UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, DC

IN THE MATTER OF CERTAIN CMOS IMAGE SENSORS AND PRODUCTS CONTAINING SAME	Inv. No. 337-TA-

COMPLAINT UNDER SECTION 337 OF THE TARIFF ACT OF 1930 AS AMENDED

COMPLAINANT:

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APPENDICES

A. U.S. Patent and Trademark prosecution history for the U.S. Patent No. 5,841,126

B. Copies of the applicable pages of each technical reference mentioned in the prosecution history of the U.S. Patent No. 5,841,126

C. U.S. Patent and Trademark prosecution history for the U.S. Patent No. 6,606,122

D. Copies of the applicable pages of each technical reference mentioned in the prosecution history of the U.S. Patent No. 6,606,122

E. U.S. Patent and Trademark prosecution history for the U.S. Patent No. 5,990,506

F. Copies of the applicable pages of each technical reference mentioned in the prosecution history of the U.S. Patent No. 5,990,506

I. INTRODUCTION

1. Complainant California Institute of Technology ("Caltech") requests that the U.S. International Trade Commission commence an investigation pursuant to section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337(a)(1)(B) ("Section 337"), to remedy the unlawful importation into the United States, the sale for importation, and/or the sale within the United States after importation by the owner, importer, or consignee of articles covered by valid and enforceable U.S. Patents owned by Complainant.

2. The proposed Respondents, STMicroelectronics NV, STMicroelectronics Inc., Nokia Corp., Nokia, Inc., Research in Motion Ltd., and Research in Motion Corp. (collectively "Respondents"), have engaged in unfair acts in violation of Section 337 through the unlicensed importation, sale for importation, and/or sale within the United States after importation of certain complementary metal oxide semiconductor ("CMOS") image sensors and/or products containing the same that infringe at least claims 1 and 2 of U.S. Patent No. 5,841,126 (the "'126 patent"), claim 6 of U.S. Patent No. 6,606,122 (the "'122 patent"), and claims 15 and 16 of U.S. Patent No. 5,990,506 (the "'506 patent") (collectively the "Asserted Patents").[1]

3. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the '126 patent accompanies this Complaint as **Exhibit 1**. Caltech owns by assignment the entire right, title, and interest in this patent. A copy of the assignment record from the U.S. Patent and Trademark Office's website accompanies this Complaint as **Exhibit 2**. Pursuant to Commission Rule 210.12(a)(9)(ii), a certified copy of the assignment for the '126 patent will be provided at a later date.

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[1] Complainant Caltech and proposed Respondents STMicroelectronics NV, STMicroelectronics Inc., Nokia Corp., and Nokia, Inc. are parties to a district court action that is more fully set forth, *infra*, at Section XII.

4. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the '122 patent accompanies this Complaint as **Exhibit 3**. Caltech owns by assignment the entire right, title, and interest in this patent. A copy of the assignment record from the U.S. Patent and Trademark Office's website accompanies this Complaint as **Exhibit 4**. Pursuant to Commission Rule 210.12(a)(9)(ii), a certified copy of the assignment for the '122 patent will be provided at a later date.

5. Pursuant to Commission Rule 210.12(a)(9)(i), a certified copy of the '506 patent accompanies this Complaint as **Exhibit 5**. Caltech owns by assignment the entire right, title, and interest in this patent. A copy of the assignment record from the U.S. Patent and Trademark Office's website accompanies this Complaint as **Exhibit 6**. Pursuant to Commission Rule 210.12(a)(9)(ii), a certified copy of the assignment for the '506 patent will be provided at a later date.

6. An industry as required by Section 337(a)(2) and defined by Section 337(a)(3) exists in the United States relating to Caltech's substantial investment in licensing the Asserted Patents in the United States.

7. Respondents infringe at least claims 1 and 2 of the '126 patent, claim 6 of the '122 patent, and claims 15 and 16 of the '506 patent.

8. Complainant seeks an order pursuant to Section 337(d) permanently excluding infringing CMOS image sensors and all products containing the same that are imported, sold for importation, and sold within the United States after importation by proposed Respondents from entry into the United States. Complainant further seeks a cease-and-desist order pursuant to Section 337(f) directed to the domestic proposed Respondents halting the importation,

promotion, marketing, advertising, demonstration, warehousing of inventory for distribution, sale and use of such infringing CMOS image sensors and products containing the same.

II. COMPLAINANT

A. California Institute of Technology

9. Complainant Caltech is a research institution with its principal place of operations at 1200 East California Boulevard, Pasadena, California 91125.

10. Caltech is a private independent university and a leading center of research. Caltech conducts a variety of operations, including managing the work at the off-campus facility known as the Jet Propulsion Laboratory ("JPL"). JPL is a federally funded research and development facility managed and operated by Caltech for the National Aeronautic Space Agency ("NASA"), and is the lead center in the United States for robotic exploration of the solar system. **Exhibit 7** at 1-3 (JPL Fact Sheet).

11. JPL is headquartered at 4800 Oak Grove Drive, Pasadena, California 91109. **Exhibit 8** at 2 (About JPL: From the Director). The main laboratory in Pasadena covers 177 acres. **Exhibit 7** at 2 (JPL Fact Sheet). In addition, JPL operates NASA's Deep Space Network of antenna stations in California's Mojave Desert, in Spain, and in Australia. *Id.* at 5. JPL also maintains installations including an astronomical observatory at Table Mountain, California and a launch operations site at Cape Canaveral, Florida. *Id.* In 2011, JPL had a workforce of about 5,000 employees and on-site contractors and an annual budget of $1.6 billion. *Id.*

12. JPL is the leader of the nation's planetary exploration program, which specializes in several key areas of innovation, including deep space navigation and communication, digital image processing, imaging systems, intelligent automated systems, instrument technology, microelectronics, and more. *See id.* As part of its research in imaging systems, a team at JPL

developed the CMOS image sensors covered by the Asserted Patents, under the direction of Eric Fossum as the lead inventor. As a result of Eric Fossum's development of the CMOS image sensors covered by the Asserted Patents, he was inducted into the National Inventors Hall of Fame in May 2011. *See* **Exhibit 9** at 1 (National Inventors Hall of Fame 2011 Inductees).

III. PROPOSED RESPONDENTS

A. STMicro

13. Upon information and belief, proposed Respondent STMicroelectronics NV is organized under the laws of the Netherlands with its principal place of business at 39, Chemin du Champ des Filles, C. P. 21, CH 1228 Plan-Les-Ouates, Geneva, Switzerland.

14. Upon information and belief, proposed Respondent STMicroelectronics Inc. is a Delaware corporation with its principal place of business at 750 Canyon Drive, Coppell, Texas 75019. Upon information and belief, STMicroelectronics Inc. is a wholly owned subsidiary of STMicroelectronics NV.

