UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, D.C.

In The Matter Of

CERTAIN LIGHT-EMITTING DIODES AND PRODUCTS CONTAINING SAME

Investigation No. 337-TA-____

COMPLAINT OF SAMSUNG LED CO., LTD. AND SAMSUNG LED AMERICA, INC. UNDER SECTION 337 OF THE TARIFF ACT OF 1930, AS AMENDED

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3.	United States Patent No. 7,282,741 ("the '741 patent")
4.	United States Patent No. 7,771,081 ("the '081 patent")
5.	United States Patent No. 7,893,443 ("the '443 patent")
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I. INTRODUCTION

- 1. Samsung LED Co., Ltd. ("SLED") and Samsung LED America, Inc. ("SLA") collectively "Complainants" or "Samsung") request that the United States International Trade Commission commence an investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. §1337 ("Section 337"), to remedy the unlawful importation into the United States, sale for importation into the United States, and/or sale within the United States after importation by the owner, importer, or consignee, of certain light-emitting diodes ("LEDs") and products containing the same that infringe valid and enforceable United States patents owned by SLED (collectively "accused products").
- 2. On information and belief, the proposed respondents OSRAM GmbH, OSRAM Opto Semiconductors GmbH, OSRAM Opto Semiconductors Inc. and OSRAM Sylvania Inc. (collectively "OSRAM" or "Respondents") have engaged in unfair acts in violation of Section 337 through and in connection with the unlicensed importation into the United States, sale for importation into the United States, and/or sale within the United States after importation of accused products that infringe one or more claims of United States Patent 6,551,848 ("848 Patent"), 7,268,372 ("372 Patent"), 7,282,741 ("741 Patent"), 7,771,081 ("081 Patent"), 7,893,443 ("443 Patent"), 7,838,315 ("315 Patent"), 7,959,312 ("312 Patent"), and 7,964,881 ("881 Patent") (collectively "the SLED patents" or "the asserted patents").
- 3. SLED asserts that the OSRAM accused products directly infringe and/or induce infringement of at least claims 1, 3, 5-10, and 13-16 of the '848 patent, claims 1-9 of the '372 patent, claims 1 and 5-9 of the '741 patent, claims 1, 2, 4, 6-8, and 10-11 of the '081 patent, claims 1, 4, 5, and 7-14 of the '443 patent, claims 1-4, 6, and 9-13 of the '312 patent,

claims 1-5 of the '315 patent, and claims 1-12 of the '881 patent (collectively "the asserted claims").

- 4. Certified copies of the '848, '372, '741, '081, '443, '312, '315 and '881 patents accompany this Complaint as Exhibits 1 through 8. SLED owns by assignment the entire right, title, and interest in and to these patents. Certified copies of the recorded assignments of the asserted patents to SLED for the '848, '372, '741, '443, '312, '315 and '881 patents and the assignment record from the certified file history for the '081 patent accompany this Complaint as Exhibits 9 through 16.
- 5. As required by Section 337(a)(2) and defined by Section 337(a)(3), an industry exists or is in the process of being established in the United States relating to the asserted patents at least by virture of Samsung's significant investment in plant and equipment, significant employment of labor and capital, and/or substantial investment in the exploitation of the technologies reflected in the asserted patents.
- 6. Complainants seek a permanent limited exclusion order, pursuant to Section 337(d), excluding from entry into the United States all of Respondents' accused products that infringe one or more claims of the asserted patents. Complainants also seek a permanent cease and desist order, pursuant to Section 337(f), directing Respondents to cease and desist from importing, marketing, advertising, demonstrating, warehousing inventory for distribution, offering for sale, selling, distributing, or using accused products that infringe one or more claims of the Asserted Patents.

