

1 Thomas F. Fitzpatrick (SBN 193565) tfitzpatrick@goodwinprocter.com Andy H. Chan (SBN 242660) achan@goodwinprocter.com GOODWIN PROCTER LLP 135 Commonwealth Drive Menlo Park, CA 94025 Tel.: 650.752.3100 5 Fax: 650.853.1038 Charles H. Sanders (pro hac vice pending) csanders@goodwinprocter.com JUN - 6 2011 7 GOODWIN PROCTER LLP Exchange Place Richard W. Wieking Clerk, U.S. District Court Northern District of California 8 53 State Street Boston, MA 02109 San Jose Tel: 617.570.1315 Fax: 617.523.1231 10 Attorneys for Plaintiff OSRAM GmbH 11 UNITED STATES DISTRICT COURT 12 NORTHERN DISTRICT OF CALIFORNIA 13 14 **OSRAM GMBH** 15 Plaintiff. COMPLAINT FOR PATENT INFRINGEMENT 16 v. 17 LG ELECTRONICS, INC., LG INNOTEK **DEMAND FOR JURY TRIAL** CO., LTD., LG ELECTRONICS U.S.A., INC., 18 and LG INNOTEK U.S.A., INC. 19 Defendants. 20 Plaintiff OSRAM GmbH ("OSRAM") complains and alleges as follows against defendants 21 LG Electronics, Inc., LG Innotek Co., Ltd., LG Electronics U.S.A., Inc., and LG Innotek U.S.A., 22 Inc. (collectively "LG" or "Defendants"): 23 **NATURE OF THE ACTION** 24 1. OSRAM brings this action to obtain damages for LG's unlawful infringement of 25 OSRAM's valuable patent rights on light-emitting diode ("LED") technology and to enjoin LG's 26 continuing infringement. 27 28

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- 2. OSRAM was founded over 100 years ago and is one of the two largest lighting manufacturers in the world. Light from OSRAM shines in about 150 countries. OSRAM has 40,000 employees worldwide, supplying customers around the globe from its 46 production sites in 17 countries.
- 3. OSRAM is a high-tech company in the lighting industry and has maintained a strong commitment to research and development, particularly in the field of LEDs. Business in this area is growing rapidly and has taken on major strategic importance. LEDs are also an energy-efficient "green" technology. OSRAM's milestones in the development of LED technology include the first surface-mounted LEDs and the first LEDs that emit white light ("white LEDs") using conversion technology, and these innovative technologies are the subject of patents asserted in this complaint.
- 4. OSRAM developed novel conversion technology for white LEDs, which enables production of white LEDs using blue-emitting semiconductors and suitable phosphor converters, and first introduced white LEDs using conversion technology in 1996.
- 5. There is enormous demand within the lighting industry for the technologies developed by OSRAM, in part because white LEDs are becoming the most widespread type of LED. Typical applications include backlighting of displays and both interior and exterior vehicle lighting, and white LEDs are now being used increasingly for general illumination.
- 6. With several thousand patents and patent applications, OSRAM holds a strong intellectual property position in the field of LED technology. As a result of the enormous demand for the technologies developed by OSRAM, and in particular for OSRAM's conversion for white LEDs, OSRAM has licensed many major companies around the world.
- 7. Unlike the many other respected companies who have obtained licenses from OSRAM to use OSRAM's valuable patented LED technologies, LG has continued to engage in unauthorized, infringing use of OSRAM's patented LED technologies and has refused to recognize the value of OSRAM's patents.

