IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE

FUNDAMENTAL INNOVATION SYSTEMS INTERNATIONAL LLC,	
Plaintiff,	Civil Action No.
vs. ANKER INNOVATIONS LTD. AND FANTASIA TRADING LLC D/B/A ANKERDIRECT, Defendants.	JURY TRIAL DEMANDED

COMPLAINT FOR PATENT INFRINGEMENT AND JURY DEMAND

Plaintiff Fundamental Innovation Systems International LLC ("Plaintiff" or "Fundamental"), by and through its undersigned counsel, brings this action against Defendants Anker Innovations Ltd. and Fantasia Trading LLC d/b/a AnkerDirect ("Defendant" or "Anker") to prevent Defendant's continued infringement of Plaintiff's patents without authorization and to recover damages resulting from such infringement.

PARTIES

- 1. Plaintiff is a Delaware limited liability company with a place of business located at 2990 Long Prairie Road, Suite B, Flower Mound, Texas 75022.
- 2. Plaintiff is the owner by assignment of all right, title, and interest in U.S. Patent Nos. 7,239,111 (the "'111 Patent"), 8,624,550 (the "'550 Patent"), 7,453,233 (the "'233 Patent"), and 6,936,936 (the "'936 Patent") (collectively, the "Patents-in-Suit").
- 3. On information and belief, Anker Innovations Ltd. is a Hong Kong company with a place of business at Room 1318-19, Hollywood Plaza, 610 Nathan Road, Mongkok, Kowloon, Hong Kong SAR, People's Republic of China.

- 4. On information and belief, Fantasia Trading LLC d/b/a AnkerDirect is a limited liability company organized under the laws of the State of Delaware with a place of business at 9155 Archibald Avenue, Suite 202, Rancho Cucamonga, California 91730, and can be served through its registered agent Business Filings Incorporated at 108 W. 13th Street, Wilmington, Delaware 19801.
- 5. On information and belief, Anker directly and/or indirectly imports, develops, designs, manufactures, uses, distributes, markets, offers to sell and/or sells products and services in the United States, including in this district, and otherwise purposefully direct activities to the same.

JURISDICTION AND VENUE

- 6. This is an action for patent infringement arising under the patent laws of the United States of America, 35 U.S.C. § 1, *et seq.*, including 35 U.S.C. § 271. This Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 7. This Court has personal jurisdiction over Anker Innovations Ltd. pursuant to due process and/or the Delaware Long Arm Statute, due at least to its substantial business in this State, including: (A) at least part of its own infringing activities alleged herein; and (B) regularly doing or soliciting business, engaging in other persistent conduct, and/or deriving substantial revenue from infringing goods offered for sale, sold, and imported and services provided to Delaware residents vicariously through and/or in concert with its subsidiaries, intermediaries, and/or agents.
- 8. This Court has personal jurisdiction over Fantasia Trading LLC d/b/a AnkerDirect based at least on its incorporation in the State of Delaware.
- 9. Venue is proper in this judicial district under 28 U.S.C. § 1391 with respect to Anker Innovations Ltd. because it is not a resident in the United States, and thus may be sued in any judicial district, including this one.
- 10. Venue is proper in this judicial district under 28 U.S.C. § 1400(b) with respect to Fantasia Trading LLC d/b/a AnkerDirect because it is incorporated in, and therefore reside in, the

State of Delaware.

FACTUAL ALLEGATIONS

The Patents-in-Suit

- 11. The Patents-in-Suit relate to, among other things, novel techniques for using Universal Serial Bus ("USB") in connection with mobile devices to both facilitate data communication and allow for the charging of certain classes of devices. This technology represented a fundamental break from previous techniques for mobile device charging and has provided for faster charging times, longer battery life, improved user experiences and a dramatic increase in performance and features.
- 12. The Patents-in-Suit resulted from a large scale research and development program at Research In Motion Limited ("RIM"), later reorganized as BlackBerry Limited ("BlackBerry"). At the time of the inventions, RIM was a global leader and pioneer in the field of wireless mobile communications. The company was founded in 1984 and revolutionized the mobile industry when it launched the BlackBerry® 850 in 1999. Fundamental is responsible for protecting and licensing seminal BlackBerry innovations in the field of USB charging.
- 13. In the early 2000s, BlackBerry sought to simplify the number of cables and connectors used with its mobile devices and provide its customers with an improved device for charging a mobile device's battery. At the time, mobile devices in the market used either separate connectors for power (including battery charging) and for data, or a proprietary connector that could not be used with other devices. As a result, mobile device users frequently had to carry at least two different cables with them—and even more if they used more than one device.
- 14. The disclosures of the Patents-in-Suit describe this problem in the art. For example, the specification of the '111 patent explains: "[M]ost mobile devices provide a distinct power interface for receiving power from a power Source, for instance to recharge a battery, and a separate data interface for communicating. For example, many mobile devices presently use USB (Universal Serial Bus) interfaces for communicating and use a separate power interface, such as a

barrel connector, for receiving power. It is desirable, however, to have a combined power and data interface. The mobile devices that do have combined power and data interfaces typically use non-standard and sometimes proprietary interfaces. Consequently, combined interfaces for a particular manufacturer's mobile device may not be compatible with combined interfaces for mobile devices provided by other manufacturers." '111 Patent col. 1:35-51.