II. COMPLAINANTS

7. Samsung LED Co., Ltd. (SLED) is a joint venture of Samsung Electronics Co., Ltd. ("SEC") and Samsung Electro-Mechanics Co., Ltd. ("SEMCO"), and is organized under

the laws of the Republic of Korea, with its principal place of business at 314, Maetan 3-Dong, Yeongtong-gu, Suwon City, Gyeonggi-Do 443-743, Republic of Korea.

- 8. SLED is the assignee of the asserted claims with the right to sue for all past, present, and future infringement thereof.
- 9. Samsung LED America, Inc. (SLA) is a subsidiary of SLED, organized under the laws of the State of Georgia, with its principal place of business at 6 Concourse Pkwy NE, Atlanta, Georgia 30328.
- develop, design and manufacture LED products and to research and advance LED technologies. SEMCO opened its LED business in 1995, but SLED was formed as a separate entity to allow for LED specialization with the continuing expansion of the global market for energy-efficient LED products. SLA began operations in 2010 to support SLED in the rapidly-growing LED market in the United States. In addition to investments already made by SEMCO and SLED, SLED and SLA plan to further increase their activities, investments, sales and market share in the United States as the availability and use of LEDs spread in various areas such as home and business lighting, automotive lighting and outdoor lighting.

III. PROPOSED RESPONDENTS

11. On information and belief, OSRAM GmbH is a corporation organized under the laws of Germany with its principal place of business at Hellabrunner Strasse 1, 81543 Munich, Germany, engaged in the development and manufacture of optoelectronic components, including LEDs. OSRAM GmbH is the parent company of OSRAM Opto Semiconductors GmbH and OSRAM Opto Semiconductors Inc. (collectively "OSRAM Opto") and OSRAM Sylvania Inc. ("Sylvania"). OSRAM GmbH, OSRAM Opto and Sylvania are

referred to collectively as OSRAM. On information and belief, OSRAM GmbH is involved with the design, manufacture, importation into the United States, sale for importation, and/or sale after importation of accused products.

- 12. On information and belief, OSRAM Opto Semiconductors GmbH is a corporation organized under the laws of Germany with its principal place of business at Leibnizstr 4, 93055 Regensburg, Germany, and it is involved with the design, manufacture, importation into the United States, sale for importation, and/or sale after importation of accused products.
- 13. On information and belief, OSRAM Opto Semiconductors Inc. is a corporation organized under the laws of Delaware with its principal place of business at 1150 Kifer Road Suite 100, Sunnyvale, California 94086, and it is involved with the design, manufacture, importation into the United States, sale for importation, and/or sale after importation of accused products.
- 14. On information and belief, OSRAM Sylvania Inc. is a corporation organized under the laws of Delaware with its principal place of business at 100 Endicott Street, Danvers, Massachusetts 01923, and it is involved with the design, manufacture, importation into the United States, sale for importation, and/or sale after importation of accused products..

IV. THE PRODUCTS-AT-ISSUE

15. The OSRAM accused products are LEDs and products containing LEDs, including but not limited to light fixtures for consumer or business use, products with LCD displays, automotive lights, and outdoor lights that incorporate LEDs. Examples of OSRAM accused products include the TOPLED and related products, DRAGON family and related

products, OSLON Family and related products, CERAMOS and related products, and OSLUX and related products, as well as products of Respondents that contain the above.

Additional information about these accused products is provided in the accompanying claim charts (Exhibits 20 through 27) and in additional exhibits relating to those accused products (Exhibits 28 through 35, and 57).

V. THE PATENTS-AT-ISSUE

A. The '848 Patent

- 1. Identification of the Patent and Ownership by SLED
- 16. U.S. Patent No. 6,551,848 is entitled "Method For Fabricating Semiconductor Light Emitting Device" and issued on April 22, 2003. The '848 patent issued from U.S. Patent Application Serial No. 10/096,919, filed on March 14, 2002. The '848 patent claims priority to Korean Patent Application number 2001-29253, filed on May 26, 2001. The '848 patent identifies Joon-seop Kwak and Kyo-yeol Lee as the inventors. *See* Exhibit 1.
- 17. Complainant SLED is the owner, by valid assignment, of the entire right, title, and interest in and to the '848 patent. *See* Exhibit 9. The '848 patent is valid, enforceable, and is currently in full force and effect.
- 18. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '848 patent in Appendix A. There are no technical references for the '848 patent.

