IN THE UNITED STATES DISTRICT COURT FOR THE WESTERN DISTRICT OF TEXAS WACO DIVISION

MYPAQ HOLDINGS LTD.,

CIVIL ACTION NO. 6:21-CV-00398-ADA

Plaintiff,

v.

SAMSUNG ELECTRONICS CO., LTD., SAMSUNG ELECTRONICS AMERICA, INC., SAMSUNG SEMICONDUCTOR, INC., and SAMSUNG AUSTIN SEMICONDUCTOR, LLC, JURY TRIAL DEMANDED

Defendants.

PLAINTIFF'S SECOND AMENDED COMPLAINT FOR PATENT INFRINGEMENT AND JURY DEMAND

Plaintiff MyPAQ Holdings Ltd. ("MyPAQ") files this Second Amended Complaint for Patent Infringement and Jury Demand against Defendants Samsung Electronics Co., Ltd., Samsung Electronics America, Inc., Samsung Semiconductor, Inc., and Samsung Austin Semiconductor, LLC (collectively, "Defendants" or "Samsung"). Plaintiff alleges infringement of United States Patent Number 7,403,399 (the "399 Patent"), United States Patent Number 7,675,759 (the "759 Patent"), United States Patent Number 7,978,489 (the "489 Patent"), and United States Patent Number 8,477,514 (the "514 Patent") (collectively, the "Patents") as follows:

I. PARTIES

- 1. MyPAQ is a corporation organized and existing under the laws of the Republic of Seychelles with a principal place of business at 303 Aarti Chambers, Victoria Mahe, Republic of Seychelles. MyPAQ is the assignee of each of the Patents.
- 2. Defendant Samsung Electronics Co., Ltd. is a foreign corporation organized and existing under the laws of the Republic of Korea with a principal place of business at 129, Samsungro, Yeongtong-gu, Suwon-si, Gyeonggi-Do, Korea 443-742.

- 3. Defendant Samsung Electronics America, Inc. is a wholly owned subsidiary corporation of Samsung Electronics Co., Ltd. organized and existing under the laws of New York with a principal place of business at 105 Challenger Road, Ridgefield Park, New Jersey 07660. Samsung Electronics America, Inc. may be served with process through its registered agent with the Texas Secretary of State, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201. Samsung Electronics America, Inc. is registered to do business in Texas and has been since at least June 10, 1996.
- 4. Further, Defendant Samsung Electronics America, Inc. merged with Samsung Telecommunications America LLC in January 2015. *Koninklijke KPN N.V. v. Samsung Telecomms. Am. LLC, et al.*, Case No. 2:14-cv-01165-JRG (E.D. Tex.) at Dkt. 34. Prior to such merger, Samsung Telecommunications America LLC was involved in the sales and distribution of Samsung-branded consumer electronics products in the United States.
- 5. On information and belief, Defendant Samsung Electronics America, Inc. is liable for any act for which Samsung Telecommunications America LLC otherwise would be or would have been liable, including for any infringement alleged in this matter, and references herein to Samsung Electronics America, Inc. should be understood to encompass such acts by Samsung Telecommunications America LLC.
- 6. Defendant Samsung Semiconductor, Inc. is a wholly owned subsidiary corporation of Samsung Electronics America, Inc. organized and existing under the laws of California with a principal place of business at 3655 North First Street, San Jose, California 95134. Samsung Semiconductor, Inc. may be served with process through its registered agent with the Texas Secretary of State, National Registered Agents, Inc., 1999 Bryan Street, Suite 900, Dallas, Texas 75201. Samsung Semiconductor, Inc. is registered to do business in Texas and has been since at least January 17, 1995.

7. Defendant Samsung Austin Semiconductor, LLC is a wholly owned subsidiary corporation of Samsung Semiconductor, Inc. organized and existing under the laws of Delaware with a principal place of business at 12100 Samsung Boulevard, Austin, Texas 78754. Samsung Austin Semiconductor, LLC may be served with process through its registered agent with the Texas Secretary of State, CT Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201. Samsung Austin Semiconductor, LLC is registered to do business in Texas and has been since at least August 5, 2005.

II. JURISDICTION

- 8. This action arises under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*, including 35 U.S.C. §§ 271, 281, 284, and 285. This is a patent infringement lawsuit over which this Court has subject matter jurisdiction under 28 U.S.C. §§ 1331 and 1338(a).
- 9. This United States District Court for the Western District of Texas has general and specific personal jurisdiction over Defendants because Defendants are present in, and transact and conduct business in and with residents of, this District and the State of Texas.
- 10. MyPAQ's causes of action arise, at least in part, from Defendants' contacts with and activities in this District and the State of Texas.
- 11. Defendants have committed acts that infringe the Patents within this District and the State of Texas by making, using, selling, offering for sale, and/or importing in or into this District and elsewhere in the State of Texas infringing products. Defendants make, use, sell, offer for sale, ship, distribute, advertise, promote, and/or otherwise commercialize such infringing products in this District and the State of Texas. Defendants regularly conduct and solicit business in, engage in other persistent courses of conduct in, and/or derive substantial revenue from goods and services provided to residents of this District and the State of Texas.