- USB with its mobile devices. At the time, USB was emerging as a standardized, non-proprietary interface used to connect computers to peripheral devices. For example, Revision 2.0 of the USB Specification ("USB 2.0"), first published on April 27, 2000, defined connectors and interfaces with power and data lines that could be used to support power delivery and data communications between a host (*e.g.*, a PC) and a connected device (*e.g.*, a keyboard or mouse).
- battery charging in mind, and mobile devices prior to the inventions of the Patents-in-Suit did not use USB for charging the battery of the mobile device. Accordingly, USB 2.0 does not define or otherwise describe a USB charging adapter or the use of USB to charge a battery. Instead, USB 2.0 defines a data and power protocol between a "USB host," such as a desktop computer or laptop, and one or more "USB devices," such as a mouse, keyboard, microphone, or speaker, connected to the USB host over a USB connection. According to USB 2.0, when a USB device is connected to a USB host, it must perform a process called "USB enumeration," during which the USB host and USB device exchange certain data in order to configure the USB device for use with the USB host. As part of the enumeration process, the USB device is configured to draw up to (but no more than) 500 milliamps of current from the USB host; and if enumeration does not successfully complete, the USB device is limited to drawing even less current.
- 17. BlackBerry realized that existing USB technology was not effective for charging a battery in a mobile device for multiple reasons. First, the enumeration requirement meant that a mobile device using USB for battery charging could only charge when connected to a USB host, such as a computer, that was capable of performing USB enumeration. This meant that mobile

devices could not charge the battery from more common and more convenient sources, such as electrical outlets and car chargers, and could not charge at all when the battery was fully depleted and the device was unable to power on in order to perform USB enumeration. Second, designing a USB charging adapter that could perform the enumeration functionality of a USB host would have increased the size and the cost of the charging adapter, which was not practical. Third, the current limits imposed by USB 2.0 would significantly limit the charging speed of a mobile device, requiring hours to fully charge the battery, which was not acceptable for a mobile device.

- 18. The technical problems encountered by BlackBerry are identified in the disclosures of the Patents-in-Suit. For example, the specification of the '111 patent explains: "In accordance with the USB specification, typical USB power source devices, such as hubs and hosts, require that a USB device participate in a host-initiated process called enumeration in order to be compliant with the current USB specification in drawing power from the USB interface. Although a mobile device could be adapted to participate in enumeration when drawing power over the USB interface, it would be preferable in many situations, such as when a host would not be available, as often happens during normal use of a mobile device, to be able to utilize alternate power sources such as conventional AC outlets and DC car sockets that are not capable of participating in enumeration to supply power to the mobile device via a USB interface." '111 Patent col. 1:54-67. The specification goes on to state: "Typically when a mobile device 10 receives power over the USB from a USB host, it is required to draw power in accordance with the USB specification. The USB specification specifies a process for transferring energy across the USB called enumeration and limits the electrical current that can flow across the USB." '111 Patent col. 8:11-16.
- 19. In order to overcome these technical problems associated with using USB for battery charging, BlackBerry invented a new charging adapter that is different from the USB hosts and USB hubs defined in USB 2.0. BlackBerry's novel USB charging adapter utilized the same USB connector that was used by a USB host so that a mobile device could connect to the adapter using the same USB cable used for connecting the mobile device to a USB host. The novel USB charging adapter, however, utilized the USB connector in a new way that did not previously exist

in the art. Unlike a conventional USB host, BlackBerry's novel USB charging adapter included novel circuitry for providing a signal (*e.g.*, an "identification signal") to a connected mobile device. The signal provided by this novel circuitry informed the mobile device that it is connected to a charging adapter as opposed to a conventional USB host or hub, and thereby allowed the mobile device to draw a higher level of current from the adapter without performing USB enumeration, in order to more quickly charge the battery in the mobile device. In addition, BlackBerry's novel circuitry was designed to provide a signal over the USB data connection that is not defined as valid in USB 2.0 (*e.g.*, an "abnormal data condition") so that it could be distinguished from data communication provided by a conventional USB host, and would not interfere with the conventional USB functionality of a compatible mobile device. BlackBerry's novel USB charging adapter is embodied and reflected in the claims of the '111, '550, '233, and '936 patents.

- 20. The novelty of the inventions claimed in the Patents-in-Suit has consistently been confirmed by the Patent Trial and Appeal Board ("PTAB"). The Patents-in-Suit and other related patents have collectively been challenged in eighteen separate *inter partes* review ("IPR") petitions filed by four different petitioners at the PTAB. Three of these petitions were voluntarily terminated prior to any determination by the PTAB. For the remaining fifteen petitions, the PTAB uniformly affirmed the novelty of BlackBerry's inventions and the validity of the Patents-in-Suit. The PTAB denied institution of IPR for thirteen of the petitions, finding that the petitioners had not even demonstrated a reasonable likelihood that any challenged claim was unpatentable. For the two petitions where an IPR was instituted, the PTAB issued a final written decision upholding the validity of all claims.
- 21. The value of the inventions claimed by the Patents-in-Suit has also been widely recognized in the industry. Over fifty companies have taken licenses to the Patents-in-Suit, including many of Anker's competitors.