19. The '848 patent describes an improved process for fabricating semiconductor LEDs. It improves on earlier methods in part by smoothing the bottom of the GaN substrate, which ensures better contact between the electrode and the substrate.

3. Foreign Counterparts to the '848 Patent

20. The foreign counterparts to the '848 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '848 patent have been filed, abandoned, withdrawn or rejected.

B. The '372 Patent

1. Identification of the Patent and Ownership by SLED

- 21. U.S. Patent No. 7,268,372 is entitled "Vertical GaN Light Emitting Diode and Method for Manufacturing the Same" and issued on September 11, 2007. The '372 patent issued from U.S. Patent Application Serial No. 10/601,597, filed on June 24, 2003. The '372 patent claims priority to Korean Patent Application No. 10-2002-0084703, filed on December 27, 2002. The '372 patent identifies Young Ho Park, Hun Joo Hahm, Jong Seok Na and Seung Jin Yoo as the inventors. *See* Exhibit 2.
- 22. Complainant SLED is the owner, by valid assignment, of the entire right, title, and interest in and to the '372 patent. *See* Exhibit 10. The '372 patent is valid, enforceable, and is currently in full force and effect.
- 23. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '372 patent in Appendix B, and four copies of each technical reference mentioned in the prosecution history of the '372 patent in Appendix C.

24. The '372 patent describes an improved vertical "GaN" LED. LEDs are semiconductor elements that are widely used in a wide range of light applications, including in headlights, televisions, room lighting, flood lights, security lights, reading lights, and a range of appliances. A vertical LED has electrodes disposed on the top surface and bottom surface of the LED structure respectively, which achieves a number of benefits, including improved current efficiency and heat dissipation. "GaN" is gallium nitride, which is a semiconductor compound that has properties particularly well suited to use in LEDs. The '372 patent describes a vertical LED with a light emitting structure on top of a reflective layer, an adhesive layer, and a conductive substrate. The reflective layer improves luminescence. Using a conductive substrate helps improve efficiency and reliability.

3. Foreign Counterparts to the '372 Patent

25. The foreign counterparts to the '372 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '372 patent have been filed, abandoned, withdrawn or rejected.

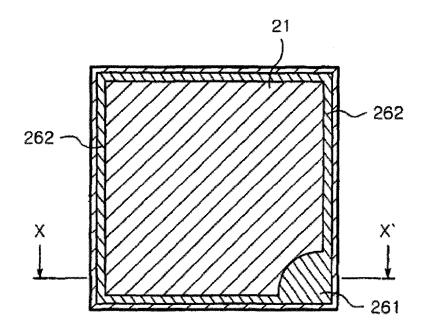
C. The '741 Patent

1. Identification of the Patent and Ownership by SLED

26. U.S. Patent No. 7,282,741 is entitled "Vertical Type Nitride Semiconductor Light Emitting Diode" and issued on October 16, 2007. The '741 patent issued from U.S. Patent Application Serial No. 11/153,500, filed on June 16, 2005. The '741 patent claims priority to Korean Patent Application number 10-2005-0016525, filed on February 28,

- 2005. The '741 patent identifies Dong Woo Kim, Yong Chun Kim and Hyun Kyung Kim as the inventors. *See* Exhibit 3.
- 27. Complainant SLED is the owner, by valid assignment, of the entire right, title, and interest in and to the '741 patent. *See* Exhibit 11. The '741 patent is valid, enforceable, and is currently in full force and effect.
- 28. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '741 patent in Appendix D; and four copies of each technical reference mentioned in the prosecution history of the '741 patent in Appendix E.