15. Collectively, STMicroelectronics NV and STMicroelectronics Inc. are referred to as "STMicro."

16. Upon information and belief, STMicroelectronics NV is engaged in the design, manufacture, and sale of CMOS image sensors and products containing the same, such as CMOS image sensor modules. Upon information and belief, STMicroelectronics NV has its CMOS image sensors and CMOS image sensor modules manufactured outside of the United States, including in France and Singapore, which are then imported into the United States for sale. *See* **Exhibit 10** at 45 (TSR CCD/CMOS Area Image Sensor Market Analysis, December 2011 Market Report); **Exhibit 11** at 13, 20-21, 25-26, 27-28, 30, 53-54 (STMicro Form 20-F dated

March 7, 2011); **Exhibit 12** at 14, 22, 26, 28-29, 32, 56, 57-58, 59, 64, 68-69 (STMicro Form 20-F dated March 5, 2012).

17. Upon information and belief, STMicroelectronics Inc. is STMicroelectronics NV's agent in the United States. Upon information and belief, STMicroelectronics Inc. arranges for the importation of STMicroelectronics NV's CMOS image sensors and CMOS image sensor modules into the United States and coordinates the distribution and sales of STMicroelectronics NV's CMOS image sensors and CMOS image sensor modules throughout the United States.

18. Upon information and belief, STMicro sells CMOS image sensors and CMOS image sensor modules to third parties, including proposed Respondents Nokia Corp., Nokia, Inc., Research in Motion Ltd., and Research in Motion Corp., who incorporate the CMOS image sensors and CMOS image sensor modules into consumer electronics devices, such as camera phones, automobile back-up cameras, and tablet computers, which are then sold in, and/or imported for sale into, the United States.

B. Nokia

19. Upon information and belief, proposed Respondent Nokia Corp. is incorporated under the laws of Finland and has its principal place of business at Keilalahdentie 2-4, FI-02150 Espoo, Finland.

20. Upon information and belief, proposed Respondent Nokia, Inc. is a Delaware corporation with its principal place of business at 102 Corporate Park Drive, White Plains, New York 10604.

21. Collectively, Nokia Corp. and Nokia, Inc. are referred to as "Nokia."

22. Upon information and belief, Nokia Corp. purchases CMOS image sensors from STMicro and incorporates them into products, which are then imported into the United States for sale. *See generally infra* Section IX.

23. Upon information and belief, Nokia, Inc. is Nokia Corp.'s agent in the United States. Upon information and belief, Nokia, Inc. arranges for the importation of Nokia Corp.'s products with STMicro's CMOS image sensors into the United States and coordinates the distribution and sales of Nokia Corp.'s products with STMicro's CMOS image sensors throughout the United States.

C. RIM

24. Upon information and belief, proposed Respondent Research in Motion Ltd. is a Canadian corporation having its principle place of business at 295 Phillip Street, Waterloo, Ontario, Canada N2L 3W8.

25. Upon information and belief, proposed Respondent Research in Motion Corp. is a Delaware corporation having its principal place of business at 122 W. John Carpenter Pkwy, Suite 430, Irving, Texas 75038.

26. Collectively, Research in Motion Ltd. and Research in Motion Corp. are referred to as "RIM."

27. Upon information and belief, Research in Motion Ltd. purchases CMOS image sensors from STMicro and incorporates them into products, which are then imported into the United States for sale. *See generally infra* Section IX.

28. Upon information and belief, Research in Motion Corp. is Research in Motion Ltd.'s agent in the United States. Upon information and belief, Research in Motion Corp. arranges for the importation of Research in Motion Ltd.'s products with STMicro's CMOS

image sensors into the United States and coordinates the distribution and sales of Research in Motion Ltd.'s products with STMicro's CMOS image sensors throughout the United States.

IV. THE ASSERTED PATENTS

29. The Asserted Patents relate to semiconductor devices or "chips" known as CMOS image sensors. CMOS image sensors are widely used in digital cameras, camcorders, camera phones, automobile back-up cameras, security cameras, medical and dental x-ray sensors, and many other applications. CMOS image sensors include a number of picture elements, or "pixels," that are arranged in rows and columns to form an array. Each pixel receives light and stores electric charge in an amount corresponding to the light's intensity. Electronic components on the image sensor allow the pixel's stored charge to be "read out" and processed so that an image of an object or scene can be created on a display or a computer monitor.

30. Prior to the inventions of the Asserted Patents, the imaging array of an image sensor typically used charge-coupled device, or CCD, technology. CCD technology typically requires the use of specialized fabrication processes that are not compatible with the fabrication processes for the circuitry for the other components of the image sensor. Thus, cameras using CCD arrays typically require separate chips for the imaging array and for the circuitry that performs the remaining functions of the sensor, such as timing and control, signal processing, and digitization. This increases the overall device cost and complexity. The inventors realized that by using CMOS technology, a single-chip camera device could be fabricated on a single low-power chip, unlike CCDs and other prior art technologies. This made CMOS a much better technology for many imaging applications, including the battery-powered, miniaturized cameras in the camera phones, automobile back-up cameras, and tablet computers at issue in this case.

31. The '126 patent is a continuation-in-part of U.S. Patent Application Serial No. 08/558,521, filed November 16, 1995 (now U.S. Patent No. 6,101,232), which is a continuation of U.S. Patent Application Serial No. 08/188,032, filed January 28, 1994 (now U.S. Patent No. 5,471,515), and additionally claims priority to U.S. Provisional Patent Application Serial No. 60/010,678, filed January 26, 1996. The '122 patent issued from U.S. Patent Application Serial No. 09/162,920, filed September 29, 1998, and claims priority to U.S. Provisional Patent Application Serial No. 60/060,236, filed September 29, 1997. The '506 patent issued from U.S. Patent Application Serial No. 08/821,157, filed March 20, 1997, and claims priority to U.S. Provisional Patent Application Serial No. 60/013,700, filed March 20, 1996.

V. THE '126 PATENT

A. Identification of the '126 Patent and Exclusive Rights of Caltech

32. The '126 patent (*see* **Exhibit 1**) was issued to Caltech as assignee (*see* **Exhibit 2**) on November 24, 1998, in the names of Eric R. Fossum and Robert Nixon for an invention entitled "CMOS Active Pixel Sensors Type Imaging System On A Chip."

33. This Complaint is accompanied by **Appendix A**, which contains a copy of the U.S. Patent and Trademark prosecution history for the '126 patent. Pursuant to Commission Rule 210.12(c)(1)-(2), one certified copy of the prosecution history of the '126 patent has been ordered and will be submitted at a later date along with three additional copies thereof. The applicable pages of each U.S. patent and U.S. patent application mentioned in the prosecution history of the '126 patent are attached as **Appendix B**. The applicable pages of each foreign patent and other non-patent reference mentioned in the prosecution history of the '126 patent will be submitted with the certified copy of the prosecution history.

B. Non-Technical Description of the '126 Patent

34. The '126 patent relates to CMOS image sensors, which capture light reflected from an input scene and generate a digital image thereof. The patent discloses a single-chip camera device having a control area integrated on the same substrate as an array of pixel areas. The patent also discloses that the pixel areas include a plurality of light collecting elements and that the control area includes at least a timing element. The patent also discloses that the circuitry in the control areas is formed of CMOS and that the pixel areas are fabricated using a logic family that is compatible with CMOS. Noise in the device is preferably suppressed through the use of correlated double sampling. The patent contains 2 independent claims.

