UNITED STATES INTERNATIONAL TRADE COMMISSION
WASHINGTON, DC

In the Matter of **CERTAIN NON-VOLATILE MEMORY DEVICES AND PRODUCTS CONTAINING SAME**	**Investigation No. 337-TA-____**

VERIFIED COMPLAINT OF MACRONIX INTERNATIONAL CO. LTD. AND MACRONIX AMERICA, INC. UNDER SECTION 337 OF THE TARIFF ACT OF 1930, AS AMENDED

Complainants:

Macronix International Co., Ltd.
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Proposed Respondents:

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Physical Exhibits

Physical Exh. 1. Spansion S29GL064N90TFI02 NVM

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APPENDICES

App. A	Certified copy of the prosecution history of U.S. Patent No. 6,552,360 and three copies thereof
App. B	Certified copy of the prosecution history of U.S. Patent No. 6,100,557 and three copies thereof
App. C	Certified copy of the prosecution history of U.S. Patent No. 6,002,630 and three copies thereof
App. D	Four copies of each technical reference identified in the prosecution history of U.S. Patent No. 6,552,360
App. E	Four copies of each technical reference identified in the prosecution history of U.S. Patent No. 6,100,557
App. F	Four copies of each technical reference identified in the prosecution history of U.S. Patent No. 6,002,630

I. INTRODUCTION

1. This complaint is filed by Macronix International Co., Ltd. and Macronix America, Inc. (collectively, "Macronix") pursuant to Section 337 of the Tariff Act of 1930, as amended, 19 U.S.C. § 1337, based on the unlawful importation into the United States, the sale for importation, and the sale within the United States after importation, of certain non-volatile memory devices and products containing the same, that infringe one or more claims of U.S. Patent No. 6,552,360 ("the '360 Patent"), U.S. Patent No. 6,100,557 ("the '557 Patent"); and U.S. Patent No. 6,002,630 ("the '630 Patent") (collectively, "the Asserted Patents").

2. Certified copies of each of the Asserted Patents are attached as Exhibit Nos. 1, 2, and 3, respectively. Macronix International Co., Ltd. owns all right, title, and interest in each of the Asserted Patents. Certified copies of the recorded assignments for each of the Asserted Patents are attached as Exhibit Nos. 4, 5, and 6, respectively.[1] Certified copies of the prosecution histories for each of the Asserted Patents are attached as App. Nos. A, B, and C, respectively.

3. The Proposed Respondents are Spansion, Inc., Spansion LLC, and Spansion (Thailand) Ltd. (collectively "Spansion"), as well as Spansion's downstream customers Beats Electronics LLC ("Beats"); Delphi Automotive PLC ("Delphi"); Harman International Industries, Inc., Harman Becker Automotive Systems, Inc. and Harman Becker Automotive Systems GmbH (collectively "Harman"); Ruckus Wireless, Inc. ("Ruckus"); and Tellabs, Inc. ("Tellabs") (collectively "the Downstream Respondents"). The accused Spansion products are certain non-volatile memory devices ("Accused NVM"). The Accused NVM are used by the

[1] Macronix and Nintendo Co., Ltd. have executed an Assignment re-vesting in Macronix full right, title, and interest in and to the '630 Patent. Exh. 32. Macronix has recorded this Assignment with the U.S. Patent and Trademark Office. Exh. 34. Macronix will order a certified copy of the current assignment and will supplement Exhibit No. 6 to include a certified copy of the current assignment for the '630 Patent upon receipt.

Downstream Respondents in a variety of products, including but not limited to, automotive components, "infotainment" systems, access points, wireless local area network controllers, and network gateway systems (collectively the "Accused Downstream Products") ("Accused NVM" and "Accused Downstream Products" are collectively "Accused Products"). On information and belief, the Accused Products are manufactured and/or sold for importation into the United States, imported into the United States, or sold within the United States after importation by or on behalf of Spansion, Actiontec, Beats, Delphi, Harman, Polycom, Ruckus, Shoretel, Tellabs, and other entities.

4. As required by 19 U.S.C. § 1337(a)(2) and (3), an industry in the United States relating to articles protected by the Asserted Patents exists or is in the process of being established.