29. The '741 patent describes a vertical LED that has an improved layout. Some vertical LEDs in the prior art had electrodes in the middle of the device. That meant the wire attached to the electrode could block part of the light being emitted. Other vertical LEDs in the prior art that had electrodes near an edge of the layer on which the electrodes were built reduced the effective area for emitting the light. The '741 patent describes a new electrode structure, in which one electrode (the "n-side" electrode, shown as 261 in Figure 2(a) below) is formed adjacent to an edge of the n-type layer. An extended electrode (shown as 262 in the figure below) is formed in a band from the bonding pad of the n-side electrode. This layout is shown here:



3. Foreign Counterparts to the '741 Patent

30. The foreign counterparts to the '741 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '741 patent have been filed, abandoned, withdrawn or rejected.

D. The '081 Patent

1. Identification of the Patent and Ownership by SLED

31. U.S. Patent No. 7,771,081 is entitled "LED Package and Backlight Unit Using the Same" and issued on August 10, 2010. The '081 patent issued from U.S. Patent Application Serial No. 12/497,009, filed on July 2, 2009. The '081 patent claims priority to Korean Patent Application number 2005-0126774, filed on December 21, 2005. The '081 patent identifies Dae Yeon Kim and Young Sam Park as the inventors. *See* Exhibit 4.

- 32. Complainant SLED is the owner, by valid assignment, of the entire right, title, and interest in and to the '081 patent. *See* Exhibit 12. The '081 patent is valid, enforceable, and is currently in full force and effect.
- 33. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '081 patent in Appendix F; and four copies of each technical reference mentioned in the prosecution history of the '081 patent in Appendix G.

34. The '081 patent describes an improved LED package. It describes an LED package that emits light at a wide beam angle. The housing for the LED has a recessed seating for the LEDs, and includes an optimized lens meeting certain parameters.

3. Foreign Counterparts to the '081 Patent

35. The foreign counterparts to the '081 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '081 patent have been filed, abandoned, withdrawn or rejected.

E. The '443 Patent

1. Identification of the Patent and Ownership by SLED

36. U.S. Patent No. 7,893,443 is entitled "Nitride Based Semiconductor Light-Emitting Device" and issued on February 22, 2011. The '443 patent issued from U.S. Patent Application Serial No. 11/380,415, filed on April 26, 2006. The '443 patent claims priority to Korean Patent Application number 2004-10538, filed on February 18, 2004. The '443 patent identifies Je Won Kim, Jeong Tak Oh, Dong Joon Kim, Sun Woon Kim, Jin Sub Park and Kyu Han Lee as the inventors. *See* Exhibit 5.

- 37. Complainant SLED is the owner, by valid assignment, of the entire right, title, and interest in and to the '443 patent. *See* Exhibit 13. The '443 patent is valid, enforceable, and is currently in full force and effect.
- 38. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '443 patent in Appendix H. There are no technical references cited in the '443 patent.

39. The '443 patent describes an improved semiconductor LED, which enhances efficiency based on the properties of the layers within it. The patent describes the improved LED as having a layer that is not treated (or "doped") with aluminum and is therefore substantially aluminum free in between an active layer and an electron-blocking layer.

3. Foreign Counterparts to the '443 Patent

40. The foreign counterparts to the '443 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '443 patent have been filed, abandoned, withdrawn or rejected.

F. The '315 Patent

1. Identification of the Patent and Ownership by SLED

41. U.S. Patent No. 7,838,315 is entitled "Method of Manufacturing Vertical Light Emitting Diode" and issued on November 23, 2010. The '315 patent issued from U.S. Patent Application Serial No. 12/155,277, filed on June 2, 2008. The '315 patent claims priority to Korean Patent Application number 10-2007-0120260, filed on November 23, 2007. The