8. OSRAM therefore brings this action against LG for patent infringement under the patent laws of the United States, Title 35, United States Code. OSRAM seeks damages, injunctive relief, and other relief due to LG's unlawful conduct. **PARTIES** 9. OSRAM GmbH is a German corporation with its principal place of business at Hellabrunner Strasse 1, 81543 Munich, Germany. LG Electronics, Inc. ("LGE") is a Korean corporation with its principal place of 10. business at LG Twin Towers, 20, Yeouido-dong, Yeongdungpo-gu, Seoul 150-721, Korea. LGE manufactures and provides a wide range of products incorporating LEDs, including, e.g., televisions, computer monitors, and mobile devices, which are offered for sale and sold within the United States. LG Innotek Co., Ltd. ("LGIT") is a Korean corporation with its principal place of 11. business at Seoul Square 20F, Namdaemunno 5-ga, Jung-gu, Seoul 100-714, Korea. LGIT manufactures LEDs, lighting modules containing LEDs for use in LED luminaires, and backlight units for use in, e.g., televisions, computer monitors, and mobile devices, which are upon information and belief offered for sale and sold within the United States. LG Electronics U.S.A., Inc. ("LGE USA") is a Delaware corporation with its 12. principal place of business at 1000 Sylvan Avenue, Englewood Cliffs, New Jersey 07632. Upon information and belief, LGE USA also has an office at 150 East Brokaw Road, San Jose, California 95112. Upon information and belief, LGE USA is a wholly owned subsidiary of LGE. LGE USA imports and supplies consumer electronics incorporating LEDs, including, e.g., televisions and computer monitors, to retailers in the United States. LG Innotek U.S.A., Inc. ("LGIT USA") is a California corporation with its 13. principal place of business at 10225 Willow Creek Road, San Diego, California 92131. LGIT USA also has an office at 2540 North First Street, Suite 400, San Jose, California 95131. Upon

information and belief, LGIT USA is a wholly owned subsidiary of LGIT. Upon information and

belief, LGIT USA offers LED-containing products manufactured by LGIT for sale in the United

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JURISDICTION

- 14. This Court has subject matter jurisdiction over this action pursuant to 28 U.S.C. §§ 1331 and 1338(a).
- and belief, Defendants have continuous and systematic contacts with this forum by virtue of the domestic Defendants' maintaining offices in the forum, and the foreign Defendants' interacting with their U.S. subsidiaries' offices located within this forum. This Court also has personal jurisdiction over Defendants because Defendants have purposefully directed their infringing activities at this forum, and this litigation arises from injuries arising out of that infringement. Furthermore, this Court has personal jurisdiction over Defendants because they place infringing products into the stream of commerce, with the knowledge or understanding that such products are offered for sale and sold in and from this forum. The infringing acts committed by LG cause injury to OSRAM within this forum.

VENUE

16. Venue is proper in this District pursuant to 28 U.S.C. §§ 1391 and 1400(b). Upon information and belief, Defendants reside in this judicial district or otherwise are subject to suit in this judicial district, upon information and belief have committed acts of infringement in this judicial district, and have regular and established places of business in this judicial district.

INTRADISTRICT ASSIGNMENT

17. LGIT USA and, upon information and belief, LGE USA have regular and established places of business in San Jose, within Santa Clara County. OSRAM has a U.S. subsidiary located in Sunnyvale, within Santa Clara County. Under Civil Local Rule 3-2(c), Intellectual Property Actions are assigned on a district-wide basis.

PATENTS IN SUIT

18. U.S. Patent No. 6,812,500 ("the '500 patent"), entitled "Light-Radiating Semiconductor Component with a Luminescence Conversion Element," issued on November 2, 2004, naming inventors Ulrike Reeh, Klaus Höhn, Norbert Stath, Günter Waitl, Peter Schlotter,

Jürgen Schneider, and Ralf Schmidt. A true and correct copy of the '500 patent is attached hereto as Exhibit 1.

