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17 Polaris PowerLED Technologies, LLC

18 UNITED STATES DISTRICT COURT
19 FOR THE CENTRAL DISTRICT OF CALIFORNIA

20 POLARIS POWERLED
21 TECHNOLOGIES, LLC,

22 Plaintiff,

23 v.

24 WISTRON CORPORATION,

25 Defendant.
26

Case No. 8:19-cv-01935

**COMPLAINT FOR PATENT
INFRINGEMENT**

DEMAND FOR JURY TRIAL

1 Plaintiff Polaris PowerLED Technologies, LLC (“Polaris PowerLED”), by
2 and through its undersigned counsel, files this Complaint for Patent Infringement
3 relating to two U.S. patents as identified below (collectively, the “Patents-in-Suit”)
4 and alleges as follows:

5 **THE PARTIES**

6 1. Plaintiff Polaris PowerLED Technologies, LLC (“Polaris PowerLED”
7 or “Plaintiff”) is a Delaware limited liability company, with its address at 32932
8 Pacific Coast Highway #14-498, Dana Point, California.

9 2. Upon information and belief, Defendant Wistron Corporation
10 (“Wistron”) is a corporation organized and existing under the laws of Taiwan with
11 its principal place of business at 158, Singshan Rd., Neihu, Taipei, 11469, Taiwan.

12 **JURISDICTION AND VENUE**

13 3. Polaris PowerLED brings this civil action for patent infringement
14 pursuant to the Patent Laws of the United States, 35 U.S.C. § 1, *et seq.* This Court
15 has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and
16 1338(a).

17 4. Upon information and belief, Defendant transacts and conducts
18 business in this District and the State of California, and is subject to the personal
19 jurisdiction of this Court. Upon information and belief, Defendant has minimum
20 contacts within the State of California and this District and has purposefully availed
21 itself of the privileges of conducting business in the State of California and in this
22 District. Polaris PowerLED’s causes of action arise directly from Wistron’s
23 business contacts and other activities in the State of California and in this District.

24 5. Upon information and belief, Wistron has committed acts of
25 infringement within this District and the State of California by, *inter alia*, making,
26 using, selling, offering for sale, importing, advertising, and/or promoting products
27 that infringe one or more claims of the Patents-in-Suit. More specifically, Wistron,
28 directly and/or through intermediaries, makes, uses, sells, ships, imports,

1 distributes, offers for sale, advertises, and otherwise promotes its products in the
2 United States, the State of California, and this District. Upon information and
3 belief, Wistron solicits customers in the State of California and this District and has
4 one or more customers who are residents of the State of California and this District
5 and who use or resell Wistron's products in the State of California and in this
6 District.

7 6. Venue is proper in this District under 28 U.S.C. §§ 1391 and 1400(b),
8 including based on Wistron's transaction of business in this District directly and/or
9 through its customers and acts of patent infringement in this District.

10 THE PATENTS-IN-SUIT

11 7. Polaris PowerLED owns the entire right, title, and interest in U.S.
12 Patent No. 7,239,087 entitled "Method and Apparatus to Drive LED Arrays Using
13 Time Sharing Technique" (the "'087 Patent"). The '087 Patent issued on July 3,
14 2007 to inventor Newton E. Ball from U.S. Patent Application No. 11/011,752,
15 filed on Dec. 14, 2004. A true and correct copy of the '087 Patent is attached as
16 **Exhibit A** to this Complaint.

17 8. Polaris PowerLED owns the entire right, title, and interest in U.S.
18 Patent No. 8,223,117 entitled "Method and Apparatus to Control Display
19 Brightness with Ambient Light Correction" (the "'117 Patent"). The '117 Patent
20 issued on July 17, 2012 to inventor Bruce R. Ferguson from U.S. Patent
21 Application No. 12/336,990, filed on Dec. 17, 2008. A true and correct copy of the
22 '117 Patent is attached as **Exhibit B** to this Complaint.

23 BACKGROUND

24 9. Vizio, Inc. ("Vizio") is a California corporation which designs,
25 manufactures, and sells televisions, sound bars, speakers, and other television
26 accessories. Vizio offers its products for sale through retailers and online.

27 10. Wistron manufactures, sells for importation, offers for sale for
28 importation, imports into the United States, and/or distributes certain consumer

1 electronics with display and processing capabilities on behalf of or for sale to Vizio,
2 namely televisions sold under the Vizio brand (the “Vizio Televisions”).