5. Macronix seeks, as permanent relief, a general exclusion order barring from entry into the United States all infringing Spansion NVM and products containing same. Alternatively, Macronix seeks a permanent limited exclusion order, specifically directed to each named respondent and its subsidiaries and affiliates, barring from entry into the United States all infringing NVM and their products containing such NVM. Macronix also seeks a cease and desist orders directed to each named respondent prohibiting their sale for importation, importation, sale after importation, use, offer for sale, sale, distribution, advertising, testing, repair, technical support, or any other commercial activity related to infringing NVM and products containing such infringing NVM.

II. COMPLAINANTS

6. Macronix was originally established in 1982 in San Jose California to research, design, manufacture, and sell NVM devices. Macronix was later reorganized so that the corporate parent is Macronix International Co. Ltd. and Macronix America, Inc. is a wholly

owned subsidiary. Established in 1989, Macronix is a leading innovator of NVM semiconductor solutions. Exh. 7.

7. Macronix International Co., Ltd. ("Macronix Taiwan") is a corporation organized under the laws of The Republic of China, having its principal place of business at No. 16, Li-Hsin Road, Science Park, Hsin-chu, Taiwan, Republic of China. Macronix has been listed on the Taiwan Stock Exchange since March 15, 1995. In 2012, Macronix generated over $810 million from sale of its products.

8. Macronix America, Inc. ("Macronix America") is a wholly-owned subsidiary of Macronix International Co., Ltd., existing under the laws of the State of California, headquartered at 680 North McCarthy Boulevard, Milpitas, California 95035. (Macronix Taiwan and Macronix America are collectively referenced as "Macronix").

9. Led by scientists, engineers, and researchers, Macronix dedicates a substantial portion of its revenue, upwards of $170 million annually, to research and development of NVM and regularly publishes and presents technical papers in major international conferences to help bring the next generation of NVM to consumers around the world. For example, in the United States, Macronix has entered into a joint project with International Business Machines Corporation ("IBM") NVM phase-change memory technology. Macronix and IBM personnel have worked together on this project at IBM's Thomas J. Watson Research Center in Yorktown Heights, New York; at IBM's semiconductor fabrication facility in Burlington, Vermont; and previously at the IBM Almaden Research lab in San Jose, California.

10. Macronix has made substantial investments in protecting its intellectual property. Macronix has over 5,000 patents issued to it world-wide, including over 2,000 United States patents. According to a 2011 study by the Patent Board™, among the 240 semiconductor

companies evaluated, Macronix's patent portfolio was ranked 18th worldwide and was 1st in the Taiwanese semiconductor industry.

11. On information and belief, Macronix's licensees conduct in the United States certain research and development, engineering, manufacturing, and technical support of products based on Macronix technologies.

III. PROPOSED RESPONDENTS

A. The Spansion Respondents

12. On information and belief, Spansion Inc. and its affiliated entities design and manufacture NVM products from facilities located in California, Texas, and Thailand. On information and belief, the Accused NVM devices are assembled, packaged, and/or tested abroad prior to importation into the United States.

13. On information and belief, Spansion was founded in 1993 as a joint venture between Advanced Micro Devices ("AMD") and Japan's Fujitsu Ltd. Spansion was formerly known as FASL LLC. Once AMD took control of the company in 2003, it was renamed Spansion LLC.

14. On information and belief, in 2005, AMD and Fujitsu spun off the money-losing joint venture into Spansion, Inc.

15. On information and belief, with $2 billion in debt, Spansion, Inc. declared bankruptcy in 2009 and laid off about half of its work force.