III. VENUE

- 12. Venue is proper in this District against Samsung Electronics Co., Ltd. because venue in a patent infringement action against a foreign defendant is proper in any judicial district. *Brunette Mach. Works, Ltd. v. Kochum Indus., Inc.*, 406 U.S. 706, 711–714 (1972), cited by *TC Heartland LLC v. Kraft Foods Grp. Brands LLC*, 137 S. Ct. 1514, 1520 n.2 (2017); see also In re HTC Corp., 889 F.3d 1349, 1354 (Fed. Cir. 2018) (citing *Brunette Mach. Works*, 406 U.S. at 706).
- 13. Venue is proper in this District against all of Defendants because each has physical offices located in this District that are regular and established places of business and belong to them. *See In re Cray Inc.*, 871 F.3d 1355 (Fed. Cir. 2017).
- 14. As a result of Samsung's corporate structure, Samsung Electronics Co., Ltd. exercises direction and control over the performance of Samsung Electronics America, Inc., Samsung Semiconductor, Inc., and Samsung Austin Semiconductor, LLC; Samsung Electronics America, Inc. exercises direction and control over the performance of Samsung Semiconductor, Inc. and Samsung Austin Semiconductor, LLC; and Samsung Semiconductor, Inc. exercises direction and control over the performance of Samsung Austin Semiconductor, LLC. Alternatively, Defendants form a joint business enterprise such that the performance by one is attributable to each other Defendant.
- 15. As such, Defendants, individually and collectively as a common business enterprise, conduct business operations and maintain regular and established offices, as well as a manufacturing facility, in the Western District of Texas, including at 12100 Samsung Boulevard, Austin, Texas 78754, which is in fact the principal place of business for Samsung Austin Semiconductor, LLC.
- 16. In addition, each of the Defendants has placed, or contributed to placing, infringing products into the stream of commerce via an established distribution channel knowing or understanding that such products would be sold and used in the United States, including in the Western District of Texas.

- 17. On information and belief, Defendants have authorized retailers that offer and sell products on their behalf in this District, including products accused of infringement herein. On information and belief, these include Target, e.g., at 5401 Bosque Boulevard, Waco, Texas 76710; Best Buy, e.g., at 4627 South Jack Kultgen Expressway, Waco, Texas 76706; AT&T, e.g., at 4330 West Waco Drive, Waco, Texas 76710; T-Mobile, e.g., at 100 North New Road, Suite 110, Waco, Texas 76710; and Verizon, e.g., at 1820 South Valley Mills Drive, Waco, Texas 76711, among others.
- 18. On information and belief, Defendants have each derived substantial revenue from infringing acts in the Western District of Texas, including from the sale and use of infringing products.
 - 19. Venue is proper under 28 U.S.C. § 1391(b)–(c) and 28 U.S.C. § 1400.

IV. UNITED STATES PATENT NUMBER 7,403,399

- 20. United States Patent Number 7,403,399 is titled "Active Primary-Sided Circuit Arrangement for a Switch-Mode Power Supply" and was filed on March 30, 2006. The '399 Patent claims priority to German Patent Application Number 10 2005 014 746, which was filed on March 31, 2005. A true and correct copy of the '399 Patent is attached as Exhibit A and is publicly available at https://pdfpiw.uspto.gov/.piw?PageNum=0&docid=7403399.
 - 21. The '399 Patent claims patent-eligible subject matter and is valid and enforceable.
 - 22. Claim 1 of the '399 Patent reads:

Circuit arrangement for a switch-mode power supply, wherein the switch-mode power supply has a primary side, which can be connected to a supply voltage, and a secondary side, which can be connected to a consumer,

wherein the circuit arrangement (100) comprises a primary-sided switch (102), a control circuit (104) for controlling the primary-sided switch (102) and additional active, primary-sided components (106, 108, 110),

wherein said control circuit (104) is formed by a first integrated semiconductor chip and the primary-sided switch (102) and the additional components (106, 108, 110), are integrated in at least one additional semiconductor chip, said semiconductor chip being separate

from the control circuit and arranged on a circuit carrier (112) shared with the control circuit.

23. Claim 2 reads:

Circuit arrangement according to claim 1, wherein the control circuit (104), the primary-sided switch (102) and the additional primary-sided components (106, 108, 110) are accommodated in a shared housing (118).

24. Claim 4 reads:

Circuit arrangement according to claim 2, wherein the housing (118) is executed as a housing that can be surface-mount technologies.

25. Claim 5 reads:

Circuit arrangement according to claim 1, wherein the circuit carrier is executed as a leadframe (112).

26. Claim 6 reads:

Circuit arrangement according to claim 1, wherein a metallization of the circuit carrier (112) has cooling areas that are formed for removing heat.

27. Claim 10 reads:

Circuit arrangement according to claim 1, wherein the additional active components (106, 108, 110) are at least partially combined into a single semiconductor chip and are monolithically integrated.

28. Claim 13 reads:

Switch-mode power supply having a primary side, which can be connected to a supply voltage, and a secondary side, which can be connected to a consumer,

said switch-mode power supply comprising a circuit arrangement which comprises a primary-sided switch, a control circuit for controlling the primary-sided switch and additional active, primarysided components,

wherein said control circuit is formed by a first integrated semiconductor chip and the primary-sided switch and the additional components, are integrated in at least one additional semiconductor chip, said semiconductor chip being separate from the control circuit and arranged on a circuit carrier shared with the control circuit.