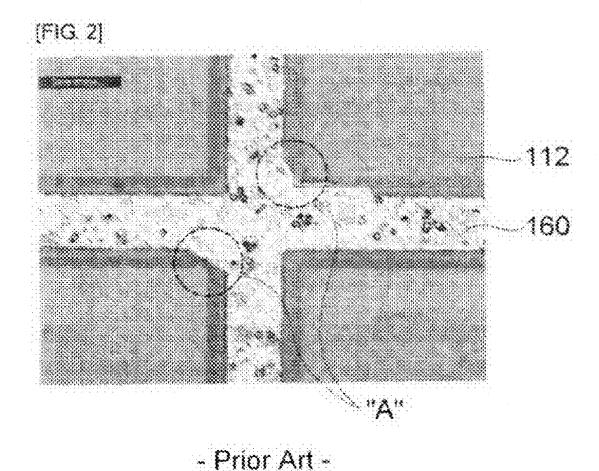
'315 patent identifies Jong In Yang, Sang Bum Lee, Si Hyuk Lee and Tae Hyung Kim as the inventors. *See* Exhibit 6.

- 42. Complainant Samsung is the owner, by valid assignment, of the entire right, title, and interest in and to the '315 patent. *See* Exhibit 14. The '315 patent is valid, enforceable, and is currently in full force and effect.
- 43. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '315 patent in Appendix I; and four copies of each technical reference mentioned in the prosecution history of the '315 patent in Appendix J.

2. Non-Technical Description of the Patented Invention

44. The '315 patent describes an improved method for making vertical LEDs.

The conventional method of manufacturing a vertical LED involves using a laser liftoff process to remove the substrate on which the unit LED elements are built. This resulted in cracks at the edge of the light emitting structure, as shown here:



The method described in the '315 patent overcomes this problem.

3. Foreign Counterparts to the '315 Patent

45. The foreign counterparts to the '315 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '315 patent have been filed, abandoned, withdrawn or rejected.

G. The '312 Patent

1. Identification of the Patent and Ownership by SLED

46. U.S. Patent No. 7,959,312 is entitled "White Light Emitting Device and White Light Source Module Using the Same" and issued on June 14, 2011. The '312 patent issued from U.S. Patent Application Serial No. 12/081,726, filed on April 21, 2008. The '312 patent

claims priority to Korean Patent Application No. 10-2006-0122631, filed on December 5, 2006, and Korean Patent Application No. 10-2007-0012112, filed on February 6, 2007. The '312 patent identifies Chul Hee Yoo, Young June Jeong, Young Sam Park, Seong Yeon Han, Ho Yeon Kim, Hun Joo Hahm and Hyung Suk Kim as the inventors. *See* Exhibit 7.

- 47. Complainant SLED is the owner, by valid assignment, of the entire right, title, and interest in and to the '312 patent. *See* Exhibit 15. The '312 patent is valid, enforceable, and is currently in full force and effect.
- 48. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '312 patent in Appendix K; and four copies of each technical reference mentioned in the prosecution history of the '312 patent in Appendix L.

2. Non-Technical Description of the Patented Invention

49. The '312 patent describes an improved LED that emits white light. This is particularly useful in lighting applications that include headlights, flashlights, in-door, and outdoor lighting. The device has one blue LED and two phosphors around the blue LED(a phosphor is a material that emits light when exposed to radiation). The phosphors are green and red. The blue LED excites the green and red phosphors, which then emit green and red light. That green and red light mixes with the blue light from the LED to generate white light.

3. Foreign Counterparts to the '312 Patent

50. The foreign counterparts to the '312 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '312 patent have been filed, abandoned, withdrawn or rejected.