16. The "Spansion Respondents" include various Spansion entities that collectively manufacture, sell for importation into the United States, import, and/or sell within the United States after importation Spansion NVM. As explained below, NVM manufactured by or on behalf of the Spansion Respondents, and products containing the same, infringe the Asserted

Patents. With respect to the Spansion Respondents, Macronix alleges the following upon information and belief:

1. Spansion, Inc.

17. Spansion, Inc. is a publicly traded holding company. *See* Exh. 8 Spansion 2012 Form 10-K at 4, 8; *see also* Exh. 9 Spansion Compl., *Certain Flash Memory Chips and Products Containing the Same*, Inv. No. 337-TA-664 ("Spansion 664 Complaint") at ¶10. Spansion, Inc. is incorporated in Delaware and maintains its headquarters at 915 DeGuigne Drive, Sunnyvale, CA 94085. *See* Exh. 8 at 1. Spansion, Inc. manufactures, sells for importation into the United States, and/or sells within the United States after importation the infringing Spansion NVM. *See id.* at 4, 8; *see also* Exh. 9 at ¶10.

2. Spansion LLC

18. Spansion LLC is "a wholly owned operating subsidiary" of Spansion, Inc. *See* Exh. 8 at 9. Spansion LLC is incorporated in Delaware and maintains its headquarters at 915 DeGuigne Drive, Sunnyvale, CA 94085. *See* Exh. 9 at ¶8. As of December 20, 2012, Spansion, Inc. controlled 60% of Spansion LLC's stock (*see* Exh. 8 at Ex. 21.1 & n.2); the remaining 40% is controlled by Spansion Technology LLC, another wholly owned subsidiary of Spansion, Inc. *Id.* Spansion LLC operates a semiconductor wafer fabrication facility in Austin, Texas that produces Spansion NVM devices. *See* Exh. 9 at 35. Spansion LLC manufacturers, sells for importation into the United States, imports, and/or sells within the United States after importation the infringing Spansion NVM. *See* Exh. 8 at 4, 8; *see also* Exh. 9 at ¶10.

3. Spansion (Thailand) Ltd.

19. Spansion (Thailand) Ltd. is a wholly owned subsidiary of Spansion LLC. *See* Exh. 8 at 169 n.3. Spansion (Thailand) Ltd. was formed under the laws of Thailand and has its principal place of business at 229 Moo 4 Changwattana Road, Pakkred, Nonthaburi 11120,

Thailand. Spansion (Thailand) Ltd. maintains and "operate[s] a final manufacturing" and "final-assembly" and testing facility in Bangkok, Thailand. *See id.* at 5, 8. Final manufacturing consists of assembly, test, marking, and packaging operations. *See id.* at 5. On information and belief, Spansion (Thailand) Ltd. manufactures, sells for importation into the United States, imports, and/or sells within the United States after importation infringing Spansion NVM. *See id.*

20. On information and belief, the Spansion Respondents are in the business of, among other things, developing, manufacturing, selling for importation, importing, and/or selling in the United States after importation NVM devices that infringe the Asserted Patents.

B. The Downstream Respondents

21. The proposed Downstream Respondents are engaged in the importation, the sale for importation, and/or the sale within the United States after importation of certain products containing Spansion's Accused NVM. With respect to the Downstream Respondents, Macronix alleges the following:

1. Beats

22. On information and belief, Beats Electronics LLC ("Beats") is a Delaware company with its principal place of business at 1601 Cloverfield Blvd., Suite 5000N, Santa Monica, CA 90404. (*See* Exh. 35 (Beats Business Entity Detail).) On information and belief, Beats is engaged in the design and sale of products that include but are not limited to headphones, earphones, and speakers. See Exh. 36 Beats, About Us.

2. Delphi

23. Delphi Automotive PLC ("Delphi") is a public limited company incorporated in Jersey, United Kingdom with its principal place of business at Courteney Road, Hoath Way, Gillingham, Kent ME8 0RU, United Kingdom. Delphi is a vehicle components manufacturer.

See Exh. 10 Delphi Form 10-K for 2012 at 4. Delphi's Electronics and Safety segment offers so-called "infotainment and driver interface" products, including but not limited to receivers, reception systems, digital receivers, satellite audio receivers, navigation systems, displays, and mechatronics. *See id.* at 7.

24. Delphi is engaged in the design, manufacture, sale for importation, importation, and/or sale after importation of products that are based on the Accused NVM devices.

3. Harman

25. Harman International Industries, Inc. ("Harman") is a Delaware Corporation with its principal place of business at 400 Atlantic Street, Suite 1500, Stamford, CT 06901. Harman's "Infotainment" segment designs, manufactures, and sells so-called "infotainment systems" for vehicle applications, which are installed primarily as original equipment by automotive manufacturers. *See* Exh. 11 Harman 2013 Annual Report at 96.