Anker's Accused Products and Infringement

22. On information and belief, Anker makes, uses, sells, offers for sale and/or imports infringing USB charging adapters ("Accused Products") in the United States, including but not

limited to: Wall Chargers (e.g., Anker Nano, PowerPort C1, PowerPort PD 2, PowerPort III Duo, PowerPort III mini, PowerPort Atom III 60W, PowerPort Atom III (2 ports), PowerPort Atom PD 2, PowerPort III 2-Port 60W, PowerPort III 3-port 65W Charger, PowerPort II 2, PowerPort Speed 2 Ports, PowerPort Speed 4 Ports, Anker PowerPort Speed+ Duo Wall Charger, PowerPort II with Power Delivery, PowerPort Atom PD 1, PowerPort Speed 1 USB-C, PowerPort Elite 2, PowerPort 4 Ports, PowerPort+ 1 with QC 3.0, PowerPort 2 Ports, PowerPort Speed 1 USB-C Port, PowerPort Mini Dual Port Wall Charger, Anker 18W Power Delivery USB C Charger, PowerPort Atom PD 1 with Powerline II Cable, PowerPort PD Nano, PowerPort Atom PD 1, Anker 45W Ultra-Slim Fast Charger), Car Chargers (e.g., PowerDrive PD 2, PowerDrive III Duo, PowerDrive Speed+ Duo, PowerDrive+ III Duo, PowerDrive 2 Alloy Metal Mini, PowerDrive 2, PowerDrive Elite 2 Ports with Lightning Connector, PowerDrive Speed 2, 30W Dual USB Car Adapter PowerDrive Speed 2, PowerDrive Speed+ 2, PowerDrive Elite 2, PowerDrive+ 1 Port, PowerDrive 5 Ports, PowerDrive Classic PD 2), Desktop Chargers (e.g., PowerPort Atom III Slim (four ports), PowerPort Atom PD 4, PowerPort Speed PD 5, PowerPort 6, PowerPort Speed 5 Ports, PowerPort 5, PowerPort Speed 5 Ports, PowerPort 10), Power Strips (e.g., PowerPort Strip 3 with 3 USB Ports, PowerPort Strip 6 with 3 USB Ports, PowerExtend USB 2 mini, PowerPort Strip PD 2 Mini, PowerPort Strip PD 3, PowerStrip Pad, PowerPort Strip PD 6), Power Banks (e.g., PowerCore Fusion, PowerCore+ mini 3350, Astro E1, PowerCore II 6700, Anker PowerCore III 5000mAh, PowerCore III Sense 10k, PowerCore Slim 10000 PD, Anker PowerCore Lite 10000mAh, PowerCore Lite 20000, PowerCore II 10000, PowerCore Slim 10000, PowerCore 10000mAh Power Bank, PowerCore Speed 10000, PowerCore 104000, PowerCore 13000, PowerCore 15600, PowerCore+ 10050, PowerCore 13000 C, PowerCore 10000 Redux, PowerCore 10000 PD, PowerCore 15000 Redux, PowerCore Slim 10000, PowerCore 10000 PD Redux, PowerCore II 20000, PowerCore Speed 20000, PowerCore Elite 20000, PowerCore 20100, PowerCore 26800, PowerCore+ 20100 USB-C, PowerCore+ 26800 PD, PowerCore+ 26800), and other models that include similar functionality.

23. The Accused Products are USB charging adapters that are designed to provide

power to a mobile device. The charging adapters include a Vbus line and a USB communication path. The charging adapters are configured to generate an identification signal, such as a voltage on a D+ line and on a D- line, that indicates to the mobile device that it is receiving power from a source that is not a USB host or hub. The charging adapters are able to supply current to a mobile device without regard to at least one associated condition specified in a USB specification. Certain of the Accused Products also receive power from a power socket and include a power converter that regulates the received power to generate a DC power output.

Anker's Knowledge of the Patents-in-Suit and Infringement

- 24. No later than April 29, 2016, Fundamental communicated to Anker notice of the Patents-in-Suit. In 2017, Fundamental met with representatives of Anker to provide an explanation of Anker's infringement of the Patents-in-Suit, including claim charts showing that infringement, and to discuss a license to the Patents-in-Suit.
- 25. On January 9, 2019, Fundamental and Anker entered into a Limited Release and Standstill Agreement ("Anker Agreement"), which expired on December 31, 2020.
- 26. Fundamental's provision of actual notice of infringement entitles Fundamental to past damages pursuant to 35 U.S.C. §287, at least as of January 9, 2019, the date on which the parties entered into the Limited Release and Standstill Agreement.
- Anker Agreement, Anker has continued to make, use, sell, offer for sale, and import into the United States the Accused Products. Anker's making, using, selling, offering to sell and importing of the Accused Products into the United States constitute direct infringement under 35 U.S.C. § 271(a). On information and belief, Anker also directly infringes one or more method claims in the Patents-in-Suit by testing, repairing, and using the Accused Products in the United States.
- 28. After having received notice of the Patents-in-Suit, and after expiration of the Anker Agreement, Anker has continued to make, use, sell, offer for sale, and import into the United States the Accused Products with knowledge that these Accused Products are a material part of inventions claimed by the Patents-in-Suit and are especially made or adapted for use in an