3 **COUNT I**

4 (INFRINGEMENT OF U.S. PATENT NO. 7,239,087)

5 11. Polaris PowerLED incorporates by reference paragraphs 1-10 above.

6 12. Mr. Newton E. Ball invented a novel manner of arranging and
7 controlling light sources that was a significant advance in improving display quality
8 in electronics products such as televisions. Mr. Ball patented these innovations in
9 the '087 patent.

10 13. Upon information and belief, Wistron makes, uses, offers for sale,
11 distributes, sells, and/or imports into the United States products that directly
12 infringe, or that employ systems, components, and/or processes that directly
13 infringe, the '087 Patent, including, namely the Vizio Televisions, including one or
14 more of Vizio's D-series, E-Series, M-Series, and P-Series televisions. The
15 exemplary, non-exhaustive list of devices stated in this paragraph are collectively
16 referred to in this Count and in this Complaint as the “Accused Products.”

17 Wistron's infringement includes infringement of at least claim 1 of the '087 Patent.

18 14. Claim 1 of the '087 Patent, for example, reads as follows:

19 1. A multi-load time sharing driver comprising:

20 a current source configured to provide a regulated current;

21 a network of semiconductor switches coupled in series; and

22 a plurality of light sources in a backlight system, each light source

23 associated with a semiconductor switch, wherein the semiconductor

24 switch selectively opens to allow the associated light source to conduct

25 the regulated current.

26 15. Wistron has directly infringed and continues to directly infringe one or
27 more claims of the '087 patent, including at least claim 1 of the '087 Patent,
28 literally and/or under the doctrine of equivalents, by or through making, using,

1 distributing, offering for sale, selling within the United States, and/or importing into
2 the United States the Accused Products.

3 16. The Accused Products have “a multi-load time sharing driver
4 comprising: a current source configured to provide a regulated current.” The
5 Accused Products include, for example, a boost controller chip or other regulated
6 current source that is coupled to a power supply via a LED connection port. The
7 power supply, working with one or more wide input boost controller chips,
8 provides a regulated current. For example, the Vizio M557 (“M557”) made by
9 Wistron includes an SSC3S910 LLC Current-Resonant Off-Line Switching
10 Controller (“SSC3S910”) and associated circuitry that provide a regulated current
11 to 16 LED strings that are used implement “local dimming zones.” The SSC3S910
12 and its associated circuitry work in conjunction with current sink circuitry in an
13 AS3824 LED driver chip to provide a regulated current to each string of LEDs.

14 17. The Accused Products have “a network of semiconductor switches
15 coupled in series.” For instance, the Accused Products include a semiconductor
16 switch associated with a switched mode power supply coupled in series with each
17 of a plurality of FETs, or similar semiconductor switches, each of which is, in turn,
18 coupled to an LED string. Additionally, in the Accused Products, there are
19 semiconductor switches, such as operational amplifiers, in the LED driver each
20 coupled in series with a FET, or similar, semiconductor switch. Moreover, the
21 LED TV backlight controller in the Accused Products is coupled to one or more
22 semiconductor switches that are connected in series to other semiconductor
23 switches. This network of semiconductor switches is further in series with the
24 regulated current source and the LED strings. For example, the M557 includes an
25 AMS AS3824 LED driver chip. The AMS AS3824 LED driver is connected to 16
26 semiconductor switches (N-Channel MOSFETs), one for each section of LEDs.
27 The SSC3S910 and its associated circuitry includes a pair of semiconductor
28 switches that control output the current resonant power supply. This pair of

1 semiconductor switches are connected in series. These semiconductor switches are
2 also coupled in series with each of the LED strings and each of the N-Channel
3 MOSFETs (*i.e.*, semiconductor switches), thereby forming a “network of
4 semiconductor switches coupled in series.”

5 18. The Accused Products have “a plurality of light sources in a backlight
6 system, each light source associated with a semiconductor switch, wherein the
7 semiconductor switch selectively opens to allow the associated light source to
8 conduct the regulated current.” The light sources in the Accused Products are
9 connected, for example, to an LED TV backlight controller and power supply such
10 that semiconductor switches can be selectively opened to allow the associated light
11 source to conduct the regulated current. Each switch is coupled to a light source via
12 the source or drain terminals of the transistor. The switch will open or close
13 depending on the voltage at the gate of the associated switch, thereby controlling
14 the associated light source for that switch. In the M557, 16 different LED strings
15 are used in its backlight system, and each string is associated with at least one
16 semiconductor switch within the network, such that the semiconductor switch can
17 selectively open to allow the LED string to conduct regulated current.