- 19. U.S. Patent No. 7,078,732 ("the '732 patent"), entitled "Light-Radiating Semiconductor Component with a Luminescence Conversion Element," issued on July 18, 2006, naming inventors Ulrike Reeh, Klaus Höhn, Norbert Stath, Günter Waitl, Peter Schlotter, Jürgen Schneider, and Ralf Schmidt. A true and correct copy of the '732 patent is attached hereto as Exhibit 2.
- 20. U.S. Patent No. 7,126,162 ("the '162 patent"), entitled "Light-Radiating Semiconductor Component with a Luminescence Conversion Element," issued on October 24, 2006, naming inventors Ulrike Reeh, Klaus Höhn, Norbert Stath, Günter Waitl, Peter Schlotter, Jürgen Schneider, and Ralf Schmidt. A true and correct copy of the '162 patent is attached hereto as Exhibit 3.
- 21. U.S. Patent No. 7,151,283 ("the '283 patent"), entitled "Light-Radiating Semiconductor Component with a Luminescence Conversion Element," issued on December 19, 2006, naming inventors Ulrike Reeh, Klaus Höhn, Norbert Stath, Günter Waitl, Peter Schlotter, Jürgen Schneider, and Ralf Schmidt. A true and correct copy of the '283 patent is attached hereto as Exhibit 4.
- 22. U.S. Patent No. 7,629,621 ("the '621 patent"), entitled "Light-Radiating Semiconductor Component with a Luminescence Conversion Element," issued on December 8, 2009, naming inventors Ulrike Reeh, Klaus Höhn, Norbert Stath, Günter Waitl, Peter Schlotter, Jürgen Schneider, and Ralf Schmidt. A true and correct copy of the '621 patent is attached hereto as Exhibit 5.
- 23. U.S. Patent No. 6,975,011 ("the '011 patent"), entitled "Optoelectronic Semiconductor Component Having Multiple External Connections," issued on December 13, 2005, naming inventors Karlheinz Arndt, Herbert Brunner, Franz Schellhorn, and Günter Waitl. A true and correct copy of the '011 patent is attached hereto as Exhibit 6.
- 24. U.S. Patent No. 7,199,454 ("the '454 patent"), entitled "Optoelectronic Semiconductor Component," issued on April 3, 2007, naming inventors Karlheinz Arndt, Herbert

Brunner, Franz Schellhorn, and Günter Waitl. A true and correct copy of the '454 patent is attached hereto as Exhibit 7.

- 25. U.S. Patent No. 7,271,425 ("the '425 patent"), entitled "Optoelectronic Component," issued on September 18, 2007, naming inventors Karlheinz Arndt, Georg Bogner, Günter Waitl, and Mattias Winter. A true and correct copy of the '425 patent is attached hereto as Exhibit 8.
- 26. U.S. Patent No. 6,849,881 ("the '881 patent"), entitled "Optical Semiconductor Device Comprising a Multiple Quantum Well Structure," issued on February 1, 2005, naming inventors Volker Harle, Berthold Hahn, Hans-Jürgen Lugauer, Helmut Bolay, Stefan Bader, Dominik Eisert, Uwe Strauss, Johannes Völkl, Ulrich Zehnder, Alfred Lell, and Andreas Weimar. A true and correct copy of the '881 patent is attached hereto as Exhibit 9.
- 27. U.S. Patent No. 7,106,090 ("the '090 patent"), entitled "Optical Semiconductor Device With Multiple Quantum Well Structure," issued on September 12, 2006, naming inventors Volker Harle, Berthold Hahn, Hans-Jurgen Lugauer, Helmut Bolay, Stefan Bader, Dominik Eisert, Uwe Strauss, Johannes Volkl, Ulrich Zehnder, Alfred Lell, and Andreas Weimer. A true and correct copy of the '090 patent is attached hereto as Exhibit 10.
- 28. U.S. Patent No. 6,459,130 ("the '130 patent"), entitled "Optoelectronic Semiconductor Component," issued on October 1, 2002, naming inventors Karlheinz Arndt, Herbert Brunner, Franz Schellhorn, and Günter Waitl. A true and correct copy of the '130 patent is attached hereto at Exhibit 11.
- 29. U.S. Patent No. 6,927,469 ("the '469 patent"), entitled "Optoelectronic Semiconductor Component," issued on August 9, 2005, naming inventors Karlheinz Arndt, Herbert Brunner, Franz Schellhorn, and Günter Waitl. A true and correct copy of the '469 patent is attached hereto at Exhibit 12.
- 30. The '500 patent, the '732 patent, the '162 patent, the '283 patent, the '621 patent, the '011 patent, the '454 patent, the '425 patent, the '881 patent, the '090 patent, the '130 patent, and the '469 patent are assigned to plaintiff OSRAM GmbH.

COUNT I

(Infringement of the '500 Patent)

- 31. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 30, as if fully set forth herein.
- 32. LG has been and is infringing the '500 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States white LEDs or products containing white LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include white LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '500 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed white LEDs and products containing such LEDs as infringing the '500 patent, LG's infringing products include without limitation model names LEMWS37P80LZ00, LEMWS59T80LZ00, LEMWS59T70GZ00, LEMWS52P80LZ00, LEMWH51W80LZ00, LEMWS51X75GZ00, and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs (e.g., upon information and belief, the Flatron E2290).
- 33. LG's infringement of the '500 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 34. Before the filing of this action, OSRAM specifically informed LG of the '500 patent, so LG has had actual knowledge of the '500 patent. LG purposefully continued its infringing activity despite knowledge of the '500 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '500 patent.
- 35. Upon information and belief, LG has been and is willfully infringing the '500 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '500 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.