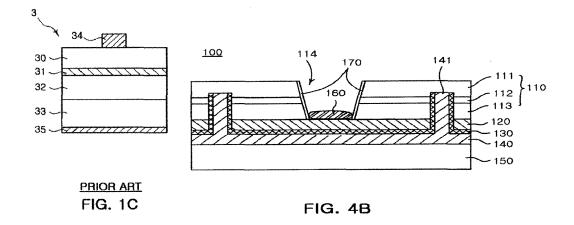
H. The '881 Patent

1. Identification of the Patent and Ownership by SLED

- 51. U.S. Patent No. 7,964,881 is entitled "Semiconductor Light Emitting Device, Method of Manufacturing The Same, And Semiconductor Light Emitting Device Package Using The Same" and issued on June 21, 2011. The '881 patent issued from U.S. Patent Application Serial No. 12/189,428, filed on August 11, 2008. The '881 patent claims priority to Korean Patent Application number 10-2007-0105365, filed on October 19, 2007. The '881 patent identifies Pun Jae Choi, Jin Hyun Lee, Ki Yeol Park and Myong Soo Cho as the inventors. *See* Exhibit 8.
- 52. Complainant Samsung is the owner, by valid assignment, of the entire right, title, and interest in and to the '881 patent. *See* Exhibit 16. The '881 patent is valid, enforceable, and is currently in full force and effect.
- 53. As required by Rule 210.12(c), Complainants submit the following materials accompanying the Complaint: a certified copy and three additional copies of the prosecution history of the '881 patent in Appendix M; and four copies of each technical reference mentioned in the prosecution history of the '881 patent in Appendix N.

2. Non-Technical Description of the Patented Invention

54. The '881 patent describes an improved semiconductor LED. It utilizes an electrode layer with a contact hole rather than just putting the electrode on top of the device. This improves efficiency and reliability and reduces the problem of light loss. Figures intended to highlight differences in the prior art and the improved semiconductor of the patent are illustrated here:



3. Foreign Counterparts to the '881 Patent

55. The foreign counterparts to the '881 patent are listed in Exhibit 17. No other foreign patents or patent applications corresponding to the '881 patent have been filed, abandoned, withdrawn or rejected.

VI. OSRAM'S UNLAWFUL AND UNFAIR ACTS – PATENT INFRINGEMENT

- 56. The OSRAM accused products infringe at least the following claims of the SLED asserted patents:
 - claims 1-9 of the '372 patent,
 - claims 1 and 5-9 of the '741 patent,
 - claims 1, 2, 4, 6-8, and 10-11 of the '081 patent,
 - claims 1, 4, 5, and 7-14 of the '443 patent,
 - claims 1-4, 6, and 9-13 of the '312 patent, and
 - claims 1-12 of the '881 patent.
- 57. OSRAM processes used to make the accused products infringe at least the following claims of the SLED asserted patents:
 - claims 1, 3, 5-10, and 13-16 of the '848 patent,; and
 - claims 1-5 of the '315 patent.

- 58. The accused products are manufactured, assembled, and/or packaged and tested outside the United States. On information and belief, the accused products are manufactured, assembled, and/or packaged and tested at least in Malaysia and China. These same products are then imported into the United States, sold for importation into the United States, and/or sold after importation in the United States. These acts of OSRAM constitute direct infringement and/or infringement by inducement of the asserted claims of SLED's asserted patents.
- 59. The importation into the United States, sale for importation into the United States, and/or sale after importation into the United States of the accused products directly and/or indirectly infringes claims 1-9 of the '372 patent, claims 1 and 5-9 of the '741 patent, claims 1, 2, 4, 6-8, and 10-11 of the '081 patent, claims 1, 4, 5, and 7-14 of the '443 patent, claims 1-4, 6, and 9-13 of the '312 patent, and claims 1-12 of the '881 patent.
- 60. The importation into the United States, sale for importation into the United States, and/or sale after importation into the United States of products manufactured using the accused methods directly and/or indirectly infringes at least claim 1-5 of the '315 patent and claims 1, 3, 5-10, and 13-16 of the '848 patent.
- 61. Respondents induce others to infringe the asserted claims through the importation into the United States and sale after importation into the United States of the accused OSRAM devices along with directions, demonstrations, datasheets, guides, manuals, application notes, training for use, and other materials that encourage the infringing use of the accused devices. Further discovery may reveal that additional claims of the asserted patents are infringed by the accused products.