26. Harman Becker Automotive Systems, Inc. ("HBAS USA") is a subsidiary of Harman and is a Delaware Corporation with its principal place of business at 39001 West 12 Mile Road, Farmington Hills, MI 48331. *See* Exh. 12 Excerpt from Harman.com; *see also* Exh. 11 at Ex. 21.1 List of Harman subsidiaries.

27. Harman Becker Automotive Systems GmbH ("HBAS Germany") is an indirect wholly-owned subsidiary of Harman. *See id.* On information and belief, HBAS's principal place of business is Becker-Goering-Strasse 16, 76307 Karlsbad, Germany. *See* Exh. 12 Contact Information from HBAS website. HBAS Germany designs, manufactures, and/or sells infotainment systems. *See* Exh. 11 at 8; *see also* Exh. 13 HBAS Germany website explaining "[o]ur products in the area of fixed installations are 'made in Germany'".

28. Harman, HBAS USA, and/or HBAS Germany are engaged in the design, manufacture, sale for importation, importation, and/or sale after importation of products that are based on the Accused NVM devices.

4. Ruckus

29. On information and belief, Ruckus Wireless, Inc. ("Ruckus") is a Delaware corporation with its principal place of business at 350 West Java Drive, Sunnyvale, CA 94089. On information and belief, Ruckus is engaged in the design, manufacture, and/or sale of products that include but are not limited to access points, wireless local area network controllers, and network gateway systems. *See* Exh. 14 Ruckus 2012 Annual Report at 3.

30. Ruckus is engaged in the design, manufacture, sale for importation, importation, and/or sale after importation of products that are based on the Accused NVM devices.

5. Tellabs

31. On information and belief, Tellabs, Inc. ("Tellabs") is a Delaware corporation with its principal place of business at 1415 West Diehl Road, Naperville, IL 60563. On information and belief, Tellabs is engaged in the design and/or sale of products that include, but are not limited to, products "used to manage large volumes of telecommunications traffic in metro areas," such as the Tellabs 7100 Optical Transport System (OTS) and Tellabs 82.71323-NX Transponder. *See* Exh. 39 Tellabs, 2012 Form 10-K at 3, 29.

32. Tellabs is engaged in the design, manufacture, sale for importation, importation, and/or sale after importation of products that are based on the Accused NVM devices.

IV. THE TECHNOLOGY AND PRODUCTS AT ISSUE[2]

33. The technologies at issue relate generally to various aspects of NVM devices. NVM retains information even in the absence of a power source for extended periods of time. For example, in smartphones, personal information such as names and telephone numbers and multimedia, such as music, video, and photos can be stored in the phone's NVM and will remain in that memory even when the phone is turned off. In contrast, other types of memory, such as dynamic random-access memory ("DRAM"), lose data if electrical power is removed.

34. The NVM devices at issue are semiconductor devices manufactured by a multiple-step sequence of photolithographic and chemical processing during which electronic circuits are gradually created on a wafer made of semiconducting material. The manufacturing process is often divided into semiconductor wafer fabrication, packaging, and testing phases that often occur at separate locations.

35. During semiconductor wafer fabrication, there are advantages to producing substantially planar surfaces in certain layers of the device. One method for planarizing surfaces is chemical mechanical polishing/planarization (CMP), sometimes implemented as a rotating polishing head that uses polishing slurry to remove irregular topography from a wafer layer, making the wafer layer more planar.

36. Macronix's U.S. Patent No. 6,552,360 discloses and claims process and circuit structure layouts for semiconductor devices suitable for fabrication using a CMP process. For example, this technology includes circuit structure layouts that enhance use of CMP within a wafer fabrication process.

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[2] The description of the technology at issue is provided for purpose of general information and understanding and is not meant to be a position with respect to claim construction and/or other technical aspects of patent law.

