

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

POLARIS POWERLED TECHNOLOGIES, §  
LLC, §

Plaintiff, §

v. §

SAMSUNG ELECTRONICS AMERICA, §  
INC., §

Defendant. §

Civil Action No.

**JURY TRIAL DEMANDED**

**COMPLAINT FOR PATENT INFRINGEMENT**

Plaintiff Polaris PowerLED Technologies, LLC (“Polaris PowerLED”) for its Complaint against Defendant Samsung Electronics America, Inc. (“Samsung,” “SEA” or “Defendant”), alleges as follows:

**NATURE OF THE ACTION**

1. This is a civil action for infringement of United States Patent No. U.S. Patent No. 8,223,117 (“117 Patent”) under the patent laws of the United States, 35 U.S.C. § 1 *et seq.*
2. Polaris PowerLED brings this patent infringement action to protect its valuable patented technology relating to controlling the brightness of a display and increasing battery life, a significant advance in the field of display technology and power control for mobile and battery operated devices.

**THE PARTIES**

3. Polaris PowerLED is a Delaware limited liability company having its address at 32932 Pacific Coast Highway #14-498, Dana Point, California.
4. Defendant Samsung Electronics America, Inc. is a New York corporation with its

principal place of business located at 85 Challenger Road, Ridgefield Park, New Jersey 07660. SEA's registered agent in Texas is C T Corporation System, 1999 Bryan Street, Suite 900, Dallas, Texas 75201-3136.

### **JURISDICTION AND VENUE**

5. This action arises under the patent laws of the United States, Title 35 of the United States Code. Accordingly, this Court has subject matter jurisdiction under 28 U.S.C. §§1331 and 1338(a) and the patent laws of the United States, 35 U.S.C. § 1, *et seq.*

6. The Court has personal jurisdiction over Defendant consistent with the Texas Long Arm Statute. This Court has personal jurisdiction over Defendant in this action because, among other reasons, Defendant has committed infringing acts within the Eastern District of Texas giving rise to this action and have established minimum contacts with the forum state of Texas. Defendant conducts business in this District and maintains regular and established places of business within this District.

7. This Court has personal jurisdiction over Defendant because Defendant has committed and continues to commit acts of infringement in violation of 35 U.S.C. § 271 and places infringing products into the stream of commerce, with the knowledge or understanding that such products are sold in the State of Texas, including in this District.

8. On information and belief, Samsung's business operations concerning cellular phones and tablets are conducted at its facilities located in Richardson, Texas. Additionally, Samsung has committed infringing activities by marketing, selling, distributing, and servicing certain Samsung-branded cellular phones and tablets which Plaintiff accuses of infringement in this Action.

9. Venue is proper in this judicial district pursuant to 28 U.S.C. §§ 1391(b), (c) and

1400(b). Defendant maintains regular and established places of business, and a permanent and continuous physical presence, within the District, including an office located at 1301 East Lookout Drive, Richardson, Texas 75080, which is located in Collin County and within this district, and 1000 Klein Rd., Plano, Texas 75074.

10. Defendant SEA also employs full-time personnel, such as engineers and senior managers in this district, including in Richardson, Texas. On information and belief, Samsung's business operations relating to cellular mobile devices are conducted primarily at its facilities located in Richardson.

11. Defendant SEA has also committed acts of infringement in this district by commercializing, marketing, selling, distributing, and servicing certain Samsung-branded devices, including but not limited to phones and tablets, which are devices Plaintiff accuses of infringement in this Action.

#### **PATENT-IN-SUIT**

12. On July 17, 2012, the United States Patent Office duly and legally issued United States Patent No. U.S. Patent No. 8,223,117, entitled "Method and Apparatus to Control Display Brightness With Ambient Light Correction" to Mr. Bruce R. Ferguson. Polaris PowerLED is the owner of all substantial rights, title, and interest in the '117 Patent. A true and correct copy of the '117 Patent is attached as Exhibit A.

#### **BACKGROUND**

13. In modern electronic and mobile devices, display screens can consume significant power and in mobile devices drain the battery of the mobile device more quickly. Additionally, if a screen is too bright or too dark for the ambient light conditions, use of the mobile device can cause significant eye strain for the user. These are significant disadvantages of modern displays

and mobile devices that adversely affect the experience of the user of electronic products and mobile devices.