- 62. The accused products that infringe the asserted claims include, but are not limited to, TOPLED and related products, DRAGON family and related products, OSLON Family and related products, CERAMOS and related products, OSLUX and related products, and Sylvania products that contain the OSRAM accused LEDs. Further discovery may reveal additional products and/or models.
- 63. Claim charts demonstrating how the accused products infringe the asserted claims of the SLED asserted patents, presented in separate charts for each asserted patent, are attached as Exhibits 20, 21, 22, 23, 24, 25, 26 and 27 to this Complaint.
- 64. Photographs and images of the accused products along with related datasheets and application notes, where available, are attached to this Complaint Exhibit Nos. 18 and 19.
- 65. In addition to notice to OSRAM through communications between OSRAM and the Complainants prior to filing of this Complaint, OSRAM has been given actual notice of its infringement of the asserted patents by Complainants' service of this Complaint on the Respondents at the time of filing with the United States International Trade Commission.

VII. SPECIFIC INSTANCES OF UNFAIR IMPORTATION AND SALE

- 66. On information and belief, OSRAM and/or others on its behalf, manufactures the accused products outside of the United States, at least in Germany, Malaysia and/or China, and then imports them into the United States, sells them for importation into the United States, and/or sells them after importation into the United States.
- 67. In June 2011, SLA personnel purchased a number of OSRAM LEDs in the United States, including the LCW W5AM, LCW W5PM, LCW W5SM and LCW W5SN LEDs.

The packaging indicates that these LEDs were manufactured in Malaysia. Attached as Exhibit 18 are images of the receipt evidencing purchase of the accused products in the United States and photographs showing the packaging for some of those products. Further discovery will likely reveal additional specific acts of OSRAM's importation, sale for importation, and/or sale after importation of the accused products.

68. In July 2011, a legal assistant and a law clerk from SLED's outside law firm purchased a number of Sylvania's LED-based products, including, for example, the Sylvania A19 2700K ULTRA LED, the Sylvania A19 3000K ULTRA LED, and the Sylvania Golden Dragon Bright White LED Light. The packaging indicates that these LED products were manufactured in China. Attached as Exhibit 18 are images of the receipts evidencing purchase of the accused products in the United States. Further discovery will likely reveal additional specific acts of OSRAM's importation, sale for importation, and/or sale after importation of the accused products.

VIII. CLASSIFICATION OF THE INFRINGING PRODUCTS UNDER THE HARMONIZED TARIFF SCHEDULE

69. The accused products are believed to fall within at least the following classifications of the Harmonized Tariff Schedules of the United States: 8541 and subsections thereof, including 8541.40.20; 8528 and subsections thereof, including subsubsections of 8528.59 and 8528.72; and 8517 and subsections thereof, including subsubsections of 8517.12. These classifications are intended for illustration only and are not intended to be restrictive of the accused products.

IX. LICENSEES

70. Attached as Confidential Exhibit 50 is a list of persons and entities to which SLED has licensed one or more of the asserted patents.

X. SAMSUNG SATISFIES THE DOMESTIC INDUSTRY REQUIREMENT

- A. Samsung Satisfies the Technical Prong of the Domestic Industry Requirement
- 71. As required by Section 337(a)(2) and defined by Section 337(a)(3), an industry in the United States exists in connection with the asserted patents or such an industry is in the process of being established. Claim charts and explanatory information for examples of SLED LEDs and products that currently practice at least one exemplary claim of each of the asserted patents, and/or are expected to practice at least one exemplary claim when development and commercialization are completed, are attached to this Complaint as Exhibits 38 through 45 (hereinafter "the Domestic Industry Products") are attached to this Complaint as Exhibits 38 through 45.
- 72. Photographs, images, datasheets and other technical information about the Samsung Domestic Industry Products are attached to this Complaint as Exhibits 36, 37, 46 and 47.
 - B. Samsung Satisfies the Economic Prong of the Domestic Industry Requirement
- 73. SLED and SLA have engaged in and continue to engage in significant domestic industry activities in the United States relating to the Samsung Domestic Industry products. SLA formally began operations in an Atlanta, Georgia facility in 2010 to help prepare for an expected rapid expansion of the U.S. market for energy-efficient "green" LEDs and LED products. SLA employs engineers and other personnel who support the domestic industry, providing design, development, assembly, engineering and other technical support relating to the Samsung Domestic Industry Products to customers in the United States. Further, SLED has entered into agreements with U.S. partners for LED-related joint research,