37. Some of the NVM devices at issue store data as an electrical charge in a memory cell structure. Programming/erasing data within an NVM cell is achieved by storing/removing charges in the memory cell. The storage of charges in the memory cell represents a programmed cell and the removal of electrons in the memory cell reflects an erased structure. Some popular NVM devices store charge in a floating gate, others in a trapped charge cell. A relatively high voltage is required to complete charge storage within an individual memory cell.

38. Some early NVM devices used external power sources to supply the relatively high voltage required to program or erase memory cells. Later, other NVM devices used an on-chip "charge pump" to step up the standard on-chip supply voltage to the relatively higher voltages necessary to program or erase memory cells.

39. Macronix's U.S. Patent No. 6,100,557 discloses and claims a technology for using triple well devices to increase the efficiency of either a positive or negative charge pump. One aspect of this technology is providing a plurality of pumping transistors arranged and formed from different conductivity type materials to increase the voltage level with each clock cycle to provide improved efficiencies of increasing the output current, lowering the required power supply voltage level, and increasing the operating frequency.

40. NVM devices utilize relatively lower voltages for some operations and relatively higher voltages for other operations. Historically, many integrated circuit devices operate with 5 volt power supplies. More recently, there are lower power devices operating in the range of 2.7 – 3.6 volts. However, these low voltages may be insufficient for some NVM operations such as programming or erasing a memory cell.

41. Macronix's U.S. Patent No. 6,002,630 discloses and claims an on-chip voltage generation circuit suitable for use on integrated circuits such as flash memory devices with a low

power supply voltage, *e.g.*, 2.7 to 3.6 volts. One feature of this technology is an on-chip circuit to sense the level of the power supply voltage and selectively boost an internal supply voltage to generate a high voltage based on the level of the power supply voltage. The high voltage internal supply can be used for functions such as programming or erasing the NVM cells.

V. THE ASSERTED PATENTS AND NON-TECHNICAL DESCRIPTIONS

A. U.S. Patent No. 6,552,360

1. Identification and Ownership of the '360 Patent

42. United States Patent No. 6,552,360, titled "Method and Circuit Layout for Reducing Post Chemical-Mechanical Polishing Defect Count," issued on April 22, 2003, to inventors Chun-Lien Su, Chi-Yuan Chin, Ming-Shang Chen, Tsung-Hsien Wu, and Yih-Shi Lin. Exh. 1. The '360 Patent issued from Application No. 10/054,985, filed on January 25, 2002. *Id.*

43. The '360 Patent has 1 independent claim and 8 dependent claims. *Id.* Macronix is asserting claims 1-8 of the '360 Patent in this Investigation.

44. The Asserted Claims of the '360 Patent are valid, enforceable, and currently in full force and effect until its expiration on January 25, 2022.

45. Macronix International Co., Ltd. owns by assignment the entire right, title, and interest in and to the '360 Patent. Exh. 4.

46. Pursuant to Commission Rule 210.12(c)(1), this Complaint is accompanied by a certified copy of the prosecution history of the '360 Patent and three copies thereof. App. A. Further, pursuant to Commission Rule 210.12(c)(2), this Complaint is accompanied by four copies of each technical reference identified in the prosecution history of the '360 Patent. App. D.

2. Non-Technical Description of the '360 Patent

47. The '360 Patent is directed to a circuit layout on a substrate of a semiconductor wafer that when combined with chemical mechanical polishing ("CMP") process can reduce defects. For example, a circuit layout of a plurality of strips of a first circuit structure and at least two strips of a second circuit structure where each of the two strips of the second circuit structure link the front end and the rear end of the plurality of strips of the first circuit structure when used with CMP may reduce defects. One example of such a layout is illustrated below, although other embodiments are possible with different layouts.

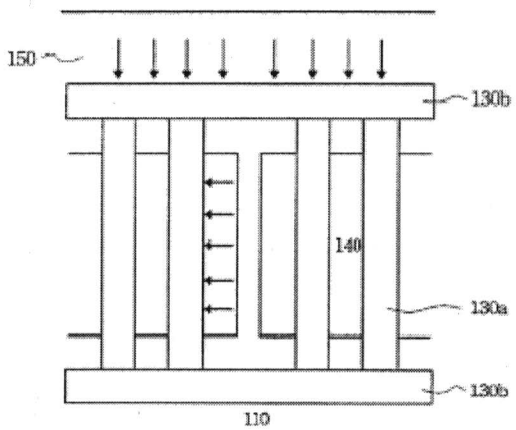

FIG. 4

48. The circuit structure layout shown in Fig. 4 above distributes CMP pressure on the front end and the rear end of the plurality of strips of said first circuit structure during the chemical mechanical polishing process, which may reduce defects. One benefit of this example can be illustrated in comparison to the prior art shown below.