Products are not a staple article or commodity of commerce suitable for substantial non-infringing use. Anker's actions contribute to the direct infringement of the Patents-in-Suit by others, including customers of the Accused Products, in violation of 35 U.S.C. § 271(c). For example, the Accused Products include battery charging adapters, which are a component of a patented machine, manufacture, or combination, or an apparatus for use in practicing a patented process. Furthermore, such components are a material part of the invention and are not a staple article or commodity of commerce suitable for substantial non-infringing use.

- After having received notice of the Patents-in-Suit, and after expiration of the Anker Agreement, Anker has continued to advertise and distribute the Accused Products, offer technical assistance, and publish user manuals, specifications, promotional literature or instructions to customers, partners, and/or end users, advising them to use the Accused Products in a manner that directly infringes the Patents-in-Suit. On information and belief, by such acts, Anker actively induced, and continues to actively induce, direct infringement of the Patents-in-Suit, in violation of 35 U.S.C. § 271(b). For example, Anker's customers who purchase the Accused Products and operate the Accused Products in accordance with instructions provided by Anker, directly infringe one or more claims of the Patents-in-Suit. Anker provides such instructions through, for example, user guides, including user guides located at: https://www.anker.com/download.
- 30. On information and belief, Anker has further actively induced infringement by remaining willfully blind to its customers' infringement despite believing there to be a high probability its customers, among others, infringe the Patents-in-Suit.

FIRST CLAIM FOR RELIEF

(Infringement of U.S. Patent No. 7,239,111)

- 31. Fundamental re-alleges and incorporates by reference the allegations of the preceding paragraphs of this Complaint as if fully set forth herein.
 - 32. The '111 Patent, titled "Universal Serial Bus Adapter for a Mobile Device," was

duly and legally issued on July 3, 2007. A true and correct copy of the '111 Patent is attached as Exhibit A.

- 33. The '111 Patent names Daniel M. Fischer, Dan G. Radut, Michael F. Habicher, Quang A. Luong, and Jonathan T. Malton as co-inventors.
- 34. The '111 Patent has been in full force and effect since its issuance. Fundamental owns by assignment the entire right, title, and interest in and to the '111 Patent, including the exclusive right to seek damages for past, current and future infringement thereof.
- 35. The claims of the '111 Patent are directed to a novel USB charging adapter. For example, claim 1 of the '111 Patent recites a "Universal Serial Bus ('USB') adapter for providing power to a mobile device through a USB port." Among other things, the claim requires a novel "identification subsystem" invented by BlackBerry, which provides an "identification signal" that "indicate[s] to the mobile device" that it is connected to a USB charging adapter and "not a USB host or hub." By detecting the identification signal via a USB connection, a novel mobile device according to BlackBerry's invention can distinguish between a USB charging adapter and a USB host, and can forgo enumeration and draw higher current when connected to a USB charging adapter.
- 36. Claim 1 also requires a USB connector on the USB adapter that is coupled to the identification subsystem. The claims of the '111 patent use a USB connector in a novel manner on an adapter to enable a mobile device to be coupled to the power output and identification signal of the USB adapter. Using a USB connector on an adapter provides advantages that were not known in the prior art in that it enables a mobile device to be connected to either the USB adapter or to a conventional USB host (such a s PC) using the same USB cable.
- 37. The dependent claims of the '111 Patent recite in more detail the implementations of specific embodiments of BlackBerry's novel USB charging adapter. For example, claims 6 and 7 describe how the identification subsystem in the novel USB charging adapter provides the identification signal to a connected mobile device, *e.g.*, by providing "a voltage level that is applied to at least one data line in the USB connector" (claim 6) or "a hard-wired connection of a voltage

level to one or more data lines in the USB connector" (claim 7).

38. On information and belief, Anker has been, and currently is, directly infringing

the '111 Patent by making, using, selling, offering to sell, and/or importing into the United States

the Accused Products. On information and belief, Anker's products infringe at least claim 1 of the

'111 Patent.

39. The Accused Products are charging adapters that are able to provide power to a

mobile device. The products include a plug unit that can be plugged into an electrical socket to

receive energy from the socket.

Foldable Plug

40. The products also include a power converter that converts the voltage from the electrical outlet to a voltage that can be output from the charging adapter. For example, some of the Accused Products can be connected to an AC electrical outlet and convert the AC voltage to a DC voltage.

Input: AC 100-240V-0.7A 50-60Hz Output: 5.0V=4.8A (2.4A Max Per Port)

https://www.anker.com/products/variant/powerport-ii-2/A2027121

41. Other Accused Products can be connected to an electrical outlet in a vehicle and

convert power from 12v to 5v for output from the charging adapter.