- 29. The '399 Patent's named inventors are Stefan Morbe and Michael Bothe.
- 30. MyPAQ owns all rights, title, and interest in and to the invention of the '399 Patent and its underlying patent applications by written assignments recorded with the United States Patent and Trademark Office. On May 18, 2006, as recorded with the United States Patent and Trademark Office on June 19, 2006, Stefan Morbe and Michael Bothe assigned their interests in the '399 Patent to FRIWO Mobile Power GmbH. On May 26, 2008, as recorded with the United States Patent and Trademark Office on February 23, 2009, FRIWO Mobile Power GmbH changed its name to Power Systems Technologies GmbH. Power Systems Technologies GmbH assigned its interests in the '399 Patent to MyPAQ on March 26, 2021, as recorded with the United States Patent and Trademark Office on April 8, 2021.
- 31. As a result, MyPAQ is the exclusive owner by assignment of all rights, title, and interest in the '399 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '399 Patent.
- 32. Defendants are not licensed to the '399 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '399 Patent whatsoever.

V. UNITED STATES PATENT NUMBER 7,675,759

- 33. United States Patent Number 7,675,759 is titled "Power System with Power Converters Having an Adaptive Controller" and was filed on February 23, 2007. The '759 Patent claims priority to United States Patent Application Number 11/607,325, which was filed on December 1, 2006. A true and correct copy of the '759 Patent is attached as Exhibit B and is publicly available at https://pdfpiw.uspto.gov/.piw?PageNum=0&docid=7675759.
 - 34. The '759 Patent claims patent-eligible subject matter and is valid and enforceable.

35. Claim 1 of the '759 Patent reads:

A power converter coupled to a power system controller configured to receive a signal indicating a system operational state of a load coupled thereto, comprising:

a power switch configured to conduct for a duty cycle to provide a regulated output characteristic at an output thereof; and

a controller configured to receive a command from said power system controller to enter a power converter operational state as a function of said signal indicating said system operational state, said controller further configured to provide a signal to control said duty cycle of said power switch as a function of said output characteristic and in accordance with said command, thereby regulating an internal operating characteristic of said power converter to improve an operating efficiency thereof as a function of said system operational state.

36. Claim 2 of the '759 Patent reads:

The power converter as recited in claim 1 wherein said power converter is configured to enter said power converter operational state within a transition time from another power converter operational state.

37. Claim 3 of the '759 Patent reads:

The power converter as recited in claim 1 wherein said power system controller is configured to receive a signal indicating a power converter status of said power converter, said power converter operational state being a function of said power converter status.

38. Claim 6 of the '759 Patent reads:

A power system coupled to a load, comprising:

a power system controller configured to receive a signal indicating a system operational state of said load and to select a power converter operational state as a function thereof; and

a power converter, including:

a power switch configured to conduct for a duty cycle to provide a regulated output characteristic at an output thereof, and a controller configured to receive a command from said power system controller to enter said power converter operational state and to provide a signal to control said duty cycle of said power switch as a function of said output characteristic and in accordance with said command, thereby regulating an internal operating characteristic of said power converter to improve an operating efficiency thereof as a function of said system operational state.

39. Claim 11 of the '759 Patent reads:

The power system as recited in claim 6 wherein said power converter is configured to enter said power converter operational state within a transition time from another power converter operational state.

40. Claim 12 of the '759 Patent reads:

The power system as recited in claim 6 wherein said power system controller is configured to receive a signal indicating a power converter status of said power converter, said power converter operational state being a function of said power converter status.

41. Claim 13 of the '759 Patent reads:

The power system as recited in claim 12 wherein said power converter status is selected from the group consisting of:

- a fully operational status,
- a failure likely status,
- a failed status, and
- an overloaded status.

42. Claim 16 of the '759 Patent reads:

A method of operating a power system coupled to a load, comprising:

receiving a signal indicating a system operational state of said load;

generating a power converter operational state as a function of said system operational state;

inducing a power converter to enter said power converter operational state; and

providing a signal to control a duty cycle of a power switch of said power converter as a function of an output characteristic thereof and in accordance with said power converter operational state, thereby regulating an internal operating characteristic of said power converter to improve an operating efficiency thereof as a function of said system operational state.

43. Claim 19 of the '759 Patent reads:

The method as recited in claim 16 further comprising receiving a signal indicating a power converter status of said power converter and generating said power converter operational state as a function thereof.

- 44. The '759 Patent's named inventors are Daniel A. Artusi, Ross Fosler, and Allen F. Rozman.
- 45. MyPAQ owns all rights, title, and interest in and to the invention of the '759 Patent and its underlying patent applications by written assignments recorded in the United States Patent and Trademark Office. On March 8, 2007, as recorded with the United States Patent and Trademark Office on April 18, 2007, Daniel A. Artusi, Ross Fosler, and Allen F. Rozman assigned their interests in the '759 Patent to ColdWatt, Inc. On April 7, 2008, as recorded with the United States Patent and Trademark Office on February 4, 2009, ColdWatt, Inc. merged with CW Merger Company and became a wholly owned subsidiary of Flextronics International USA, Inc. In 2009, Flextronics International USA, Inc. formally approved a Plan of Dissolution for ColdWatt, Inc., and ColdWatt, Inc.'s assets, including the '759 Patent, transferred to Flextronics International USA, Inc. as ColdWatt, Inc.'s sole shareholder. Flextronics International USA, Inc. assigned its interests in the '759 Patent to MyPAQ on March 26, 2021, as recorded with the United States Patent and Trademark Office on April 8, 2021.
- 46. As a result, MyPAQ is the exclusive owner by assignment of all rights, title, and interest in the '759 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '759 Patent.