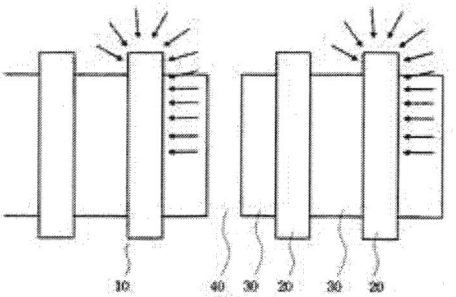

FIG. 1

49. As shown above, other structures when combined with CMP may produce uneven polishing pressure which may lead to defects.

3. Foreign Counterparts

50. The foreign patents and patent applications corresponding to the '360 Patent are:

a. Taiwanese Patent No. TW179380, issued on May 11, 2003.

b. Chinese Patent No. CN236949, issued on November 23, 2005.

51. On information and belief, no other foreign applications or patents corresponding to the '360 Patent have been filed, abandoned, or rejected.

4. Licenses

52. As required under Commission Rule 210.12(a)(9)(iii), a list of licensed entities is attached to this Complaint. Exh. 50C. On information and belief, there are no other current licenses involving the '360 Patent.

B. U.S. Patent No. 6,100,557

1. Identification and Ownership of the '557 Patent

53. United States Patent No. 6,100,557, titled "Triple Well Charge Pump," issued on August 8, 2000, to inventors Chun-Hsiung Hung, Ray-Lin Wan, and Yao-Wu Cheng. Exh. 2. The '557 Patent issued from Application No. 08/849,561, filed on October 10, 1996. *Id.*

54. The '557 Patent has 3 independent claims and 10 dependent claims. *Id.* Macronix is asserting claims 1-3, 7, and 9-13 of the '557 Patent in this Investigation.

55. The Asserted Claims of the '557 Patent are valid, enforceable, and currently in full force and effect until its expiration on October 10, 2016.

56. Macronix International Co., Ltd. owns by assignment the entire right, title, and interest in and to the '557 Patent. Exh. 5.

57. Pursuant to Commission Rule 210.12(c)(1), this Complaint is accompanied by a certified copy of the prosecution history of the '557 Patent and three copies thereof. App. B. Further, pursuant to Commission Rule 210.12(c)(2), this Complaint is accompanied by four copies of each technical reference identified in the prosecution history of the '557 Patent. App. E.

2. Non-Technical Description of the '557 Patent

58. The '557 Patent is directed to a charge pump having a particular structure. In one example, the charge pump has multiple transistors arranged to pump a voltage level from a first transistor to a last transistor in response to one or more clock signals so that the last transistor has a voltage substantially higher than, or negative, relative to the power supply voltage coupled to the transistors. In some implementations, the charge pump has a semiconductor body of a particular conductivity type and in that body is a first well of a particular conductivity type surrounded by a second well having an opposite conductivity type. Additionally disclosed is one transistor having a source and drain region also of opposite conductivity type from the first well conductivity type where the first well, second well, and source regions are coupled to a common potential.