36. LG's infringement of the '500 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT II

(Infringement of the '732 Patent)

- 37. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 36, as if fully set forth herein.
- 38. LG has been and is infringing the '732 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States white LEDs or products containing white LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include white LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '732 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed white LEDs and products containing such LEDs as infringing the '732 patent, LG's infringing products include without limitation model names LEMWS59T70GZ00, LEMWS52P80LZ00, LEMWS1X75GZ00, and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs.
- 39. LG's infringement of the '732 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 40. Before the filing of this action, OSRAM specifically informed LG of the '732 patent, so LG has had actual knowledge of the '732 patent. LG purposefully continued its infringing activity despite knowledge of the '732 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '732 patent.
- 41. Upon information and belief, LG has been and is willfully infringing the '732 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon

information and belief, LG's willful infringement of the '732 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.

42. LG's infringement of the '732 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT III

(Infringement of the '162 Patent)

- 43. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 42, as if fully set forth herein.
- 44. LG has been and is infringing the '162 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States white LEDs or products containing white LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include white LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '162 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed white LEDs and products containing such LEDs as infringing the '162 patent, LG's infringing products include without limitation model names LEMWS37P80LZ00, LEMWS59T80LZ00, LEMWS59T70GZ00, LEMWS52P80LZ00, LEMWH51W80LZ00, LEMWS1X75GZ00, and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs (e.g., upon information and belief, the Flatron E2290).
- 45. LG's infringement of the '162 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 46. Before the filing of this action, OSRAM specifically informed LG of the '162 patent, so LG has had actual knowledge of the '162 patent. LG purposefully continued its infringing activity despite knowledge of the '162 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '162 patent.

47. Upon information and belief, LG has been and is willfully infringing the '162 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '162 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.

48. LG's infringement of the '162 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT IV

(Infringement of the '283 Patent)

- 49. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 48, as if fully set forth herein.
- 50. LG has been and is infringing the '283 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States white LEDs or products containing white LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include white LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '283 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed white LEDs and products containing such LEDs as infringing the '283 patent, LG's infringing products include without limitation model names LEMWS37P80LZ00, LEMWS59T80LZ00, LEMWS59T70GZ00, LEMWS52P80LZ00, LEMWH51W80LZ00, LEMWS1X75GZ00, and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs.
- 51. LG's infringement of the '283 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 52. Before the filing of this action, OSRAM specifically informed LG of the '283 patent, so LG has had actual knowledge of the '283 patent. LG purposefully continued its infringing activity despite knowledge of the '283 patent and, upon information and belief, despite

- 53. Upon information and belief, LG has been and is willfully infringing the '283 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '283 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 54. LG's infringement of the '283 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT V

(Infringement of the '621 Patent)

- 55. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 54, as if fully set forth herein.
- 56. LG has been and is infringing the '621 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States white LEDs or products containing white LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include white LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '621 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed white LEDs and products containing such LEDs as infringing the '621 patent, LG's infringing products include without limitation model names LEMWS37P80LZ00, LEMWS59T80LZ00, LEMWS59T70GZ00, LEMWS52P80LZ00, LEMWH51W80LZ00, LEMWS51X75GZ00, and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs (e.g., upon information and belief, the Flatron E2290).
- 57. LG's infringement of the '621 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.

- 58. Before the filing of this action, OSRAM specifically informed LG of the '621 patent, so LG has had actual knowledge of the '621 patent. LG purposefully continued its infringing activity despite knowledge of the '621 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '621 patent.
- 59. Upon information and belief, LG has been and is willfully infringing the '621 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '621 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 60. LG's infringement of the '621 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT VI

(Infringement of the '130 Patent)

- 61. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 60, as if fully set forth herein.
- 62. LG has been and is infringing the '130 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States LEDs having the claimed structure or products containing such LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '130 patent. As an example, and without narrowing in any way OSRAM's identification of unlicensed LEDs having the claimed structure and products containing such LEDs as infringing the '130 patent, upon information and belief LG's infringing products include without limitation model name 47LW5600, which upon information and belief contains one or more infringing LEDs.