47. Defendants are not licensed to the '759 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '759 Patent whatsoever.

VI. UNITED STATES PATENT NUMBER 7,978,489

- 48. United States Patent Number 7,978,489 is titled "Integrated Power Converters" and was filed on August 4, 2008. The '489 Patent claims priority to United States Provisional Patent Application Number 60/963,477, which was filed on August 3, 2007. A true and correct copy of the '489 Patent is attached as Exhibit C and is publicly available at https://pdfpiw.uspto.gov/.piw?PageNum=0&docid=7978489.
 - 49. The '489 Patent claims patent-eligible subject matter and is valid and enforceable.
 - 50. Claim 1 of the '489 Patent reads:

A power supply adapter comprising:

- a rectifier coupled with AC power blades;
- a regulator circuit coupled with the rectifier;
- a transformer coupled with the regulator circuit, the transformer including a primary and a secondary, the transformer being coupled with the regulator circuit via the primary;
- an output circuit coupled with the secondary of the transformer, the output circuit including an output capacitor; and
- a flexible contact coupled with each of a first and a second printed circuit board and flexibly biased to couple with a proximate end of the AC power blades.
- 51. Claim 4 of the '489 Patent reads:

The adapter of claim 1, wherein the power converter circuit comprises one of a forward or a flyback power converter.

52. Claim 5 of the '489 Patent reads:

The adapter of claim 1, wherein the regulator circuit includes an inductor for coupling a rectified voltage signal from the rectifier to a regulator switch.

53. Claim 6 of the '489 Patent reads:

The adapter of claim 5, wherein the regulator switch comprises a semiconductor switch.

54. Claim 7 of the '489 Patent reads:

The adapter of claim 1, wherein the transformer comprises a planar format transformer coupled with one of the first or the second PCB.

55. Claim 8 of the '489 Patent reads:

The adapter of claim 7, wherein the transformer includes a metallic core.

56. Claim 9 of the '489 Patent reads:

The adapter of claim 8, wherein the metallic core comprises a ferrite material.

57. Claim 11 of the '489 Patent reads:

The adapter of claim 1, wherein the flexible contact comprises a metallic conductor.

58. Claim 12 of the '489 Patent reads:

The adapter of claim 1, wherein the flexible contact is configured to electrically couple an AC power source from the AC power blades to the power converter circuit.

59. Claim 22 of the '489 Patent reads:

A power supply adapter comprising:

- a power converter circuit configured to generate a regulated voltage signal, the power converter circuit including,
- a rectifier coupled with AC power blades;
- a regulator circuit coupled with the rectifier;
- a transformer coupled with the regulator circuit, the transformer including a primary and a secondary, the transformer being coupled with the regulator circuit via the primary;

an output circuit coupled with the secondary of the transformer; and

a flexible contact coupled with each of a first and a second printed circuit board and flexibly biased to couple with a proximate end of the AC power blades.

60. Claim 25 of the '489 Patent reads:

The adapter of claim 22, wherein the power converter circuit comprises one of a forward or a flyback power converter.

61. Claim 26 of the '489 Patent reads:

The adapter of claim 22, wherein the regulator circuit includes an inductor for coupling a rectified voltage signal from the rectifier to a regulator switch.

62. Claim 27 of the '489 Patent reads:

The adapter of claim 26, wherein the regulator switch comprises a semiconductor switch.

63. Claim 28 of the '489 Patent reads:

The adapter of claim 22, wherein the transformer comprises a planar format transformer coupled with one of the first or the second PCB.

64. Claim 29 of the '489 Patent reads:

The adapter of claim 28, wherein the transformer includes a metallic core.

65. Claim 30 of the '489 Patent reads:

The adapter of claim 29, wherein the metallic core comprises a ferrite material.

66. Claim 32 of the '489 Patent reads:

The adapter of claim 22, wherein the flexible contact comprises a metallic conductor.

67. Claim 33 of the '489 Patent reads:

The adapter of claim 22, wherein the flexible contact is configured to electrically couple an AC power source from the AC power blades to the power converter circuit.

68. Claim 39 of the '489 Patent reads:

The adapter of claim 22, wherein the power cable comprises a universal serial bus (USB) power cable.

69. Claim 42 of the '489 Patent reads:

The adapter of claim 22, wherein the enclosure includes a thermally conductive potting material substantially filling an empty space of an interior of the enclosure.

70. Claim 43 of the '489 Patent reads:

A power supply adapter comprising:

- a power converter circuit configured to generate a regulated voltage signal, the power converter circuit including,
- a rectifier coupled with AC power blades;
- a regulator circuit coupled with the rectifier;
- a transformer coupled with the regulator circuit, the transformer including a primary and a secondary, the transformer being coupled with the regulator circuit via the primary; and
- a flexible contact coupled with each of a first and a second printed circuit board and flexibly biased to couple with a proximate end of the AC power blades.

71. Claim 46 of the '489 Patent reads:

The adapter of claim 43, wherein the power converter circuit comprises one of a forward or a flyback power converter.

72. Claim 47 of the '489 Patent reads:

The adapter of claim 43, wherein the regulator circuit includes an inductor for coupling a rectified voltage signal from the rectifier to a regulator switch.

73. Claim 48 of the '489 Patent reads:

The adapter of claim 47, wherein the regulator switch comprises a semiconductor switch.

74. Claim 49 of the '489 Patent reads:

The adapter of claim 43, wherein the transformer comprises a planar format transformer coupled with one of the first or the second PCB.