14. The ability to read or view the display can be hampered under conditions of high ambient lighting. Ambient light may reflect off the surface of the display and reduce the display contrast to give a washed-out appearance. This condition can be improved by increasing the brightness of the display in comparison to the reflected light of the display surface. The brightness of the display can be adjusted to be brighter for high ambient lighting conditions and less bright for low ambient lighting conditions to maintain consistent perceived brightness.

15. In battery operated systems, such as smart phones and tablets, it is advantageous to reduce power consumption and extend the run time on a battery between charges. A method of reducing power consumption, and therefore extending battery run time, is to reduce the brightness under low ambient lighting conditions. The display can operate at a lower brightness level for low ambient lighting conditions because light reflections caused by the ambient light are lower and produce less of a washed-out effect. It is also advantageous to turn down the brightness under low ambient lighting conditions to extend the life of the battery.

16. Mr. Bruce Ferguson invented a novel manner of adjusting the brightness of the display screen in response to ambient light, conserving power, increasing battery life of mobile and battery powered devices, and reducing eye strain for the user, and significantly improving the experience of the user. His inventions were a significant advance in the field of display technology and power control for mobile and battery operated devices.

17. Mr. Ferguson patented these innovations in the '117 Patent.

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

18. Polaris PowerLED incorporates by reference paragraphs 1-17 above.

19. Samsung has directly infringed and continues to directly infringe the '117 patent by making, using, offering for sale, selling and/or importing into the United States mobile phones and tablets, including, for example, Galaxy S6, Galaxy S7, Galaxy S8, Galaxy Note5, Galaxy Note6, Galaxy Note7, Galaxy Note8, and Galaxy Tab S3, and other consumer electronics display products (collectively, "Accused Products").

20. 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;

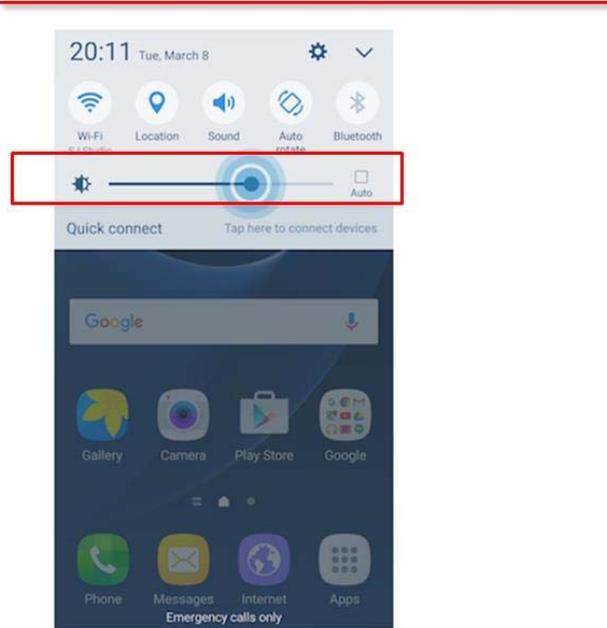
a multiplier configured to selectively generate a combined signal based on both the user signal and the sensing signal; and

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.

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

22. The Samsung Galaxy S7, for example, has "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" as shown below. The slide bar shown below can be utilized by a user to select the brightness of the display.

2. Touch and drag the slider to the right for a brighter screen or to the left for a darker screen.



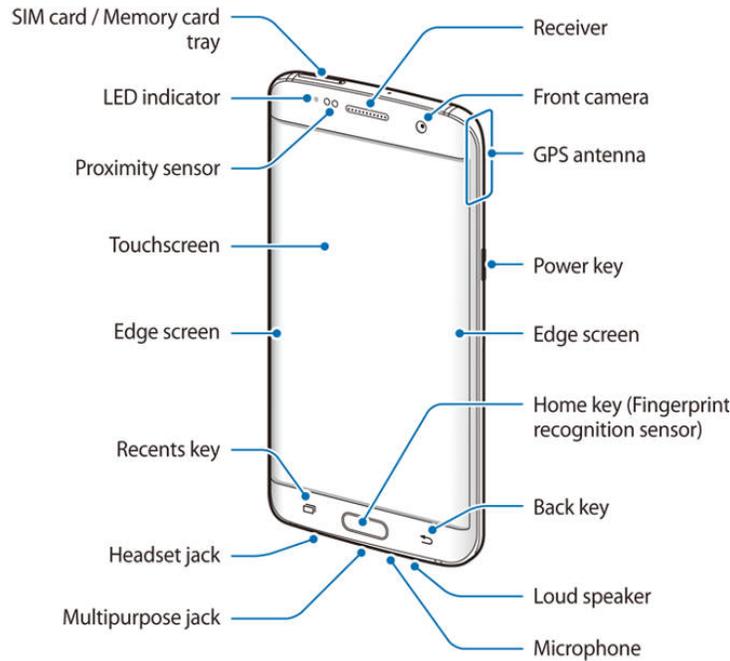
**Note:** Marking the **Auto** checkbox lets the device adjust the display brightness based on your environment.