C. Foreign Counterparts to the '126 Patent

35. Pursuant to Commission Rule 210.12(a)(9)(v), the following foreign patents correspond to U.S. patent applications from which the '126 patent claims priority:[2]

a. Australian Patent No. AU1833597, August 22, 1997, entitled "Active Pixel Sensor Array With Electronic Shuttering";

b. Australian Patent No. AU1835397, August 22, 1997, entitled "Active Pixel Sensor Array With Multiresolution Readout";

c. German Patent No. DE69729648, June 9, 2005, entitled "Active Pixel Sensor Array With Multiresolution Readout";

d. German Patent No. DE69733248, January 19, 2006, entitled "Active Pixel Sensor Array With Multiresolution Readout";

e. German Patent No. DE69737705, January 10, 2008, entitled "Active Pixel Sensor Array With Multiresolution Readout";

f. European Patent No. EP0878007, November 18, 1998, entitled "Active Pixel Sensor Array With Electronic Shuttering";

[2] The information set forth herein regarding foreign counterparts to the '126 patent was obtained from the INPADOC public database as of March 2012.

g. European Patent No. EP0940029, September 8, 1999, entitled "Active Pixel Sensor Array With Multiresolution Readout";

h. European Patent No. EP1505823, February 9, 2005, entitled "Active Pixel Sensor Array";

i. Japan Patent No. JP2000504516, April 11, 2000, entitled "Active Pixel Sensor Array With Multiresolution Readout";

j. Japan Patent No. JP2000504489, April 11, 2000, entitled "Active Pixel Sensor Array With Multiresolution Readout";

k. PCT Patent No. WO9728558, August 7, 1997, entitled "Active Pixel Sensor Array With Electronic Shuttering"; and

l. PCT Patent No. WO9728641, August 7, 1997, entitled "Active Pixel Sensor Array With Multiresolution Readout."

36. There are no other known foreign patents or patent applications pending, filed, abandoned, withdrawn, or rejected that directly correspond to the '126 patent.

VI. THE '122 PATENT

A. Identification of the '122 Patent and Exclusive Rights of Caltech

37. The '122 patent (*see* **Exhibit 3**) was issued to Caltech as assignee (*see* **Exhibit 4**) on August 12, 2003, in the names of Timothy Shaw, Bedabrata Pain, Brita Olson, Robert H. Nixon, Eric R. Fossum, Roger A. Panicacci, and Barmak Mansoorian for an invention entitled "Single Chip Camera Active Pixel Sensor."

38. This Complaint is accompanied by **Appendix C**, which contains a copy of the U.S. Patent and Trademark prosecution history for the '122 patent. Pursuant to Commission Rule 210.12(c)(1)-(2), one certified copy of the prosecution history of the '122 patent has been ordered and will be submitted at a later date along with three additional copies thereof. The applicable pages of each U.S. patent and U.S. patent application mentioned in the prosecution history of the '122 patent are attached as **Appendix D**. The applicable pages of each foreign

patent and other non-patent reference mentioned in the prosecution history of the '122 patent will be submitted with the certified copy of the prosecution history.

B. Non-Technical Description of the '122 Patent

39. The '122 patent relates to CMOS image sensors having a completely digital interface. The '122 patent discloses a single-chip camera having timing and control electronics, signal chain electronics, analog-to-digital conversion, and other control systems integrated on the same substrate as an array of photosensitive elements. The patent discloses specialized support electronics, including a serial communication network that receives digital values, and a digital-to-analog converter that produces analog reference signals from the digital values. This eliminates the need for external analog reference generators and allows the chip to have a complete digital interface. The chip can also include all of the necessary circuitry for operating the chip using a single pin. The patent has six claims; two independent claims and four dependent claims.

C. Foreign Counterparts to the '122 Patent

40. Pursuant to Commission Rule 210.12(a)(9)(v), there are no known foreign patents or patent applications pending, filed, abandoned, withdrawn, or rejected that directly correspond to the '122 patent.[3]

[3] The information set forth herein regarding foreign counterparts to the '122 patent was obtained from the INPADOC public database as of March 2012.

VII. THE '506 PATENT

A. Identification of the '506 Patent and Exclusive Rights of Caltech

41. The '506 patent (*see* **Exhibit 5**) was issued to Caltech as assignee (*see* **Exhibit 6**) on November 23, 1999, in the names of Eric R. Fossum and Sabrina E. Kemeny for an invention entitled "Active Pixel Sensors With Substantially Planarized Color Filtering Elements."

42. This Complaint is accompanied by **Appendix E**, which contains a copy of the U.S. Patent and Trademark prosecution history for the '506 patent. Pursuant to Commission Rule 210.12(c)(1)-(2), one certified copy of the prosecution history of the '506 patent has been ordered and will be submitted at a later date along with three additional copies thereof. The applicable pages of each U.S. patent and U.S. patent application mentioned in the prosecution history of the '506 patent are attached as **Appendix F**. The applicable pages of each foreign patent and other non-patent reference mentioned in the prosecution history of the '506 patent will be submitted with the certified copy of the prosecution history.

B. Non-Technical Description of the '506 Patent

43. The '506 patent relates to CMOS image sensors having color filters. The '506 patent relates to a semiconductor imaging system, preferably having a CMOS image sensor, that integrates color-filtering elements, such as polymer filters and wavelength-converting phosphers, with the image sensor. Color filtering enables spatial separation of color in an imaging device. The patent discloses one embodiment of the system that allows a plurality of pixels to have different color filtering properties to provide a color filtering effect. Alternatively, another embodiment uses a plurality of substantially identical CMOS image sensors where each chip is coated with a different color filtering film. A third embodiment uses a wavelength-converting phosphor formed on top of a CMOS image sensor array. The inventors also found that a

microlens layer deposited over the pixel array can improve the performance of the image sensor by focusing light within each pixel. The patent has nineteen claims; six independent claims and thirteen dependent claims.

C. Foreign Counterparts to the '506 Patent

44. Pursuant to Commission Rule 210.12(a)(9)(v), the following foreign patents correspond to U.S. patent applications from which the '506 patent claims priority:[4]

a. Australian Patent No. AU1833597, August 22, 1997, entitled "Active Pixel Sensor Array With Electronic Shuttering";

b. Australian Patent No. AU1835397, August 22, 1997, entitled "Active Pixel Sensor Array With Multiresolution Readout";

c. German Patent No. DE69729648, June 9, 2005, entitled "Active Pixel Sensor Array With Multiresolution Readout";

d. German Patent No. DE69733248, January 19, 2006, entitled "Active Pixel Sensor Array With Multiresolution Readout";

e. German Patent No. DE69737705, January 10, 2008, entitled "Active Pixel Sensor Array With Multiresolution Readout";

f. European Patent No. EP0878007, November 18, 1998, entitled "Active Pixel Sensor Array With Electronic Shuttering";

g. European Patent No. EP0940029, September 8, 1999, entitled "Active Pixel Sensor Array With Multiresolution Readout";

h. European Patent No. EP1505823, February 9, 2005, entitled "Active Pixel Sensor Array";

i. Japan Patent No. JP2000504516, April 11, 2000, entitled "Active Pixel Sensor Array With Multiresolution Readout";

j. Japan Patent No. JP2000504489, April 11, 2000, entitled "Active Pixel Sensor Array With Multiresolution Readout";

k. PCT Patent No. WO9728558, August 7, 1997, entitled "Active Pixel Sensor Array With Electronic Shuttering"; and

[4] The information set forth herein regarding foreign counterparts to the '506 patent was obtained from the INPADOC public database as of March 2012.