75. Claim 50 of the '489 Patent reads:

The adapter of claim 49, wherein the transformer includes a metallic core.

76. Claim 51 of the '489 Patent reads:

The adapter of claim 50, wherein the metallic core comprises a ferrite material.

77. Claim 53 of the '489 Patent reads:

The adapter of claim 43, wherein the flexible contact comprises a metallic conductor.

78. Claim 54 of the '489 Patent reads:

The adapter of claim 43, wherein the flexible contact is configured to electrically couple an AC power source from the AC power blades to the power converter circuit.

79. Claim 60 of the '489 Patent reads:

The adapter of claim 43, wherein the connector receptacle comprises a universal serial bus (USB) connector receptacle.

80. Claim 63 of the '489 Patent reads:

The adapter of claim 43, wherein the enclosure includes a thermally conductive potting material substantially filling an empty space of an interior of the enclosure.

- 81. The '489 Patent's named inventors are Mark Telefus, Bahman Sharifipour, Rowell Gapuz, Richard Sy, HongWei Du, and Bob Roohparvar.
- 82. MyPAQ owns all rights, title, and interest in and to the invention of the '489 Patent and its underlying patent applications by written assignments recorded with the United States Patent and Trademark Office. In 2013, as recorded with the United States Patent and Trademark Office on October 28, 2016, Mark Telefus, Bahman Sharifipour, Rowell Gapuz, and HongWei Du assigned their interests in the '489 Patent to Flextronics AP, LLC. The remaining inventors, Bob Roohparvar and Richard Sy, assigned their interests in the '489 Patent to Flextronics AP, LLC in June 2020, as recorded with the United States Patent and Trademark Office on March 25, 2021. Flextronics AP, LLC assigned

its interests in the '489 Patent to MyPAQ on March 19, 2021, as recorded with the United States Patent and Trademark Office on April 8, 2021.

- 83. As a result, MyPAQ is the exclusive owner by assignment of all rights, title, and interest in the '489 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '489 Patent.
- 84. Defendants are not licensed to the '489 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '489 Patent whatsoever.

VII. UNITED STATES PATENT NUMBER 8,477,514

- 85. United States Patent Number 8,477,514 is titled "Power System with Power Converters Having an Adaptive Controller" and was filed on February 22, 2010. The '514 Patent claims priority to United States Patent Application Number 11/607,325, which was filed on December 1, 2006. A true and correct copy of the '514 Patent is attached as Exhibit D and is publicly available at https://pdfpiw.uspto.gov/.piw?PageNum=0&docid=8477514.
 - 86. The '514 Patent claims patent-eligible subject matter and is valid and enforceable.
 - 87. Claim 1 of the '514 Patent reads:

A power converter coupled to a load, comprising:

- a power switch configured to conduct for a duty cycle to provide an output characteristic at an output thereof; and
- a power converter controller configured to receive a signal from said load indicating a system operational state of said load and control an internal operating characteristic of said power converter as a function of said signal.
- 88. Claim 2 of the '514 Patent reads:

The power converter as recited in claim 1 wherein said power converter controller is further configured to provide another signal to control said duty cycle of said power switch as a function of said output characteristic and in accordance with said signal.

89. Claim 3 of the '514 Patent reads:

The power converter as recited in claim 1 wherein said power converter controller is configured to adjust said internal operating characteristic over a period of time.

90. Claim 5 of the '514 Patent reads:

The power converter as recited in claim 1 wherein said internal operating characteristic is selected from the group consisting of:

a gate drive voltage level of said power switch of said power converter,

a switching frequency of said power converter, and

an internal direct current bus voltage of said power converter.

91. Claim 6 of the '514 Patent reads:

A power system, comprising:

a power system controller configured to provide a signal characterizing a power requirement of a processor system; and

a power converter coupled to said processor system, comprising:

a power switch configured to conduct for a duty cycle to provide an output characteristic at an output thereof, and

a power converter controller configured to receive a signal from said power system controller to control an internal operating characteristic of said power converter as a function of said signal.

92. Claim 7 of the '514 Patent reads:

The power system as recited in claim 6 wherein said power converter controller is further configured to provide another signal to control said duty cycle of said power switch as a function of said output characteristic and in accordance with said signal.

93. Claim 8 of the '514 Patent reads:

The power system as recited in claim 6 wherein said power converter controller is configured to adjust said internal operating characteristic over a period of time.

94. Claim 10 of the '514 Patent reads:

The power system as recited in claim 6 wherein said internal operating characteristic is selected from the group consisting of:

a gate drive voltage level of said power switch of said power converter,

a switching frequency of said power converter, and

an internal direct current bus voltage of said power converter.

95. Claim 11 of the '514 Patent reads:

A power system, comprising:

a power system controller configured to enable operation of components of a processor system to establish a state of power drain thereof, said power system controller configured to provide a signal to identify operation of said processor system in said state of power drain; and

a power converter, coupled to said processor system, comprising a power converter controller configured to receive said signal from said power system controller, to sense a power level of said state of power drain in response to said signal, and to control an internal operating characteristic of said power converter as a function of said power level.

96. Claim 12 of the '514 Patent reads:

The power system as recited in claim 11 wherein said power converter further comprises a power switch configured to conduct for a duty cycle to provide an output characteristic 10 at an output thereof, said power converter controller further configured to control said duty cycle of said power switch dependent on said output characteristic and in accordance with said power level.