- 63. LG's infringement of the '130 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 64. Upon information and belief, LG purposefully continued its infringing activity despite knowledge of the '130 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '130 patent.
- 65. Upon information and belief, LG has been and is willfully infringing the '130 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '130 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 66. LG's infringement of the '130 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT VII

(Infringement of the '469 Patent)

- 67. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 66, as if fully set forth herein.
- 68. LG has been and is infringing the '469 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States LEDs having the claimed structure or products containing such LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '469 patent. As an example, and without narrowing in any way OSRAM's identification of unlicensed LEDs having the claimed structure and products containing such LEDs as infringing the '469 patent, upon information and belief LG's infringing products include without limitation model name 47LW5600, which upon information and belief contains one or more infringing LEDs.

- 69. LG's infringement of the '469 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 70. Upon information and belief, LG purposefully continued its infringing activity despite knowledge of the '469 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '469 patent.
- 71. Upon information and belief, LG has been and is willfully infringing the '469 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '469 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 72. LG's infringement of the '469 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT VIII

(Infringement of the '011 Patent)

- 73. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 72, as if fully set forth herein.
- 74. LG has been and is infringing the '011 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States LEDs having the claimed structure or products containing such LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '011 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed LEDs having the claimed structure and products containing such LEDs as infringing the '011 patent, LG's infringing products include without limitation model names LEMWS52P80LZ00 and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs (e.g., upon information and belief, the 47LW5600).

entitled to recover damages adequate to compensate for LG's infringement, together with interest
 and costs.
 Upon information and belief, LG purposefully continued its infringing activity

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76. Upon information and belief, LG purposefully continued its infringing activity despite knowledge of the '011 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '011 patent.

LG's infringement of the '011 patent has injured OSRAM, and thus OSRAM is

- 77. Upon information and belief, LG has been and is willfully infringing the '011 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '011 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 78. LG's infringement of the '011 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT IX

(Infringement of the '454 Patent)

- 79. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 78, as if fully set forth herein.
- 80. LG has been and is infringing the '454 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States LEDs having the claimed structure or products containing such LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '454 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed LEDs and products containing such LEDs as infringing the '454 patent, LG's infringing products include without limitation model names LEMWS37P80LZ00, LEMWS59T80LZ00, LEMWS59T70GZ00, LEMWS52P80LZ00, LEMWH51W80LZ00, LEMWS59T70GZ00, and any and all products containing one or more

- 81. LG's infringement of the '454 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 82. Upon information and belief, LG purposefully continued its infringing activity despite knowledge of the '454 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '454 patent.
- 83. Upon information and belief, LG has been and is willfully infringing the '454 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '454 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 84. LG's infringement of the '454 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT X

(Infringement of the '425 Patent)

- 85. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 84, as if fully set forth herein.
- 86. LG has been and is infringing the '425 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States LEDs having the claimed structure or products containing such LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '425 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed LEDs and products containing such LEDs as infringing the '425 patent, LG's infringing products include without limitation model names LEMWS52P80LZ00 and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs.

- 87. LG's infringement of the '425 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 88. Upon information and belief, LG purposefully continued its infringing activity despite knowledge of the '425 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '425 patent.
- 89. Upon information and belief, LG has been and is willfully infringing the '425 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '425 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 90. LG's infringement of the '425 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT XI

(Infringement of the '881 Patent)

- 91. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 90, as if fully set forth herein.
- 92. LG has been and is infringing the '881 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States LEDs having the claimed structure or products containing such LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '881 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed LEDs and products containing such LEDs as infringing the '881 patent, LG's infringing products include without limitation model names LEMWS59T80LZ00 and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs.