1. PCT Patent No. WO9728641, August 7, 1997, entitled "Active Pixel Sensor Array With Multiresolution Readout."

45. There are no other known foreign patents or patent applications pending, filed, abandoned, withdrawn, or rejected that directly correspond to the '506 patent.

VIII. UNFAIR ACTS OF RESPONDENTS

A. The '126 Patent

1. Direct Infringement by STMicro, Nokia, and RIM

46. CMOS image sensors made by STMicro are covered by at least claims 1 and 2 of the '126 patent; and those sensors are manufactured outside the United States, including in Singapore and France, by STMicro or a third party under contract for STMicro. *See* **Exhibit 10** at 45 (TSR CCD/CMOS Area Image Sensor Market Analysis, December 2011 Market Report); **Exhibit 11** at 13, 20-21, 25-26, 27-28, 30, 53-54 (STMicro Form 20-F dated March 7, 2011); **Exhibit 12** at 14, 22, 26, 28-29, 32, 56, 57-58, 59, 64, 68-69 (STMicro Form 20-F dated March 5, 2012).

47. STMicro's sensors, or products containing the same, are then imported into or sold for importation into the United States by STMicro and others who sell or use them in the United States after importation. *See id.* For example, Nokia and RIM import into the United States products containing STMicro CMOS image sensors. *See infra* Section IX. Further discovery may reveal that additional claims of the '126 patent are infringed by proposed Respondents' products. The aforesaid acts of proposed Respondents constitute acts of infringement.

48. Pursuant to Commission Rule 210.12(a)(9)(viii), **Exhibits 13**, **14**, **15**, **16**, **17**, and **18** include representative claim charts comparing claims 1 and 2 of the '126 patent to STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852,

VD6851, and VX6953, respectively. **Exhibits 13, 14, 15, 16, 17,** and **18** show that STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852, VD6851, and VX6953 are covered by at least claims 1 and 2 of the '126 patent.

49. Upon information and belief, proposed Respondent STMicro has imported, sold for importation, or sold within the United States after importation numerous other CMOS image sensors that are covered by at least claims 1 and 2 of the '126 patent, including, but not limited to, STMicro's CMOS image sensors bearing the model numbers VL5510, VC5602, VS6502, VL6522, VD6525, VS6525, VS6552, VS6556, VS6556AA, VD6558, VW6558, VW6559, VD6559, VC6602, VS6624, VL6624, VS6724, VD6725, VD6725BA, VS6725, VS6735, VW6754, VB6801, VD6803, VD6826, VB6850, VD6851, VD6851BA, VB6851, VX6852, VX6852AC, VD6853, VX6854, VD6868, VB6871, VD6926, VD6952, VX6953, VX6953CA, VD6955, and VD6963.

50. Nokia's use, manufacture, sale, and importation into the United States of products containing STMicro's CMOS image sensors are acts of infringement. In particular and by way of example, Nokia's use, manufacture, sale, and importation into the United States of products bearing the model numbers 2730, 2680s, and X3 constitute acts of infringement because these products contain STMicro's CMOS image sensors bearing the model numbers VW6754, VS6556, and VX6852, respectively. *See* **Exhibits 13, 15,** and **16** (claim charts for STMicro's CMOS image sensors bearing the model numbers VS6556, VW6754, and VX6852).

51. Upon information and belief, proposed Respondent Nokia has used, manufactured, and sold other products containing STMicro's CMOS image sensors that are covered by at least claims 1 and 2 of the '126 patent. Upon further investigation and discovery,

Caltech expects to identify additional Nokia products that contain STMicro's CMOS image sensors covered by at least claims 1 and 2 of the '126 patent.

52. RIM's use, manufacture, sale, and importation into the United States of products containing STMicro's CMOS image sensors are acts of infringement. In particular and by way of example, RIM's use, manufacture, sale, and importation into the United States of products such as the Blackberry Curve 8520, Blackberry Curve 8900, and Blackberry Playbook constitute acts of infringement, because these products contain STMicro's CMOS image sensors bearing the model numbers VD6725, VD6851, and VX6953, respectively. *See* **Exhibits 14**, **17**, and **18** (claim charts for STMicro's CMOS image sensors bearing the model numbers VD6725, VD6851, and VX6953).

53. Upon information and belief, proposed Respondent RIM has used, manufactured, and sold other products containing STMicro's CMOS image sensors that are covered by at least claims 1 and 2 of the '126 patent, including, but not limited to, products such as the Blackberry Curve 8310 and Blackberry Storm 2, which contain STMicro's CMOS image sensors bearing the model numbers VS6724 and VB6871, respectively. Upon further investigation and discovery, Caltech expects to identify additional RIM products that contain STMicro's CMOS image sensors covered by at least claims 1 and 2 of the '126 patent.

2. Indirect Infringement by STMicro

54. STMicro also has induced, and continues to induce, others, including, but not limited to, Nokia and RIM, to infringe the '126 patent in violation of 35 U.S.C. § 271(b), by taking active steps to encourage and facilitate others to perform actions with knowledge of the '126 patent and specific intent or willful blindness that such acts infringe one or more claims of the '126 patent.

55. Upon information and belief, among other things, STMicro contracts for the distribution of CMOS image sensors bearing the model numbers VL5510, VC5602, VS6502, VL6522, VD6525, VS6525, VS6552, VS6556, VS6556AA, VD6558, VW6558, VW6559, VD6559, VC6602, VS6624, VL6624, VS6724, VD6725, VD6725BA, VS6725, VS6735, VW6754, VB6801, VD6803, VD6826, VB6850, VD6851, VD6851BA, VB6851, VX6852, VX6852AC, VD6853, VX6854, VD6868, VB6871, VD6926, VD6952, VX6953, VX6953CA, VD6955, and VD6963 for sale by end-product manufacturers (e.g., Nokia and RIM), third-party resellers, and consumers with knowledge that those products will be imported for sale in the United States.

56. Upon information and belief, STMicro has actual knowledge of the '126 patent as a result of the related district court litigation in the U.S. District Court for the Central District of California. *See infra* Section XII. In particular, other patents at issue in that litigation claim priority from the application that issued as the '126 patent. And, on March 6, 2012, the Court in that action ordered Caltech to produce the file history for the '126 patent. *See Cal. Inst. of Tech. v. STMicroelectronics NV, et al.*, No. 2:10-cv-09099-MRP-VBK (C.D. Cal.), ECF No. 210.

