its battery. A person of ordinary skill in the art would understand this voltage to be “a parameter level that is usable by the portable electronic device in connection with control of the charging.” No lexicography, disavowal or

disclaimer as to the term “a parameter level that is usable by the portable electronic device in connection with control of the charging” in the intrinsic evidence of the ’087 Patent or the ’042 Patent limits the term “a parameter level that is usable by the portable electronic device in connection with control of the charging” to a value that would exclude a voltage level, and the plain and ordinary meaning of “a parameter level that is usable by the portable electronic device in connection with control of the charging” encompasses a voltage level.

24. To the extent the claim term “portable electronic device” is limited to a unitary device, a portable device combined with a cable constitutes a “portable electronic device” under the doctrine of equivalents. In particular, moving the four conductors from the device itself to a cable connected to the device achieves the same function in the same way with the same result, namely, exchanging signals with a charger to determine whether the device can receive current and charge its battery. This process operates in the same manner whether the four conductors are disposed on the device itself or in a cable connected to the device. The conductors on the cable attached to the unitary device therefore perform the same function (facilitating a connection between a charger and a device to be charged) in the same way (by exchanging signals with the charger) with the same result (the portable device is able to charge its battery using the current from the charger). A person of ordinary skill in the art would thus understand that the Accused PD Chargers and the Accused PEDs infringe Claim 1 of the ’087 Patent and Claim 1 of the ’042 Patent at least under the doctrine of equivalents.

25. Anker has been aware of its infringement of at least the ’087 Patent since no later than July 3, 2022. Prior to that date Comarco submitted a report of rights infringement to Amazon.com, Inc. (“Amazon”) reporting that Anker’s products infringed the ’087 Patent. On July 3 2022, Amazon informed counsel for Comarco that it had provided Comarco’s report to

Anker. On information and belief, from that date forward, Anker had knowledge of both the '087 Patent and its infringement of the '087 Patent and nonetheless continued its infringing conduct.

26. Further, Anker has been aware of its infringement of the '087 Patent and the '042 Patent since no later than July 18, 2022, when Comarco initiated this action. On information and belief, from that date forward, Anker had knowledge of the '087 Patent and the '042 Patent, and its infringement of the '087 Patent and the '042 Patent, and nonetheless continued its infringing conduct.

COUNT I - INFRINGEMENT OF THE '087 PATENT

27. Comarco repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.

28. Anker directly infringes and has directly infringed one or more claims of the '087 Patent without authority by making, using, selling, offering for sale, and/or importing the Accused BC 1.2 Chargers and the Accused PD Chargers. A detailed claim chart that maps each element of at least one claim (claim 1) of the '087 Patent against an exemplary Accused BC 1.2 Charger showing Anker's infringement (based on Anker's acts of making, using, selling, offering for sale and/or importing Accused BC 1.2 Chargers) of the '087 Patent is attached as Appendix A. A detailed claim chart that maps each element of at least one claim (claim 1) of the '087 Patent against an exemplary Accused PD Charger showing Anker's infringement (based on Anker's acts of making, using, selling, offering for sale and/or importing Accused PD Chargers) of the '087 Patent is attached as Appendix B.

29. Anker's acts of infringement have occurred within this District and elsewhere throughout the United States.

30. On information and belief, at least as of the filing of the Complaint on July 18, 2022, if not receipt of the communication from Amazon on or about July 3, 2022, Anker is aware of the '087 Patent, has knowledge of the infringing nature of its activities, and nevertheless continues to perform its infringing activities.

31. Anker's infringement of the '087 Patent is deliberate and willful, and thus Comarco is entitled to treble damages under 35 U.S.C. § 284. *See, e.g., Arigna Tech. Ltd. v. Bayerische Motoren Werke AG*, No. 2:21-CV-00172-JRG, 2022 WL 610796, at *6 (E.D. Tex. Jan. 24, 2022) ("This Court has previously found that allegations that a defendant continues its allegedly infringing conduct even after receiving notice of a complaint are sufficient to at least state a claim for post-suit willful infringement.").

32. Comarco has been damaged and will suffer additional damages due to Anker's infringement.

COUNT II - INFRINGEMENT OF THE '042 PATENT

33. Comarco repeats and re-alleges the allegations of the above paragraphs as if fully set forth herein.

34. Anker directly infringes and has directly infringed one or more claims of the '042 Patent without authority by making, using, selling, offering for sale, and/or importing the Accused PEDs. A detailed claim chart that maps each element of at least one claim (claim 1) of the '042 Patent against an exemplary Accused PED showing Anker's infringement (based on Anker's acts of making, using, selling, offering for sale and/or importing Accused PEDs) of the '042 Patent is attached as Appendix C.

35. Anker's acts of infringement have occurred within this District and elsewhere throughout the United States.

36. On information and belief, at least as of the filing of the Complaint on July 18, 2022, Anker is aware of the '042 Patent, has knowledge of the infringing nature of its activities, and nevertheless continues to perform its infringing activities.

37. Anker's infringement of the '042 Patent is deliberate and willful, and thus Comarco is entitled to treble damages under 35 U.S.C. § 284. *See, e.g., Arigna Tech. Ltd. v. Bayerische Motoren Werke AG*, No. 2:21-CV-00172-JRG, 2022 WL 610796, at *6 (E.D. Tex. Jan. 24, 2022) ("This Court has previously found that allegations that a defendant continues its allegedly infringing conduct even after receiving notice of a complaint are sufficient to at least state a claim for post-suit willful infringement.")

38. Comarco has been damaged and will suffer additional damages due to Anker's infringement.

IV. PRAYER FOR RELIEF

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

- A. Declaring that Anker 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 Anker'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 Anker to Comarco as provided by 35 U.S.C. § 285 or other relevant law or provision;
- D. Awarding enhanced damages under 35 U.S.C. § 284.
- E. Awarding expenses, costs, and disbursements in this action against Anker to Comarco, including prejudgment interest; and
- F. 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: December 21, 2022

Respectfully submitted,

By: /s/ Matthew C. Holohan

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