- 42. The Accused Products include an identification subsystem that is configured to generate an identification signal that consists of voltages on the D+ and D- lines. These voltages indicate to a mobile device that the power socket is not a USB host or hub.
- 43. The Accused Products also include a USB connector, e.g., a USB type A connector, that is coupled to the power converter through a Vbus line and to the identification subsystem. The USB connector is configured to couple the power output and identification signal to a mobile device, through a USB cable.



44. On information and belief, Anker has been, and currently is, inducing infringement of the '111 Patent, in violation of 35 U.S.C. § 271(b), by knowingly encouraging or aiding others to make, use, sell, or offer to sell the Accused Products in the United States, or to import the Accused Products into the United States, without license or authority from Fundamental, with knowledge of or willful blindness to the fact that Anker's actions will induce others, including but

not limited to its customers, partners, and/or end users, to directly infringe the '111 patent. Anker induces others to infringe the '111 Patent by encouraging and facilitating others to perform actions that Anker knows to be acts of infringement of the '111 Patent with specific intent that those performing the acts infringe the '111 Patent.

- 45. On information and belief, Anker has been, and currently is, contributorily infringing the '111 Patent, in violation of 35 U.S.C. § 271(c), by selling or offering for sale, in this judicial district and throughout the United States, components that embody a material part of the inventions described in the '111 Patent, are known by Anker to be especially made or especially adapted for use in infringement of the '111 Patent, and are not staple articles of commerce or commodities suitable for substantial, non-infringing use, including at least the Accused Products. Anker's actions contribute to the direct infringement of the Patents-in-Suit by others, including customers of the Accused Products, in violation of 35 U.S.C. § 271(c).
- 46. As a result of Anker's infringement of the '111 Patent, Fundamental has been damaged. Fundamental is entitled to recover for damages sustained as a result of Anker's wrongful acts in an amount to be determined. Fundamental has complied with the requirements of 35 U.S.C. § 287(a) at least because Fundamental provided Anker with written notice of the infringement as discussed above.
- 47. In addition, Anker's infringing acts have caused and are causing immediate and irreparable harm to Fundamental.
- 48. On information and belief, Anker has had actual knowledge of its infringement of the '111 Patent since no later than 2017. On information and belief, Anker's infringement of the '111 Patent has been and continues to be deliberate and willful, and, therefore, this is an exceptional case warranting an award of treble damages and attorney's fees to Fundamental pursuant to 35 U.S.C. §§ 284-285.

SECOND CLAIM FOR RELIEF

(Infringement of U.S. Patent No. 8,624,550)

49. Fundamental re-alleges and incorporates by reference the allegations of the

preceding paragraphs of this Complaint as if fully set forth herein.

- 50. The '550 Patent, titled "Multifunctional Charger System and Method," was duly and legally issued on January 7, 2014. A true and correct copy of the '550 Patent is attached as Exhibit B.
- 51. The '550 Patent names Daniel M. Fischer, Dan G. Radut, Michael F. Habicher, Quang A. Luong, and Jonathan T. Malton as co-inventors.
- 52. The '550 Patent has been in full force and effect since its issuance. Fundamental owns by assignment the entire right, title, and interest in and to the '550 Patent, including the exclusive right to seek damages for past, current and future infringement thereof.
- 53. The claims of the '550 Patent are directed to a novel USB charging adapter that includes a USB VBUS line and USB communication path. For example, claim 1 of the '550 Patent recites an "adapter comprising: a USB VBUS line and a USB communication path." The VBUS line is the pin or wire in a USB cable or connector that is used to supply power. The USB communication path includes the D+ and D- pins or wires in a USB cable or connector that are used for data communications in a conventional USB host; and are used to provide the identification signal in at least some embodiments of the '550 Patent. The claims of the '550 patent use the VBUS line and the D+ and D- lines in a novel manner on an adapter to provide an identification signal and power to a mobile device from the USB adapter. Using these lines on an adapter provides advantages that were not known in the prior art in that it enables a mobile device to be connected to either the USB adapter or to a conventional USB host (such a s PC) using the same USB cable.
- 54. Claim 1 also requires that the adapter be "configured to supply current on the VBUS line without regard to at least one associated condition specified in a USB specification." This limitation refers to the novel aspect of BlackBerry's USB charging adapter that it is designed to supply a higher current to a compatible mobile device after the mobile device has determined that it is connected to a USB charging adapter and not a conventional USB host (e.g., by detecting an "identification signal" or "abnormal data condition" on the USB communication path).