Samsung Galaxy S7 FAQ, available at <http://www.samsung.com/ca/support/skp/faq/1102467>.

23. The Samsung Galaxy S7 has “a light sensor configured to sense ambient light and to output a sensing signal indicative of the ambient light level” as shown below.

24. Samsung’s product literature instructs users, for example, with respect to use of a proximity/light sensor in the accused products advising users that they should never block the proximity/light sensor if they use a screen protector. It advises that the light sensor provides information to the system to adjust brightness and other display settings. It explains that when a user is on a call, and when the user moves the phone close to his/her ear, the proximity sensor can detect it and turns off the screen to avoid inadvertent touch.

- **Proximity/light sensor.** You should **never** block the **proximity/light sensor** if you use a screen protector. The light sensor provides info to the system to adjust brightness and other display settings. When you are in a call, and when you move the phone close to your ear, the proximity sensor can detect it and turns off the screen to avoid inadvertent touch.



Galaxy S7 layout, available at <http://gadgetguideonline.com/s7/galaxy-s7-online-manual/galaxy-s7-layout-and-galaxy-s7-edge-layout/>.

25. The Samsung Galaxy S7 has “a multiplier configured to selectively generate a combined signal based on both the user signal and the sensing signal.” Specifically, the computer code running on the Galaxy S7 uses a mathematical function as a multiplier to generate a combined signal based on the user signal, which includes the brightness setting input by the user, and a sensing signal, which is a signal from the light sensor.

26. The Samsung Galaxy S7 has “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.” The computer code running on the Galaxy S7 adjusts the control signal that controls the brightness of the Galaxy S7 display to maintain the brightness level of the display above a predetermined level when the ambient brightness is approximately zero.

27. As a result of Samsung's infringement of the '117 Patent, Polaris PowerLED has suffered monetary damages and is entitled to no less than a reasonable royalty for Samsung's use of the claimed inventions of the '117 Patent, together with interest and costs as determined by the Court. Polaris PowerLED will continue to suffer damages in the future unless Samsung's infringing activities are enjoined by this Court.

28. Polaris PowerLED will be irreparably harmed unless a permanent injunction is issued enjoining Samsung and their agents, employees, representatives, affiliates, and others acting in concert with Samsung from infringing the '117 Patent.

**PRAYER FOR RELIEF**

WHEREFORE, Polaris PowerLED requests the following relief from this Court:

- (A) A judgment that Samsung infringes one or more claims of the '117 Patent;
- (B) A judgment that the '117 Patent is valid and enforceable;
- (C) A judgment awarding Polaris PowerLED all damages adequate to compensate it for Samsung's infringement of the '117 Patent, and in no event less than a reasonable royalty for Samsung's acts of infringement, including all pre-judgment and post-judgment interest at the maximum rate allowed by law;
- (D) An order and judgment permanently enjoining Samsung and its officers, directors, agents, servants, employees, affiliates, attorneys, and all others acting in privity or in concert with them, and their parents, subsidiaries, divisions, successors and assigns from further acts of infringement of the '117 Patent;
- (D) A judgment that this is an exceptional case and awarding Polaris PowerLED its costs and reasonable attorneys' fees incurred in this action as provided by 35 U.S.C. § 285; and
- (E) A judgment granting Polaris PowerLED such further relief as the Court may deem

just and proper.

**JURY TRIAL DEMAND**

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

R. Civ. P. 38.

Dated: October 27, 2017

By: /s/ Deron R. Dacus

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