B. The '122 Patent

1. Direct Infringement by STMicro, Nokia, and RIM

57. CMOS image sensors made by STMicro are covered by at least claim 6 of the '122 patent; and those sensors are manufactured outside the United States, including in Singapore and France, by STMicro or a third party under contract for STMicro. *See* **Exhibit 10** at 45 (TSR CCD/CMOS Area Image Sensor Market Analysis, December 2011 Market Report); **Exhibit 11** at 13, 20-21, 25-26, 27-28, 30, 53-54 (STMicro Form 20-F dated March 7, 2011); **Exhibit 12** at 14, 22, 26, 28-29, 32, 56, 57-58, 59, 64, 68-69 (STMicro Form 20-F dated March 5, 2012).

58. STMicro's sensors, or products containing the same, are then imported into or sold for importation into the United States by STMicro and others who sell or use them in the United States after importation. *See id.* For example, Nokia and RIM import into the United States products containing STMicro CMOS image sensors. *See infra* Section IX. Further discovery may reveal that additional claims of the '122 patent are infringed by proposed Respondents' products. The aforesaid acts of proposed Respondents constitute acts of infringement.

59. Pursuant to Commission Rule 210.12(a)(9)(viii), **Exhibits 19**, **20**, **21**, **22**, **23**, and **24** include representative claim charts comparing claim 6 of the '122 patent to STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852, VD6851, and VX6953, respectively. **Exhibits 19**, **20**, **21**, **22**, **23**, and **24** show that STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852, VD6851, and VX6953 are covered by at least claim 6 of the '122 patent.

60. Upon information and belief, proposed Respondent STMicro has imported, sold for importation, or sold within the United States after importation numerous other CMOS image sensors that are covered by at least claim 6 of the '122 patent, including, but not limited to, STMicro's CMOS image sensors bearing the model numbers VL5510, VC5602, VS6502, VL6522, VD6525, VS6525, VS6552, VS6556, VS6556AA, VD6558, VW6558, VW6559, VD6559, VC6602, VS6624, VL6624, VS6724, VD6725, VD6725BA, VS6725, VS6735, VW6754, VB6801, VD6803, VD6826, VB6850, VD6851, VD6851BA, VB6851, VX6852, VX6852AC, VD6853, VX6854, VD6868, VB6871, VD6926, VD6952, VX6953, VX6953CA, VD6955, and VD6963.

61. Nokia's use, manufacture, sale, and importation into the United States of products containing STMicro's CMOS image sensors are acts of infringement. In particular and by way of example, Nokia's use, manufacture, sale, and importation into the United States of products bearing the model numbers 2730, 2680s, and X3 constitute acts of infringement because these products contain STMicro's CMOS image sensors bearing the model numbers VW6754, VS6556, and VX6852, respectively. *See* **Exhibits 19**, **21**, and **22** (claim charts for STMicro's CMOS image sensors bearing the model numbers VS6556, VW6754, and VX6852).

62. Upon information and belief, proposed Respondent Nokia has used, manufactured, and sold other products containing STMicro's CMOS image sensors that are covered by at least claim 6 of the '122 patent. Upon further investigation and discovery, Caltech expects to identify additional Nokia products that contain STMicro's CMOS image sensors covered by at least claim 6 of the '122 patent.

63. RIM's use, manufacture, sale, and importation into the United States of products containing STMicro's CMOS image sensors are acts of infringement. In particular and by way of example, RIM's use, manufacture, sale, and importation into the United States of products such as the Blackberry Curve 8520, Blackberry Curve 8900, and Blackberry Playbook constitute acts of infringement, because these products contain STMicro's CMOS image sensors bearing the model numbers VD6725, VD6851, and VX6953, respectively. *See* **Exhibits 20**, **23**, and **24** (claim charts for STMicro's CMOS image sensors bearing the model numbers VD6725, VD6851, and VX6953).

64. Upon information and belief, proposed Respondent RIM has used, manufactured, and sold other products containing STMicro's CMOS image sensors that are covered by at least claim 6 of the '122 patent, including, but not limited to, products such as the Blackberry Curve

8310 and Blackberry Storm 2, which contain STMicro's CMOS image sensors bearing the model numbers VS6724 and VB6871, respectively. Upon further investigation and discovery, Caltech expects to identify additional RIM products that contain STMicro's CMOS image sensors covered by at least claim 6 of the '122 patent.

2. Indirect Infringement by STMicro

65. STMicro also has induced, and continues to induce, others, including, but not limited to, Nokia and RIM, to infringe the '122 patent in violation of 35 U.S.C. § 271(b), by taking active steps to encourage and facilitate others to perform actions with knowledge of the '122 patent and specific intent or willful blindness that such acts infringe one or more claims of the '122 patent.

66. Upon information and belief, among other things, STMicro contracts for the distribution of CMOS image sensors bearing the model numbers VL5510, VC5602, VS6502, VL6522, VD6525, VS6525, VS6552, VS6556, VS6556AA, VD6558, VW6558, VW6559, VD6559, VC6602, VS6624, VL6624, VS6724, VD6725, VD6725BA, VS6725, VS6735, VW6754, VB6801, VD6803, VD6826, VB6850, VD6851, VD6851BA, VB6851, VX6852, VX6852AC, VD6853, VX6854, VD6868, VB6871, VD6926, VD6952, VX6953, VX6953CA, VD6955, and VD6963 for sale by end-product manufacturers (e.g., Nokia and RIM), third-party resellers, and consumers with knowledge that those products will be imported for sale in the United States.

67. Upon information and belief, STMicro has actual knowledge of the '122 patent, which is at issue in the related district court litigation in the U.S. District Court for the Central District of California. *See infra* Section XII.

C. The '506 Patent

1. Direct Infringement by STMicro, Nokia, and RIM

68. CMOS image sensors made by STMicro are covered by at least claims 15 and 16 of the '506 patent; and those sensors are manufactured outside the United States, including in Singapore and France, by STMicro or a third party under contract for STMicro. *See* **Exhibit 10** at 45 (TSR CCD/CMOS Area Image Sensor Market Analysis, December 2011 Market Report); **Exhibit 11** at 13, 20-21, 25-26, 27-28, 30, 53-54 (STMicro Form 20-F dated March 7, 2011); **Exhibit 12** at 14, 22, 26, 28-29, 32, 56, 57-58, 59, 64, 68-69 (STMicro Form 20-F dated March 5, 2012).

69. STMicro's sensors, or products containing the same, are then imported into or sold for importation into the United States by STMicro and others who sell or use them in the United States after importation. *See id.* For example, Nokia and RIM import into the United States products containing STMicro CMOS image sensors. *See infra* Section IX. Further discovery may reveal that additional claims of the '506 patent are infringed by proposed Respondents' products. The aforesaid acts of proposed Respondents constitute acts of infringement.

70. Pursuant to Commission Rule 210.12(a)(9)(viii), **Exhibits 25**, **26**, **27**, **28**, **29**, and **30** include representative claim charts comparing claims 15 and 16 of the '506 patent to STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852, VD6851, and VX6953, respectively. **Exhibits 25**, **26**, **27**, **28**, **29**, and **30** show that STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852, VD6851, and VX6953 are covered by at least claims 15 and 16 of the '506 patent.