97. Claim 14 of the '514 Patent reads:

The power system as recited in claim 11 wherein said power converter controller is configured to adjust said internal operating characteristic over a period of time.

98. Claim 15 of the '514 Patent reads:

The power system as recited in claim 11 wherein said internal operating characteristic is selected from the group consisting of:

a gate drive voltage level of a power switch of said power converter,

a switching frequency of said power converter, and

an internal direct current bus voltage of said power converter.

99. Claim 16 of the '514 Patent reads:

A method of operating a power system, comprising:

enabling operation of components of a processor system to establish a state of power drain thereof;

providing a signal to identify operation of said processor system in said state of power drain;

sensing a power level of said state of power drain in response to said signal; and

controlling an internal operating characteristic of a power converter as a function of said power level.

100. Claim 17 of the '514 Patent reads:

The method as recited in claim 16, further comprising:

inducing a power switch of said power converter to conduct for a duty cycle to provide an output characteristic at an output thereof; and

controlling said duty cycle of said power switch dependent on said output characteristic and in accordance with said power level.

101. Claim 19 of the '514 Patent reads:

The method as recited in claim 16 wherein said controlling said internal operating characteristic comprises occurs over a period of time.

102. Claim 20 of the '514 Patent reads:

The method as recited in claim 16 wherein said internal operating characteristic is selected from the group consisting of:

a gate drive voltage level of a power switch of said power converter,

a switching frequency of said power converter, and

an internal direct current bus voltage of said power converter.

- 103. The '514 Patent's named inventors are Daniel A. Artusi, Ross Fosler, and Allen F. Rozman.
- 104. MyPAQ owns all rights, title, and interest in and to the invention of the '514 Patent and its underlying patent applications by written assignments recorded with the United States Patent and Trademark Office. On April 7, 2008, as recorded with the United States Patent and Trademark Office on May 4, 2020, ColdWatt, Inc. merged with CW Merger Company and became a wholly owned subsidiary of Flextronics International USA, Inc. In May and June 2008, as recorded with the United States Patent and Trademark Office on May 4, 2020, Daniel A. Artusi, Ross Fosler, and Allen F. Rozman assigned their interests in the '514 Patent to ColdWatt, Inc., then a wholly owned subsidiary of Flextronics International USA, Inc. In 2009, Flextronics International USA, Inc. formally approved a Plan of Dissolution for ColdWatt, Inc., and ColdWatt, Inc.'s assets, including the '514 Patent, transferred to Flextronics International USA, Inc. as ColdWatt, Inc.'s sole shareholder. Flextronics International USA, Inc. assigned its interests in the '514 Patent to MyPAQ on March 26, 2021, as recorded with the United States Patent and Trademark Office on April 8, 2021.
- 105. MyPAQ is the exclusive owner by assignment of all rights, title, and interest in the '514 Patent, including the right to bring this suit for damages, and including the right to sue and recover all past, present, and future damages for infringement of the '514 Patent.
- 106. Defendants are not licensed to the '514 Patent, either expressly or implicitly, nor do they enjoy or benefit from any rights in or to the '514 Patent whatsoever.

VIII. THE ACCUSED INSTRUMENTALITIES

107. Defendants manufacture, use, and sell infringing devices and products, including but not limited to the following Samsung products: the EP-TA800XBEGUS (the "TA800"), the EP-TA845XBEGUS (the "TA845"), the EP-TA865 (the "TA865"), and the Power IC S2MM101 (the "S2MM101," and, together with the TA800, TA845, and TA865, the "Accused Instrumentalities"),

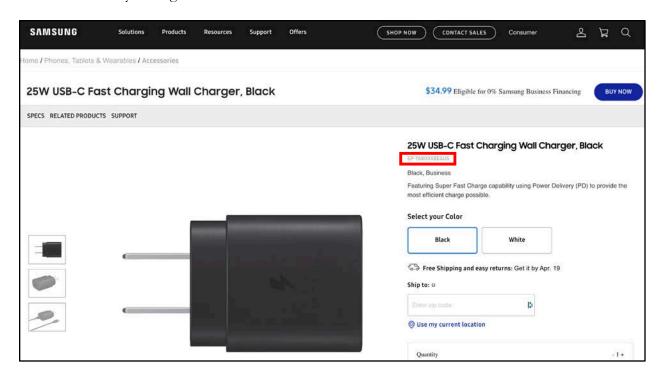
which practice (1) the '399 Patent, including but not limited to Claims 1, 2, 4, 5, 6, 10, and 13; (2) the '759 Patent, including but not limited to Claims 1, 2, 3, 6, 11, 12, 13, 16, and 19; (3) the '489 Patent, including but not limited to Claims 1, 4, 5, 6, 7, 8, 9, 11, 12, 22, 25, 26, 27, 28, 29, 30, 32, 33, 39, 42, 43, 46, 47, 48, 49, 50, 51, 53, 54, 60, and 63; and/or (4) the '514 Patent, including but not limited to Claims 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16, 17, 19, and 20.

- 108. The Accused Instrumentalities consist of or implement circuitry and/or power blade connectors that infringe the Patents.
- 109. For example, the TA800, TA845, and TA865 are power supply adapters with power converter circuits, which include a rectifier coupled with AC power blades, a regulator circuit coupled with the rectifier, a transformer coupled with the regulator circuit, and a flexible contact coupled with each of a first and a second printed circuit board and flexibly biased to couple with a proximate end of the AC power blades.
- 110. The S2MM101 is described in a dedicated website as "Samsung Power IC solutions help manage extremely delicate power necessitated by the mobile accessories." *See* Samsung, https://www.samsung.com/semiconductor/products/power-ic/accessory-power-ic/S2MM101/ (last visited Jan. 21, 2022). Its "Application" is described as "Phone Charger" and its "Category" is described as "Power Delivery IC." *Id.* Additional descriptions for such "Accessory Power IC" are provided at https://www.samsung.com/semiconductor/products/power-ic/accessory-power-ic/.