- 55. The dependent claims of the '550 Patent recite in more detail the implementations of specific embodiments of BlackBerry's novel USB charging adapter. For example, claim 3 recites another inventive aspect of BlackBerry's USB charging adapter, which further distinguishes it from conventional USB hosts defined in USB 2.0; supplying current on the VBUS power line without first performing USB enumeration.
- 56. Similarly, claims 4-7 describe various specific implementations by which the circuitry in the novel USB charging adapter can indicate to the mobile device that the USB charging adapter is not a conventional USB host, thereby causing a compatible mobile device to draw higher current. For example, claim 4 recites that the higher current is supplied in response to "an abnormal data condition on [the] USB communication path"; claim 6 further provides that the "abnormal data condition" is provided on the "D+ line" and the "D- line" used for USB data communications; and claim 7 further provides that the "abnormal data condition" is a "logic high signal" on the D+ and D- lines. Each of the foregoing dependent claims reflect BlackBerry's innovative use of circuitry in the novel USB charging adapter to provide a signal that is not defined as valid by the USB Specification, allowing a compatible mobile device to distinguish between the novel USB charging adapter and a conventional USB host without otherwise interfering with conventional USB functionality.
- 57. Anker has been, and currently is, directly infringing the '550 Patent by making, using, selling, offering to sell, and/or importing into the United States the Accused Products. On information and belief, Anker's products infringe at least claim 1 of the '550 Patent.
- 58. The Accused Products are charging adapters that include a USB VBUS line and D+/D- lines that are a USB communication path.



- 59. When connected to a mobile device, the Accused Products generate voltages on the D+ and D- lines.
- 60. The Accused Products are configured to supply current on the VBUS line of greater than 500 mA, which is without regard to the current limits in the USB specification.

Input: AC 100-240V-0.7A 50-60Hz Output: 5.0V=4.8A (2.4A Max Per Port)

https://www.anker.com/products/variant/powerport-ii-2/A2027121

- 61. On information and belief, Anker has been, and currently is, inducing infringement of the '550 Patent, in violation of 35 U.S.C. § 271(b), by knowingly encouraging or aiding others to make, use, sell, or offer to sell the Accused Products in the United States, or to import the Accused Products into the United States, without license or authority from Fundamental, with knowledge of or willful blindness to the fact that Anker's actions will induce others, including but not limited to its customers, partners, and/or end users, to directly infringe the '550 patent. Anker induces others to infringe the '550 Patent by encouraging and facilitating others to perform actions that Anker knows to be acts of infringement of the '550 Patent with specific intent that those performing the acts infringe the '550 Patent.
- 62. On information and belief, Anker has been, and currently is, contributorily infringing the '550 Patent, in violation of 35 U.S.C. § 271(c), by selling or offering for sale, in this

judicial district and throughout the United States, components that embody a material part of the inventions described in the '550 Patent, are known by Anker to be especially made or especially adapted for use in infringement of the '550 Patent, and are not staple articles of commerce or commodities suitable for substantial, non-infringing use, including at least the Accused Products. Anker's actions contribute to the direct infringement of the Patents-in-Suit by others, including customers of the Accused Products, in violation of 35 U.S.C. § 271(c).

- 63. As a result of Anker's infringement of the '550 Patent, Fundamental has been damaged. Fundamental is entitled to recover for damages sustained as a result of Anker's wrongful acts in an amount to be determined. Fundamental has complied with the requirements of 35 U.S.C. § 287(a) at least because Fundamental provided Anker with written notice of the infringement as discussed above.
- 64. In addition, Anker's infringing acts have caused and are causing immediate and irreparable harm to Fundamental.
- 65. On information and belief, Anker has had actual knowledge of its infringement of the '550 Patent since no later than 2017. On information and belief, Anker's infringement of the '550 Patent has been and continues to be deliberate and willful, and, therefore, this is an exceptional case warranting an award of treble damages and attorney's fees to Fundamental pursuant to 35 U.S.C. §§ 284-285.

THIRD CLAIM FOR RELIEF

(Infringement of U.S. Patent No. 7,453,233)

- 66. Fundamental re-alleges and incorporates by reference the allegations of the preceding paragraphs of this Complaint as if fully set forth herein.
- 67. The '233 Patent, titled "Adapter System and Method for Powering a Device," was duly and legally issued on November 18, 2008. A true and correct copy of the '233 Patent is attached as Exhibit C.
- 68. The '233 Patent names Daniel M. Fischer, Dan G. Radut, Michael F. Habicher, Quang A. Luong, and Jonathan T. Malton as co-inventors.