71. Upon information and belief, proposed Respondent STMicro has imported, sold for importation, or sold within the United States after importation numerous other CMOS image

sensors that are covered by at least claims 15 and 16 of the '506 patent, including, but not limited to, STMicro's CMOS image sensors bearing the model numbers VS6502, VL6522, VD6525, VS6525, VS6552, VS6556, VS6556AA, VD6558, VW6558, VW6559, VD6559, VC6602, VS6624, VL6624, VS6724, VD6725, VD6725BA, VS6725, VS6735, VW6754, VB6801, VD6803, VD6826, VB6850, VD6851, VD6851BA, VB6851, VX6852, VX6852AC, VD6853, VX6854, VD6868, VB6871, VD6926, VD6952, VX6953, VX6953CA, VD6955, and VD6963.

72. Nokia's use, manufacture, sale, and importation into the United States of products containing STMicro's CMOS image sensors are acts of infringement. In particular and by way of example, Nokia's use, manufacture, sale, and importation into the United States of products bearing the model numbers 2730, 2680s, and X3 constitute acts of infringement because these products contain STMicro's CMOS image sensors bearing the model numbers VW6754, VS6556, and VX6852, respectively. *See* **Exhibits 25**, **27**, and **28** (claim charts for STMicro's CMOS image sensors bearing the model numbers VS6556, VW6754, and VX6852).

73. Upon information and belief, proposed Respondent Nokia has used, manufactured, and sold other products containing STMicro's CMOS image sensors that are covered by at least claims 15 and 16 of the '506 patent. Upon further investigation and discovery, Caltech expects to identify additional Nokia products that contain STMicro's CMOS image sensors covered by at least claims 15 and 16 of the '506 patent.

74. RIM's use, manufacture, sale, and importation into the United States of products containing STMicro's CMOS image sensors are acts of infringement. In particular and by way of example, RIM's use, manufacture, sale, and importation into the United States of products such as the Blackberry Curve 8520, Blackberry Curve 8900, and Blackberry Playbook constitute acts of infringement, because these products contain STMicro's CMOS image sensors bearing the

model numbers VD6725, VD6851, and VX6953, respectively. *See* **Exhibits 26, 29**, and **30** (claim charts for STMicro's CMOS image sensors bearing the model numbers VD6725, VD6851, and VX6953).

75. Upon information and belief, proposed Respondent RIM has used, manufactured, and sold other products containing STMicro's CMOS image sensors that are covered by at least claims 15 and 16 of the '506 patent, including, but not limited to, products such as the Blackberry Curve 8310 and Blackberry Storm 2, which contain STMicro's CMOS image sensors bearing the model numbers VS6724 and VB6871, respectively. Upon further investigation and discovery, Caltech expects to identify additional RIM products that contain STMicro's CMOS image sensors covered by at least claims 15 and 16 of the '506 patent.

2. Indirect Infringement by STMicro

76. STMicro also has induced, and continues to induce, others, including, but not limited to, Nokia and RIM, to infringe the '506 patent in violation of 35 U.S.C. § 271(b), by taking active steps to encourage and facilitate others to perform actions with knowledge of the '506 patent and specific intent or willful blindness that such acts infringe one or more claims of the '506 patent.

77. Upon information and belief, among other things, STMicro contracts for the distribution of CMOS image sensors bearing the model numbers VL5510, VC5602, VS6502, VL6522, VD6525, VS6525, VS6552, VS6556, VS6556AA, VD6558, VW6558, VW6559, VD6559, VC6602, VS6624, VL6624, VS6724, VD6725, VD6725BA, VS6725, VS6735, VW6754, VB6801, VD6803, VD6826, VB6850, VD6851, VD6851BA, VB6851, VX6852, VX6852AC, VD6853, VX6854, VD6868, VB6871, VD6926, VD6952, VX6953, VX6953CA, VD6955, and VD6963 for sale by end-product manufacturers (e.g., Nokia and RIM), third-party

resellers, and consumers with knowledge that those products will be imported for sale in the United States.

78. Upon information and belief, STMicro has actual knowledge of the '506 patent, which is at issue in the related district court litigation in the U.S. District Court for the Central District of California. *See infra* Section XII.

IX. UNFAIR IMPORTATION AND SALE

79. STMicro's CMOS image sensors, including STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852, VD6851, and VX6953, are manufactured outside the United States, including in Singapore and France, and, upon information and belief, are imported or sold for importation into the United States. *See* **Exhibit 10** at 45 (TSR CCD/CMOS Area Image Sensor Market Analysis, December 2011 Market Report); **Exhibit 11** at 13, 20-21, 25-26, 27-28, 30, 53-54 (STMicro Form 20-F dated March 7, 2011); **Exhibit 12** at 14, 22, 26, 28-29, 32, 56, 57-58, 59, 64, 68-69 (STMicro Form 20-F dated March 5, 2012). Attached to this Complaint as **Exhibit 31** are photographs of STMicro's CMOS image sensors bearing the model numbers VS6556, VD6725, VW6754, VX6852, VD6851, and VX6953.

80. On August 19, 2011, Caltech purchased in the United States a Nokia 2730, which contained a STMicro CMOS image sensor bearing the model number VW6754. Attached to this Complaint as **Exhibit 32** are photographs of this imported Nokia product. A copy of the receipt for Caltech's purchase this Nokia product in the United States is attached as **Exhibit 33**. This Nokia product had been manufactured outside the United States and then imported, as indicated on the circuit board, which states that the product was "Made in India."

81. On February 26, 2010, Caltech purchased in the United States a Nokia Blu 2680s, which contained a STMicro CMOS image sensor bearing the model number VS6556. Attached

to this Complaint as **Exhibit 34** are photographs of this imported Nokia product. A copy of the receipt for Caltech's purchase this Nokia product in the United States is attached as **Exhibit 35**. This Nokia product had been manufactured outside the United States and then imported, as indicated on the box, which states that the product was "Made in Mexico."

82. On December 21, 2009, Caltech purchased in the United States a Nokia Edge 2680s, which contained a STMicro CMOS image sensor bearing the model number VS6556. Attached to this Complaint as **Exhibit 36** are photographs of this imported Nokia product. A copy of the receipt for Caltech's purchase this Nokia product in the United States is attached as **Exhibit 37**. This Nokia product had been manufactured outside the United States and then imported, as indicated on the circuit board, which states that the product was "Made in Mexico."

83. On February 26, 2010, Caltech purchased in the United States a Nokia X3, which contained a STMicro CMOS image sensor bearing the model number VX6852. Attached to this Complaint as **Exhibit 38** are photographs of this imported Nokia product. A copy of the receipt for Caltech's purchase this Nokia product in the United States is attached as **Exhibit 39**. This Nokia product had been manufactured outside the United States and then imported, as indicated on the circuit board, which states that the product was "Made in Mexico."