development, design, assembly and engineering in the U.S. relating to Domestic Industry Products. The activities of SLED and SLA include significant investment in plant and equipment and significant employment of labor or capital in the United States. These investments and activities are now significant and Samsung is committed to increasing its domestic industry activities as an integral part of its growing U.S. presence. Additional details on Complainants' actual and planned future investments are set forth in Confidential Exhibit 49.

74. SLED-and SLA have made and continue to make substantial investments in the exploitation of the inventions and technologies that are covered by the asserted patents through engineering, research and development and licensing activities in the United States. These include, but are not limited to, joint R&D and engineering projects with U.S. companies focused on both development of commercial products practicing the asserted patents, as well as on more basic LED research and development of technologies used in Samsung's Domestic Industry Products and planned products. Further detail on Complainants' actual and planned future exploitation of its patents are set forth in Confidential Exhibits 48 and 49.

XI. RELATED LITIGATION

- 75. On June 3, 2011, OSRAM GmbH filed a complaint with the International Trade Commission against SEC, Samsung Electronics America, Inc. ("SEA"), SLED and SLA alleging infringement of certain LED related patents.
- 76. On June 6, 2011, OSRAM GmbH filed a complaint in the United States District Court for the District of Delaware against SEC, SEA, SLED, and SLA alleging infringement of certain LED related patents.

77. In addition to this Complaint, Samsung LED anticipates filing a complaint in the United States District Court for the District of Delaware against OSRAM GmbH, OSRAM Opto Semiconductors GmbH, OSRAM Opto Semiconductors Inc., and OSRAM Sylvania, Inc. alleging infringement of the asserted patents in the Complaint.

XII. REQUESTED RELIEF

- 78. WHEREFORE, by reason of the foregoing, Complainants request that the United States International Trade Commission:
 - (a) institute an immediate investigation, pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, with respect to OSRAM's violations of Section 337 based on the unlawful importation into the United States, sale for importation into the United States, and/or sale within the United States after importation of OSRAM's products that infringe one or more claims of United States Patent Nos. 6,551,848, 7,268,372, 7,282,741, 7,771,081, 7,893,443, 7,959,312, 7,838,315, and 7,964,881;
 - (b) schedule and conduct a hearing on the unlawful acts and, following the hearing, determine whether there has been a violation of Section 337;
 - (c) issue a permanent limited exclusion order, pursuant to Section 337(d) of the Tariff Act of 1930, as amended, excluding from entry into the United States all of Respondents' accused products and products containing the same that infringe one or more claims of United States Patent Nos. 6,551,848, 7,268,372, 7,282,741, 7,771,081, 7,893,443, 7,959,312, 7,838,315, and 7,964,881;
 - (d) issue a permanent cease and desist order, pursuant to Section 337 (f) of the Tariff Act of 1930, as amended, prohibiting Respondents and related companies

from importing, marketing, advertising, demonstrating, warehousing inventory for distribution, offering for sale, selling, distributing, or using accused products or products containing same that infringe one or more claims of United States Patent Nos. 6,551,848, 7,268,372, 7,282,741, 7,771,081, 7,893,443, 7,959,312, 7,838,315, and 7,964,881;

(e) grant such other and further relief as the Commission deems just and proper based on the facts determined by the investigation and the authority of the Commission.

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