- 69. The '233 Patent has been in full force and effect since its issuance. Fundamental owns by assignment the entire right, title, and interest in and to the '233 Patent, including the exclusive right to seek damages for past, current and future infringement thereof.
- 70. The claims of the '233 Patent are directed to a novel USB charging adapter. For example, claim 1 of the '233 Patent recites a "Universal Serial Bus ('USB') adapter for providing power through a USB connector." Among other things, the claim requires a novel "identification subsystem" invented by BlackBerry, which provides an "identification signal" that "indicate[s] the USB adapter is configured to send substantial energy through the USB connector before completing device enumeration." By detecting the identification signal via a USB connection, a novel mobile device according to BlackBerry's invention can distinguish between a USB charging adapter and a USB host, and can forgo enumeration and draw higher current when connected to a USB charging adapter.
- 71. Claim 1 also requires a USB connector on the USB adapter that is coupled to the identification subsystem. The claims of the '233 patent use a USB connector in a novel manner on an adapter to enable a mobile device to be coupled to the power output and identification signal of the USB adapter. Using a USB connector on an adapter provides advantages that were not known in the prior art in that it enables a mobile device to be connected to either the USB adapter or to a conventional USB host (such a s PC) using the same USB cable.
- 72. The dependent claims of the '233 Patent recite in more detail the implementations of specific embodiments of BlackBerry's novel USB charging adapter. For example, claims 6 and 7 describe how the identification subsystem in the novel USB charging adapter provides the identification signal to a connected mobile device, *e.g.*, by providing "a voltage level that is applied to at least one data line in the USB connector" (claim 6) or "a hard-wired connection of a voltage level to one or more data lines in the USB connector" (claim 7).
- 73. Anker has been, and currently is, directly infringing the '233 Patent by making, using, selling, offering to sell, and/or importing into the United States the Accused Products. On information and belief, Anker's products infringe at least claim 1 of the '233 Patent.

74. The Accused Products are charging adapters that are able to provide power to a mobile device. The products include a plug unit that can be plugged into an electrical socket to receive energy from the socket.



75. The Accused Products also include a power converter that converts voltage from an electrical outlet to a voltage that can be output from the charging adapter. For example, some of the Accused Products can be connected to an AC electrical outlet and convert the AC voltage to a DC voltage.

Input: AC 100-240V-0.7A 50-60Hz Output: 5.0V=4.8A (2.4A Max Per Port)

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- 76. Other Accused Products can be connected to an electrical outlet in a vehicle and convert power from 12v to 5v for output from the charging adapter.
- 77. The Accused Products include an identification subsystem that is configured to generate an identification signal that consists of voltages on D+ and D- lines. These voltages indicate to the mobile device that the adapter is configured to send substantial energy, for example, more than 500 mA, through the USB connector before completing device enumeration.

78. The Accused Products also include a USB connector, e.g., a USB type A connector, that is coupled to the power converter through a Vbus line and to the identification subsystem. The USB connector is configured to couple the power output and identification signal to a mobile device, through a USB cable.



79. On information and belief, Anker has been, and currently is, inducing infringement of the '233 Patent, in violation of 35 U.S.C. § 271(b), by knowingly encouraging or aiding others to make, use, sell, or offer to sell the Accused Products in the United States, or to import the Accused Products into the United States, without license or authority from Fundamental, with knowledge of or willful blindness to the fact that Anker's actions will induce others, including but not limited to its customers, partners, and/or end users, to directly infringe the '233 patent. Anker induces others to infringe the '233 Patent by encouraging and facilitating others to perform actions that Anker knows to be acts of infringement of the '233 Patent with specific intent that those performing the acts infringe the '233 Patent.

- 80. On information and belief, Anker has been, and currently is, contributorily infringing the '233 Patent, in violation of 35 U.S.C. § 271(c), by selling or offering for sale, in this judicial district and throughout the United States, components that embody a material part of the inventions described in the '233 Patent, are known by Anker to be especially made or especially adapted for use in infringement of the '233 Patent, and are not staple articles of commerce or commodities suitable for substantial, non-infringing use, including at least the Accused Products. Anker's actions contribute to the direct infringement of the Patents-in-Suit by others, including customers of the Accused Products, in violation of 35 U.S.C. § 271(c).
- 81. As a result of Anker's infringement of the '233 Patent, Fundamental has been damaged. Fundamental is entitled to recover for damages sustained as a result of Anker's wrongful acts in an amount to be determined. Fundamental has complied with the requirements of 35 U.S.C. § 287(a) at least because Fundamental provided Anker with written notice of the infringement as discussed above.
- 82. In addition, Anker's infringing acts have caused and are causing immediate and irreparable harm to Fundamental.
- 83. On information and belief, Anker has had actual knowledge of its infringement of the '233 Patent since no later than 2017. On information and belief, Anker's infringement of the '233 Patent has been and continues to be deliberate and willful, and, therefore, this is an exceptional case warranting an award of treble damages and attorney's fees to Fundamental pursuant to 35 U.S.C. §§ 284-285.

FOURTH CLAIM FOR RELIEF

(Infringement of U.S. Patent No. 6,936,936)

- 84. Fundamental re-alleges and incorporates by reference the allegations of the preceding paragraphs of this Complaint as if fully set forth herein.
- 85. The '936 Patent, titled "Multifunctional charger system and method," was duly and legally issued on August 30, 2005. A true and correct copy of the '936 Patent is attached as Exhibit D.