84. On December 21, 2009, Caltech purchased in the United States a RIM Blackberry Curve 8310, which contained a STMicro CMOS image sensor bearing the model number VS6724. Attached to this Complaint as **Exhibit 40** are photographs of this imported RIM product. A copy of the receipt for Caltech's purchase this RIM product in the United States is attached as **Exhibit 41**. This RIM product had been manufactured outside the United States and then imported, as indicated on the circuit board, which states that the product was "Made in Mexico."

85. On December 2, 2009, Caltech purchased in the United States a RIM Blackberry Curve 8520, which contained a STMicro CMOS image sensor bearing the model number VD6725. Attached to this Complaint as **Exhibit 42** are photographs of this imported RIM product. A copy of the receipt for Caltech's purchase this RIM product in the United States is attached as **Exhibit 43**. This RIM product had been manufactured outside the United States and then imported, as indicated on the box, which states that the product was "Assembled in Mexico."

86. On December 2, 2009, Caltech purchased in the United States a RIM Blackberry Curve 8900, which contained a STMicro CMOS image sensor bearing the model number VD6851. Attached to this Complaint as **Exhibit 44** are photographs of this imported RIM product. A copy of the receipt for Caltech's purchase this RIM product in the United States is attached as **Exhibit 45**. This RIM product had been manufactured outside the United States and then imported, as indicated on the box, which states that the product was "Assembled in Mexico."

87. On January 6, 2010, Caltech purchased in the United States a RIM Blackberry Storm 2, which contained a STMicro CMOS image sensor bearing the model number VB6871. Attached to this Complaint as **Exhibit 46** are photographs of this imported RIM product. A copy of the receipt for Caltech's purchase this RIM product in the United States is attached as **Exhibit 47**. This RIM product had been manufactured outside the United States and then imported, as indicated on the circuit board, which states that the product was "Assembled in Mexico."

88. On May 24, 2011, Caltech purchased in the United States a RIM Blackberry Playbook, which contained a STMicro CMOS image sensor bearing the model number VX6953.

Attached to this Complaint as **Exhibit 48** are photographs of this imported RIM product. A copy of the receipt for Caltech's purchase this RIM product in the United States is attached as **Exhibit 49**. This RIM product had been manufactured outside the United States and then imported, as indicated on the circuit board, which states that the product was "Assembled in Taiwan."

89. Further discovery will likely reveal other specific acts of proposed Respondents' importation, sale for importation, and sale after importation of STMicro's CMOS image sensors bearing the model numbers VL5510, VC5602, VS6502, VL6522, VD6525, VS6525, VS6552, VS6556, VS6556AA, VD6558, VW6558, VW6559, VD6559, VC6602, VS6624, VL6624, VS6724, VD6725, VD6725BA, VS6725, VS6735, VW6754, VB6801, VD6803, VD6826, VB6850, VD6851, VD6851BA, VB6851, VX6852, VX6852AC, VD6853, VX6854, VD6868, VB6871, VD6926, VD6952, VX6953, VX6953CA, VD6955, and VD6963 and/or products containing the same. *See generally* **Exhibit 10**, TSR CCD/CMOS Area Image Sensor Market Analysis, December 2011 Market Report); **Exhibit 11** (STMicro Form 20-F dated March 7, 2011); **Exhibit 12** (STMicro Form 20-F dated March 5, 2012).

90. The subject products of the proposed Respondents are believed to fall within at least the following classifications of the Harmonized Tariff Schedules of the United States: 8525, *et seq.*, for instance 8525.40.40 (digital still image video cameras); 8541, *et seq.*, for instance 8541.40.60 (photosensitive semiconductor devices, including photovoltaic cells whether or not assembled in modules or made up into panels; other diodes, excluding light emitting diodes), and 8541.50.00 (other semiconductor devices).

X. LICENSES

91. Pursuant to Commission Rule 210.12(a)(9)(iii), Caltech has provided a list of current licensees and sublicensees to the '126 patent in **Confidential Exhibit 50**. The entities

listed in **Confidential Exhibit 51** may also have rights under this patent. **Exhibit 57** includes license agreements with Agilent Technologies, Inc. (assigned to Avago Technologies Ltd.), Forza Silicon Corporation, and NASA. The remaining license and sublicense agreements are subject to confidentiality requirements and cannot be produced without written consent. Upon the filing of this Complaint, Caltech will notify the remaining licensees and sublicensees of this filing, request permission to disclose the agreements, and submit the agreements thereafter. There are no other known licensees or sublicensees to the '126 patent.

92. Pursuant to Commission Rule 210.12(a)(9)(iii), Caltech has provided a list of current licensees and sublicensees to the '122 patent in **Confidential Exhibit 52**. The entities listed in **Confidential Exhibit 53** may also have rights under this patent. **Exhibit 58** includes license agreements with Agilent Technologies, Inc. (assigned to Avago Technologies Ltd.), Forza Silicon Corporation, and NASA. The remaining license and sublicense agreements are subject to confidentiality requirements and cannot be produced without written consent. Upon the filing of this Complaint, Caltech will notify the remaining licensees and sublicensees of this filing, request permission to disclose the agreements, and submit the agreements thereafter. There are no other known licensees or sublicensees to the '122 patent.

93. Pursuant to Commission Rule 210.12(a)(9)(iii), Caltech has provided a list of current licensees and sublicensees to the '506 patent in **Confidential Exhibit 54**. The entities listed in **Confidential Exhibit 55** may also have rights under this patent. **Exhibit 59** includes license agreements with Forza Silicon Corporation and NASA. The remaining license and sublicense agreements are subject to confidentiality requirements and cannot be produced without written consent. Upon the filing of this Complaint, Caltech will notify the remaining licensees and sublicensees of this filing, request permission to disclose the agreements, and

submit the agreements thereafter. There are no other known licensees or sublicensees to the '506 patent.

XI. DOMESTIC INDUSTRY FOR THE ASSERTED PATENTS

94. An industry required by Section 337(a)(2) and defined by Section 337(a)(3) exists in the United States relating to CMOS image sensors covered by the Asserted Patents.

95. Caltech operates and maintains a licensing program for the intellectual property developed at Caltech through its Office of Technology Transfer, for which it has made and continues to make substantial investment. Caltech's licensing program is detailed in **Confidential Exhibit 56** attached to this Complaint.

96. The Asserted Patents are key patents in Caltech's CMOS image sensor portfolio, which has been licensed to various companies and generated substantial revenue for Caltech. *See id.*; *see also infra* Section X. Of the large number of patents within that portfolio, the Asserted Patents are among the select few that have been featured in litigation and licensing negotiations with these licensees. *See* **Confidential Exhibit 56**; *see also infra* Section XII.

97. In connection with this litigation, Caltech has made substantial investments in employing outside counsel to assist in licensing the Asserted Patents. **Confidential Exhibit 56** shows the amount incurred by Caltech in attorneys' fees associated with these matters.