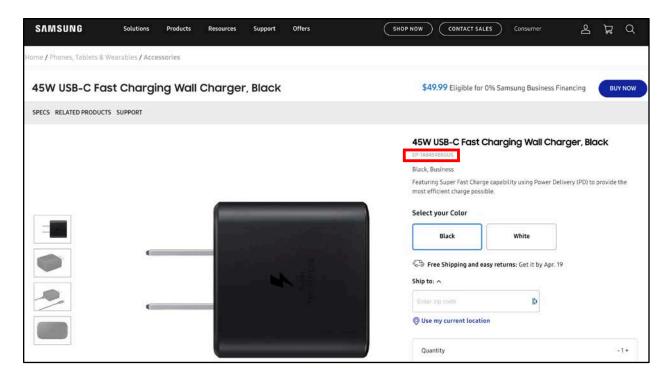
IX. COUNT 1: DIRECT INFRINGEMENT

- 111. All previous paragraphs are incorporated herein as if fully set forth.
- 112. Defendants have directly infringed and continue to directly infringe the Patents under 35 U.S.C. §§ 271(a) and 271(g) by making, using, selling, offering to sell, and/or importing in or into the United States the Accused Instrumentalities that practice the Patents.

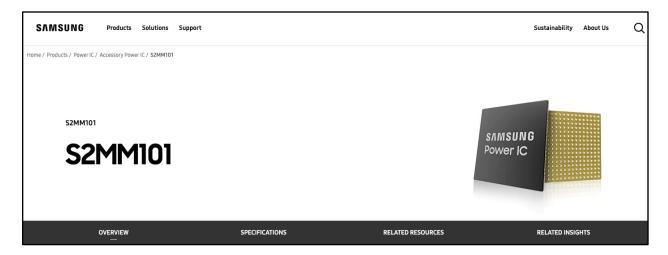
- 113. As further described in the claim charts attached as Exhibits E–KK, the Accused Instrumentalities directly infringe each element of at least Claims 1, 2, 4, 5, 6, 10, and 13 of the '399 Patent; Claims 1, 2, 3, 6, 11, 12, 13, 16, and 19 of the '759 Patent; Claims 1, 4, 5, 6, 7, 8, 9, 11, 12, 22, 25, 26, 27, 28, 29, 30, 32, 33, 39, 42, 43, 46, 47, 48, 49, 50, 51, 53, 54, 60, and 63 of the '489 Patent; and/or Claims 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16, 17, 19, and 20 of the '514 Patent.
- 114. Upon information and belief, Defendants manufacture the Accused Instrumentalities at facilities in the United States, Vietnam, China, India, and South Korea. Defendants market, sell, offer to sell, and import the Accused Instrumentalities in and into the United States.
- 115. Defendants market and/or offer to sell the Accused Instrumentalities, for example, to customers directly through their website:



Samsung, https://www.samsung.com/us/business/mobile/mobile-accessories/phones/25w-usb-c-fast-charging-wall-charger-black-ep-ta800xbegus/ (last visited Jan. 21, 2022).



Samsung, https://www.samsung.com/us/business/mobile/mobile-accessories/phones/45w-usb-c-fast-charging-wall-charger-black-ep-ta845xbegus/ (last visited Jan. 21, 2022).



Samsung, https://www.samsung.com/semiconductor/products/power-ic/accessory-power-ic/S2MM101/ (last visited Jan. 21, 2022).

X. COUNT 2: INDIRECT INFRINGEMENT

116. All previous paragraphs are incorporated herein as if fully set forth.

- 117. Defendants have indirectly infringed and continue to indirectly infringe the Patents under 35 U.S.C. § 271(b) by taking active steps to encourage, facilitate, aid, and/or otherwise cause direct infringement by others, including, but not limited to, the customers of their products.
- 118. Such active steps include, for example, Defendants' advertising, marketing, offering for sale, and sale of the Accused Instrumentalities, including, but not limited to, as pictured in paragraph 115.
- 119. Such active steps also include, for example, Defendants' online publication of instructions and best practices for, among other things, how its customers and users should use the Accused Instrumentalities:

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Fast charge your Galaxy phone

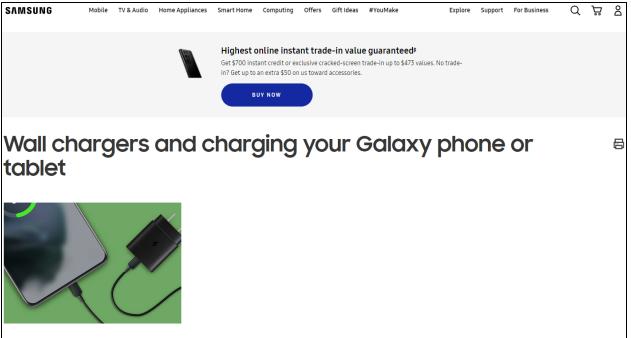




If your phone just died, or if it's about to, it isn't the end of the world. You can charge it back to full power in no time by using the Samsung Adaptive Fast Charger. This charger comes with your phone, and it provides an extremely quick charging time. You can use Fast charging, Super fast charging, and Wireless charging on your Galaxy phone. If you need replacement chargers, you can purchase them from our website.