- 86. The '936 Patent names Daniel M. Fischer, Dan G. Radut, Michael F. Habicher, Quang A. Luong, and Jonathan T. Malton as co-inventors.
- 87. The '936 Patent has been in full force and effect since its issuance. Fundamental owns by assignment the entire right, title, and interest in and to the '936 Patent, including the exclusive right to seek damages for past, current and future infringement thereof.
- 88. The claims of the '936 Patent are directed to a novel USB charging adapter that includes a USB connector and an identification subsystem. For example, claim 13 of the '936 Patent recites a "Universal Serial Bus ('USB') adapter for providing a source of power to a mobile device through a USB port." Among other things, the claim requires a novel "identification subsystem," which provides an "identification signal at one or more data lines," where the "identification subsystem comprises a hardwired connection of a voltage level to one or more data lines in the primary USB connector." BlackBerry's novel USB charging adapter advantageously permits a compatible mobile device to determine, in response to detecting the identification signal, that the charging adapter is not a conventional USB host.
- 89. Claim 13 also requires a USB connector on the USB charging adapter that is electrically coupled to the identification subsystem. The claims of the '936 patent use a USB connector in a novel manner on an adapter to enable a mobile device to be coupled to the power output and identification signal of the USB adapter. Using a USB connector on an adapter provides advantages that were not known in the prior art in that it enables a mobile device to be connected to either the USB adapter or to a conventional USB host (such a s PC) using the same USB cable.
- 90. Anker has been, and currently is, directly infringing the '936 Patent by making, using, selling, offering to sell, and/or importing into the United States the Accused Products. Anker's products infringe at least claim 13 of the '936 Patent.
- 91. The Accused Products include charging adapters that are able to provide power to a mobile device through a USB port. As shown in the photo below, the Accused Products include a plug unit that can be plugged into an electrical socket to receive energy from the socket.



92. The Accused Products also include a power converter that regulates energy from the power socket so that voltage can be output from the charging adapter, and a USB connector that is electrically connected to the power converter and that is able to deliver power to a mobile device through a USB cable.

Input: AC 100-240V-0.7A 50-60Hz Output: 5.0V=4.8A (2.4A Max Per Port)



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- 93. The USB connecter is also electrically connected to an identification subsystem. The identification subsystem is configured to generate an identification signal that consists of voltages on the D+ and D- lines. The identification subsystem includes a hardwired connection of a voltage level to the D+ and D- lines in the primary USB connector. For example, the D+ and D- lines are either connected together, or connected to the Vbus line through resistors.
- 94. On information and belief, Anker has been, and currently is, inducing infringement of the '936 Patent, in violation of 35 U.S.C. § 271(b), by knowingly encouraging or aiding others to make, use, sell, or offer to sell the Accused Products in the United States, or to import the Accused Products into the United States, without license or authority from Fundamental, with knowledge of or willful blindness to the fact that Anker's actions will induce others, including but not limited to its customers, partners, and/or end users, to directly infringe the '936 patent. Anker induces others to infringe the '936 Patent by encouraging and facilitating others to perform actions that Anker knows to be acts of infringement of the '936 Patent with specific intent that those performing the acts infringe the '936 Patent.
- 95. On information and belief, Anker has been, and currently is, contributorily infringing the '936 Patent, in violation of 35 U.S.C. § 271(c), by selling or offering for sale, in this judicial district and throughout the United States, components that embody a material part of the inventions described in the '936 Patent, are known by Anker to be especially made or especially adapted for use in infringement of the '936 Patent, and are not staple articles of commerce or commodities suitable for substantial, non-infringing use, including at least the Accused Products. Anker's actions contribute to the direct infringement of the Patents-in-Suit by others, including customers of the Accused Products, in violation of 35 U.S.C. § 271(c).
- 96. As a result of Anker's infringement of the '936 Patent, Fundamental has been damaged. Fundamental is entitled to recover for damages sustained as a result of Anker's wrongful acts in an amount to be determined. Fundamental has complied with the requirements of 35 U.S.C. § 287(a) at least because Fundamental provided Anker with written notice of the infringement as discussed above.

- 97. In addition, Anker's infringing acts have caused and are causing immediate and irreparable harm to Fundamental.
- 98. On information and belief, Anker has had actual knowledge of its infringement of the '936 Patent since no later than 2017. On information and belief, Anker's infringement of the '936 Patent has been and continues to be deliberate and willful, and, therefore, this is an exceptional case warranting an award of treble damages and attorney's fees to Fundamental pursuant to 35 U.S.C. §§ 284-285.

PRAYER FOR RELIEF

WHEREFORE, Fundamental prays for judgment against Anker as follows:

- A. That Anker has infringed, and continues to infringe, each of the Patents-in-Suit;
- B. That Anker pay Fundamental damages adequate to compensate Fundamental for Anker's infringement of the Patents-in-Suit, together with interest and costs under 35 U.S.C. § 284;
- C. That Anker be ordered to pay pre-judgment and post-judgment interest on the damages assessed;
- D. That Anker be ordered to pay supplemental damages to Fundamental, including interest, with an accounting, as needed;
- E. That Anker's infringement is willful and that the damages awarded to Fundamental should be trebled;
- F. That this is an exceptional case under 35 U.S.C. § 285 and that Anker pay Fundamental's attorney's fees and costs in this action;
- G. That Anker be enjoined from directly and indirectly infringing the Patents-in-Suit; and
- H. That Fundamental be awarded such other and further relief, including other monetary and equitable relief, as this Court deems just and proper.

DEMAND FOR JURY TRIAL

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

Dated: March 5, 2021

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