XII. RELATED LITIGATION

98. On October 13, 2000, OmniVision Technologies, Inc. ("OmniVision") sued Photobit and Caltech in the U.S. District Court for the Northern District of California for declaratory judgment of noninfringement and/or invalidity of the '506 and '126 patents as well as U.S. Patent Nos. 6,005,619 (the "'619 patent"), 6,021,172 (the "'172 patent"), and 5,886,659 (the "'659 patent"), in a matter styled, *OmniVision Techs., Inc. v. Photobit Corp., et al.*, No. CV-

00-3791 (N.D. Cal.) (the "*OmniVision* case"). On September 24, 2001, the Court dismissed the *OmniVision* case pursuant to the parties' stipulated dismissal of all claims and counterclaims.

99. On February 7, 2001, Photobit and Caltech filed a complaint with the Commission under Section 337, requesting that the Commission commence an investigation of the unlicensed importation, sale for importation, and/or sale within the United States after importation of certain CMOS image sensors and/or products containing same that infringe one or more claims of the '506 patent as well as the '126 and '619 patents by OmniVision, Creative Labs, Inc., and X10 Wireless Technology Inc. As a result, the Commission commenced an investigation on March 12, 2001, styled *In the Matter of Certain CMOS Active Pixel Image Sensors and Products Containing Same*, Investigation No. 337-TA-451 (the "*OmniVision* investigation"). The Commission terminated the *OmniVision* investigation on October 30, 2001, after the parties reached a settlement.

100. On December 31, 2008, Caltech filed suit against Canon U.S.A., Inc., Canon, Inc., Nikon, Inc., Nikon Corporation, Olympus America, Inc., Olympus Corporation, Panasonic Corporation of North America, Panasonic Corporation, Sony Electronics, Inc., Sony Corporation, Samsung Electronics America, Inc., and Samsung Electronics Co., Ltd. in the U.S. District Court for the Central District of California for infringement of the '506 and '122 patents as well as U.S. Patent Nos. 5,949,483 (the "'483 patent"), 6,456,326 (the "'326 patent"), 6,549,235 (the "'235 patent"), 6,555,842 (the "'842 patent"), 6,570,617 (the "'617 patent"), 6,744,068 (the "'068 patent"), 6,825,059 (the "'059 patent"), 6,943,838 (the "'838 patent"), and 7,369,166 (the "'166 patent"), in a matter styled *Cal. Inst. of Tech. v. Canon U.S.A., Inc., et al.*, No. 2:08-cv-08637-MRP-VBK (C.D. Cal.) (the "*Canon* case"). After the parties reached a

settlement of these claims, the Court dismissed the *Canon* case with prejudice on January 4, 2010.

101. On April 30, 2009, Sirona Dental Systems, Inc. ("Sirona"), Caltech's exclusive licensee in the field of dental radiography, and Caltech filed suit against Palodex Group Oy and Instrumentarium Dental, Inc. in the U.S. District Court for the Western District of Wisconsin for infringement of the '235, '617, '068, and '166 patents, in a matter styled *Sirona Dental Sys., Inc., et al. v. Palodex Group Oy, et al.*, No. 3:09-cv-00266-bbc (W.D. Wis.) (the "*Palodex* case"). After the parties reached a settlement of these claims, the Court dismissed the *Palodex* case with prejudice on November 16, 2009.

102. On April 9, 2010, Sirona and Caltech filed suit against Cefla S.C., Cefla Capital Services, S.p.A., Cefla Dental Group America, Inc., Danaher Corporation, DEXIS LLC, Planmeca Oy, PLANMECA U.S.A. Inc., and Gendex Corporation in the U.S. District Court for the District of Delaware for infringement of the '235, '617, '166, '068, '326, and '842 patents, in a matter styled *Sirona Dental Sys., Inc., et al. v. Cefla S.C., et al.*, No. 1:10-cv-00288-GMS (D. Del.) (the "*Cefla* case"). The *Cefla* case is currently pending against Danaher Corporation, DEXIS LLC, and Gendex Corporation (collectively the "Danaher Defendants"), but has been dismissed with prejudice as to the remaining defendants, who have reached a settlement with Sirona and Caltech. The Danaher Defendants have answered the complaint. On January 26, 2012, the Court issued an order construing terms from the '326, '235, '842, '617, '068, and '166 patents. The Court's claim construction order is attached as **Exhibit 60**.

103. On November 24, 2010, Caltech filed suit against STMicro, SETi Co., Ltd., Siliconfile Technologies, Inc., Toshiba Corp., Toshiba America Electronic Components, Inc., LG Electronics, Inc., LG Electronics Mobilecomm U.S.A., Inc., LG Electronics U.S.A., Inc., Nokia,

Pantech Co., Pantech Co., Ltd., and Pantech Wireless, Inc. in the U.S. District Court for the Central District of California for infringement of the '506, '235, '122, '617, '166, '326, '842, '068, and '838 patents, in a matter styled *Cal. Inst. of Tech. v. STMicroelectronics NV, et al.*, No. 2:10-cv-09099-MRP-VBK (C.D. Cal.) (the "*STMicro* case"). The *STMicro* case is currently pending against STMicro and Nokia, but has been dismissed with prejudice as to the remaining defendants, who have reached a settlement with Caltech. STMicro and Nokia have answered the complaint. Caltech's claims against Nokia have been stayed. On March 12, 2012, the Court granted Caltech's motion to substitute RE42,918 (the "RE918 patent") and RE42,974 (the "RE974 patent") for the '235 and '617 patents, respectively. On March 20, 2012, the Court issued an order construing terms from the '326, RE918, '122, '842, RE974, '068, and '166 patents. The Court's claim construction order is attached as **Exhibit 61**.

104. Other than the instances listed above, the Asserted Patents have not been the subject of any other court or agency litigation.

XIII. RELIEF REQUESTED

WHEREFORE, by reason of the foregoing, Complainants request that the Commission:

(a) institute an immediate investigation pursuant to Section 337 into the unlawful importation into the United States, the sale for importation into the United States, or the sale within the United States after importation by proposed Respondents and others of CMOS image sensors and products containing the same that infringe at least claims 1 and 2 of the '126 patent, claim 6 of the '122 patent, and claims 15 and 16 of the '506 patent;

(b) determine that there has been a violation of Section 337;

(c) issue a limited permanent exclusion order pursuant to Section 337(d), excluding from entry into and sale within the United States all CMOS image sensors that are

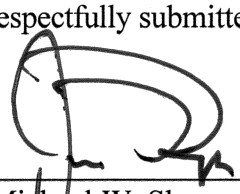
manufactured, imported, or sold by or on behalf of proposed Respondents, their affiliates, subsidiaries, successors, or assigns that infringe at least claims 1 and 2 of the '126 patent, and claims 15 and 16 of the '506 patent;

(d) issue a permanent cease-and-desist order pursuant to Section 337(f), prohibiting the domestic proposed Respondents, their affiliates, subsidiaries, successors, or assigns, from marketing, demonstrating, distributing, offering for sale, selling, or otherwise transferring, including the movement or shipment of inventory—in the United States and outside the United States for sale in the United States—any CMOS image sensors and products containing the same that infringe at least claims 1 and 2 of the '126 patent, and claims 15 and 16 of the '506 patent; and

(e) issue 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.

Dated: May 1, 2012

Respectfully submitted,



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