18 19. As a result of Wistron’s infringement of the ’087 Patent, Polaris
19 PowerLED has suffered monetary damages and is entitled to no less than a
20 reasonable royalty for Wistron’s use of the claimed inventions of the ’087 Patent,
21 together with interest and costs as determined by the Court. Polaris PowerLED will
22 continue to suffer damages in the future unless Wistron’s infringing activities are
23 enjoined by this Court.

24 20. Polaris PowerLED will be irreparably harmed unless a permanent
25 injunction is issued, enjoining Wistron and their agents, employees, representatives,
26 affiliates, and others acting in concert with Wistron from infringing the ’087 Patent.

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COUNT II

(INFRINGEMENT OF U.S. PATENT NO. 8,223,117)

21. Polaris PowerLED incorporates by reference paragraphs 1-20 above.

22. Mr. Bruce Ferguson invented a novel manner of adjusting the brightness of a display screen in response to ambient light, conserving power, reducing eye strain, and significantly improving the experience of the user. His inventions were a significant advance in the field of display technology, power conservation and power control for electronics products, including televisions and other devices. Mr. Ferguson patented these innovations in the '117 Patent.

23. Upon information and belief, Wistron makes, uses, offers for sale, distributes, sells, and/or imports into the United States products that directly infringe, or that employ systems, components, and/or processes that directly infringe, the '087 patent, namely the Vizio Televisions, including, for example, one or more of the Vizio D-Series, E-Series, M-Series, and P-Series televisions. The non-exhaustive list of exemplary devices listed in this paragraph are collectively referred to in this Count as the "Accused Products."

24. Claim 1 of the '117 Patent, for example, reads as follows:

1. A brightness control circuit with selective ambient light correction comprising:

a first input configured to receive a user signal indicative of a user selectable brightness setting;

a light sensor configured to sense ambient light and to output a sensing signal indicative of the ambient light level;

a multiplier configured to selectively generate a combined signal based on both the user signal and the sensing signal; and

a dark level bias configured to adjust the combined signal to generate a brightness control signal that is used to control a brightness level of a visible display such that the brightness control signal is maintained above a predetermined level when the ambient light level decreases to approximately zero.

1 25. Wistron has directly infringed and continues to directly infringe one or
2 more claims of the '117 patent, including at least claim 1 of the '117 Patent, literally
3 and/or under the doctrine of equivalents, by or through making, using, offering for
4 sale, selling within the United States, and/or importing the Accused Products.

5 26. The Accused Products have “a brightness control circuit with selective
6 ambient light correction comprising: a first input configured to receive a user signal
7 indicative of a user selectable brightness setting,” including auto brightness control,
8 backlight and brightness circuitry, and associated user signals.

9 27. The Accused Products have “a light sensor configured to sense
10 ambient light and to output a sensing signal indicative of the ambient light level” as
11 shown below. The front portion of the Accused Products include an ambient light
12 sensor. The ambient light sensor is connected to the main board in the Accused
13 Products, for example.

14 28. The Accused Products have “a multiplier configured to selectively
15 generate a combined signal based on both the user signal and the sensing signal.”
16 The Accused Products include a multiplier implemented at least in part in software
17 to generate a combined signal based on the user signal, which includes the
18 brightness setting input by a user, and a sensing signal, including signaling from a
19 light sensor.

20 29. The Accused Products have “a dark level bias configured to adjust the
21 combined signal to generate a brightness control signal that is used to control a
22 brightness level of a visible display such that the brightness control signal is
23 maintained above a predetermined level when the ambient light level decreases to
24 approximately zero.” The source code and/or hardware included in the Accused
25 Products with associated components adjusts a signal that controls the brightness of
26 the Accused Products maintaining the brightness level of the display above a
27 predetermined level when the ambient brightness is approximately zero.
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JURY TRIAL DEMAND

Polaris PowerLED hereby demands trial by jury on all issues so triable pursuant to Fed. R. Civ. P. 38.

DATED: October 9, 2019

FEINBERG DAY KRAMER ALBERTI
LIM TONKOVICH & BELLOLI LLP

By: /s/ Robert F. Kramer
Robert F. Kramer

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POLARIS POWERLED TECHNOLOGIES,
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