Note: Only use Samsung-approved charging devices. Samsung accessories are designed to maximize the battery life for your phone. Using other accessories may invalidate your warranty and cause damage.

Samsung, https://www.samsung.com/us/support/answer/ANS00062589/ (last visited Jan. 21, 2022).



Charging isn't the most exciting aspect of a phone or tablet, but it's a vital one. You can charge your device using any Samsung travel adapter, but charging speeds may vary depending on the charger. You should use the charger that came with your phone or tablet, though if you need additional cables, power adapters, batteries, or replacements, you can **purchase them on our website**. It is recommended to only use Samsung charging devices and batteries.

Samsung, https://www.samsung.com/us/support/answer/ANS00078994/ (last visited Jan. 21, 2022).

- 120. Defendants undertook and continue to undertake such active efforts for the purpose of inducing, and intended to induce, their customers to use the Accused Instrumentalities. Such efforts resulted in, and continue to result in, the Accused Instrumentalities being used by Defendants' customers.
- 121. On information and belief, Defendants' customers used and continue to use the Accused Instrumentalities to power a variety of devices, including several manufactured by Defendants. On information and belief, Defendants' customers do not manufacture the Accused Instrumentalities but instead purchase them from Defendants.
- 122. As further described in the claim charts attached as Exhibits E–KK, the Accused Instrumentalities infringe each element of at least Claims 1, 2, 4, 5, 6, 10, and 13 of the '399 Patent;

Claims 1, 2, 3, 6, 11, 12, 13, 16, and 19 of the '759 Patent; Claims 1, 4, 5, 6, 7, 8, 9, 11, 12, 22, 25, 26, 27, 28, 29, 30, 32, 33, 39, 42, 43, 46, 47, 48, 49, 50, 51, 53, 54, 60, and 63 of the '489 Patent; and/or Claims 1, 2, 3, 5, 6, 7, 8, 10, 11, 12, 14, 15, 16, 17, 19, and 20 of the '514 Patent. Therefore, Defendants' customers' use of the Accused Instrumentalities constitutes direct infringement of the Patents under 35 U.S.C. §§ 271(a) and 271(g). Such use was the result of Defendants' active encouragement and intentional inducement.

- 123. Defendants have known of the existence of the Patents and that the Accused Instrumentalities infringe at least one claim of the Patents since at least Samsung's waiver of service of MyPAQ's Original Complaint on May 18, 2021.
- 124. Defendants have known that their customers' acts, including, but not limited to, their customers' use of the Accused Instrumentalities, constituted direct infringement of at least one claim of the Patents since at least Samsung's waiver of service of MyPAQ's Original Complaint on May 18, 2021.

XI. JURY DEMAND

125. Plaintiff hereby demands a trial by jury on all issues so triable.

XII. PRAYER FOR RELIEF

- 126. Plaintiff requests the following relief:
- A. A judgment that Defendants have directly infringed, either literally and/or under the doctrine of equivalents, and continue to directly infringe the Patents;
- B. A judgment and order requiring Defendants to pay Plaintiff damages under 35 U.S.C. § 284, and supplemental damages for any continuing post-verdict infringement through entry of the final judgment with an accounting as needed;
- C. A judgment that this is an exceptional case within the meaning of 35 U.S.C. § 285 and Plaintiff is therefore entitled to reasonable attorneys' fees;

- D. A judgment and order requiring Defendants to pay Plaintiff pre-judgment and post-judgment interest on the damages awarded;
 - E. A judgment and order awarding a compulsory ongoing royalty;
 - F. A judgment and order awarding Plaintiff costs associated with this action; and
 - G. Such other and further relief as the Court deems just and equitable.

Dated: February 4, 2022 Respectfully submitted,

By: /s/ Scott T. Glass

Charles Ainsworth (Texas 00783521)
Robert Christopher Bunt (Texas 00787165)
PARKER, BUNT & AINSWORTH, P.C.
100 E. Ferguson, Suite 418
Tyler, Texas 75702
Tel: (903) 531-3535
charley@pbatyler.com
rcbunt@pbatyler.com

Alfonso G. Chan (Texas 24012408)
Michael W. Shore (Texas 18294915)
Halima Shukri Ndai (Texas 24105486)
SHORE CHAN LLP
901 Main Street, Suite 3300
Dallas, Texas 75202
Tel: (214) 593-9110
Fax: (214) 593-9111
achan@shorechan.com
mshore@shorechan.com
hndai@shorechan.com

Brian D. Melton (Texas 24010620) Krisina J. Zuñiga (Texas 24098664) Scott T. Glass (Texas 24121287) SUSMAN GODFREY LLP 1000 Louisiana Street, Suite 5100 Houston, Texas 77002 Tel: (713) 651-9366 Fax: (713) 654-6666 bmelton@susmangodfrey.com kzuniga@susmangodfrey.com sglass@susmangodfrey.com

Steven M. Shepard (New York 5291232) SUSMAN GODFREY LLP 1301 Avenue of the Americas, 32nd Floor New York, New York 10019 Tel: (212) 336-8330 Fax: (212) 336-8340

COUNSEL FOR PLAINTIFF MYPAQ HOLDINGS LTD.

sshepard@susmangodfrey.com