- 93. LG's infringement of the '881 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 94. Upon information and belief, LG purposefully continued its infringing activity despite knowledge of the '881 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '881 patent.
- 95. Upon information and belief, LG has been and is willfully infringing the '881 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '881 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 96. LG's infringement of the '881 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

COUNT XII

(Infringement of the '090 Patent)

- 97. OSRAM incorporates and realleges the allegations set forth in foregoing paragraphs 1 through 96, as if fully set forth herein.
- 98. LG has been and is infringing the '090 patent, directly and/or indirectly, by making, using, offering to sell, and/or selling within the United States, and/or importing into the United States LEDs having the claimed structure or products containing such LEDs, and/or actively inducing such activities, without authority from OSRAM. These infringing products include LEDs manufactured by LGIT. As exemplary only, and without prejudice to OSRAM's right to pursue infringement of additional claims, LG has been and is infringing claim 1 of the '090 patent. As just a few examples, and without narrowing in any way OSRAM's identification of unlicensed LEDs and products containing such LEDs as infringing the '090 patent, LG's infringing products include without limitation model names LEMWS59T80LZ00 and LEMWS52P75GZ00, and any and all products containing one or more of such infringing LEDs.

- 99. LG's infringement of the '090 patent has injured OSRAM, and thus OSRAM is entitled to recover damages adequate to compensate for LG's infringement, together with interest and costs.
- 100. Upon information and belief, LG purposefully continued its infringing activity despite knowledge of the '090 patent and, upon information and belief, despite an objectively high likelihood that its action constituted infringement of one or more valid claims of the '090 patent.
- 101. Upon information and belief, LG has been and is willfully infringing the '090 patent, and thus OSRAM is entitled to recover increased damages under 35 U.S.C. § 284. Upon information and belief, LG's willful infringement of the '090 patent makes this case exceptional, and thus OSRAM is entitled to recover attorneys' fees under 35 U.S.C. § 285.
- 102. LG's infringement of the '090 patent has caused irreparable injury to OSRAM and will continue to cause irreparable injury until LG is enjoined from further infringement.

PRAYER FOR RELIEF

WHEREFORE, OSRAM respectfully requests that the Court grant relief as follows:

- A. A judgment for OSRAM against LG on all counts asserted in this Complaint;
- B. A judgment that LG has infringed the '500 patent, the '732 patent, the '162 patent, the '283 patent, the '621 patent, the '011 patent, the '454 patent, the '425 patent, the '881 patent, the '090 patent, the '130 patent, and the '469 patent;
- C. An order and judgment preliminarily and permanently enjoining LG and its officers, agents, servants, employees, attorneys and all persons in active concert or participation with any of them, and their parents, subsidiaries, divisions, successors and assigns, from infringing the '500 patent, the '732 patent, the '162 patent, the '283 patent, the '621 patent, the '011 patent, the '454 patent, the '425 patent, the '881 patent, the '090 patent, the '130 patent, and the '469 patent;
- D. A judgment awarding OSRAM damages in the amount sufficient to compensate it for LG's infringement, together with prejudgment and post-judgment interest and costs, pursuant to 35 U.S.C. § 284;

1	E.	A judgment trebling the dan	nages awarded to OSRAM by reason of LG's willful	
2	infringement, pursuant to 35 U.S.C. § 284;			
3	F.	F. A judgment declaring this case "exceptional" under 35 U.S.C. § 285 and awarding		
4	OSRAM its attorneys' fees, expenses and costs incurred in this action; and			
5	G.	G. A judgment awarding OSRAM such other and further relief as this Court deems		
6	just and prope	er.		
7				
8	Dated: June 2, 2011		Respectfully submitted,	
9			99 5/	
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1 **JURY DEMAND** Plaintiff OSRAM hereby demands a trial by jury of any and all issues properly triable by 2 3 jury. 4 5 Dated: June 2, 2011 Respectfully submitted, 6 7 Thomas F. Fitzpatrick (SBN 193565) tfitzpatrick@goodwinprocter.com 8 Andy H. Chan (SBN 242660) achan@goodwinprocter.com 9 GOODWIN PROCTER LLP 135 Commonwealth Drive 10 Menlo Park, CA 94025 Tel: 650.752.3100 11 Fax: 650.853.1038 12 Charles H. Sanders (pro hac vice pending) csanders@goodwinprocter.com 13 GOODWIN PROCTER LLP **Exchange Place** 14 53 State Street Boston, MA 02109 15 Tel: 617.570.1315 Fax: 617.523.1231 16 Attorneys for Plaintiff OSRAM GmbH 17 18 19 20 21 22 23 24 25 26

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