59. Figure 1 illustrates one embodiment of the disclosure:

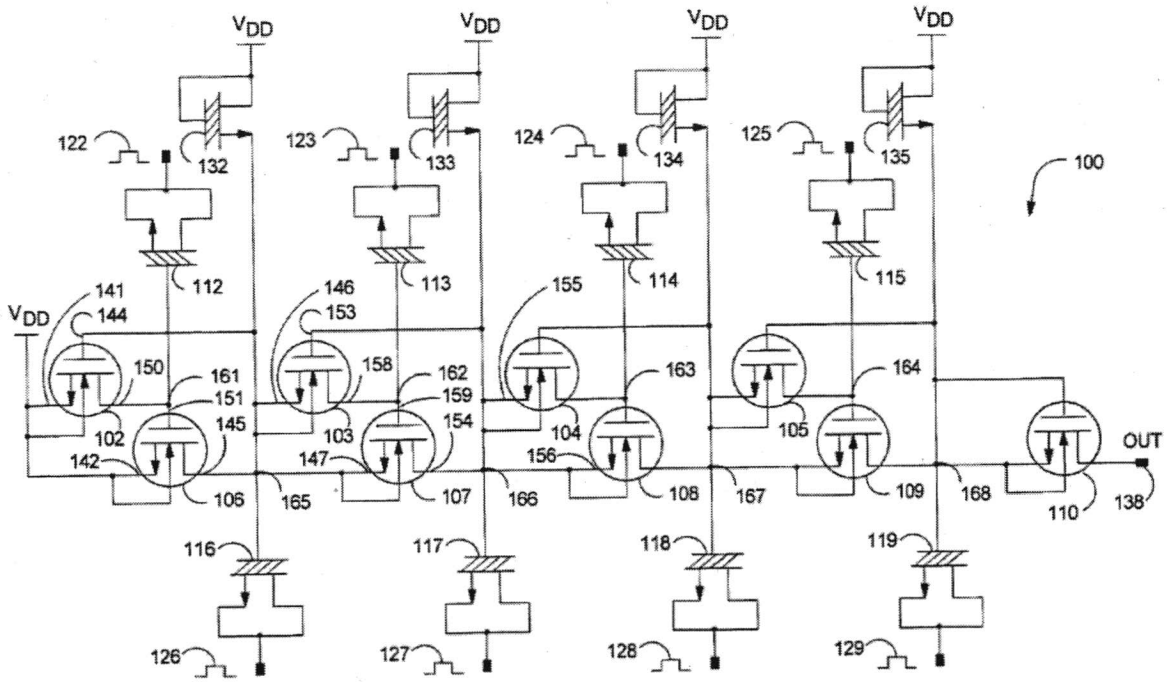

FIG.1

60. As seen, the charge pump in Figure 1 has a plurality of transistors (102–110) arranged to pump a voltage level from a first transistor (102) to a last transistor (110) in response to one or more clock signals (122–129) so that the last transistor (110) has a voltage substantially higher than the power supply voltage (V_{DD}) coupled to the transistors (102–110).

61. An exemplary transistor is additionally illustrated in Figure 3 shown below.

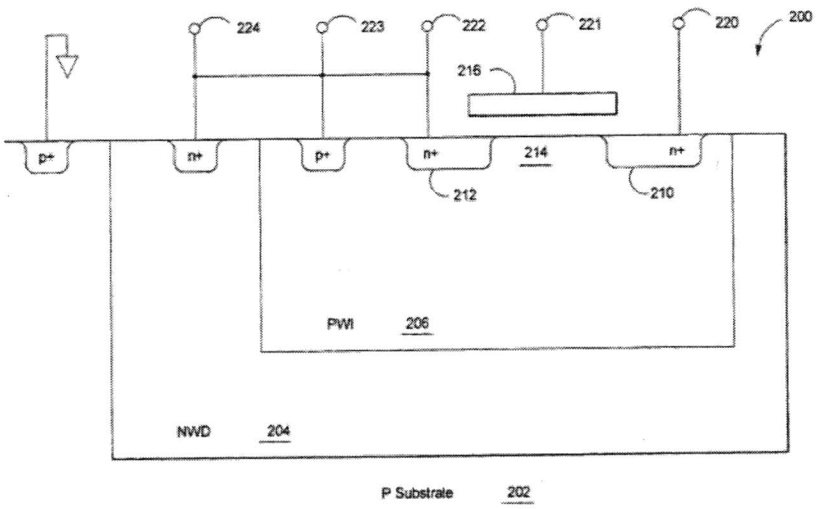

FIG.3

62. As shown in this example, the charge pump has a semiconductor body (202) of a particular conductivity type, "P." In the semiconductor body is a first well of a particular conductivity type (206), "P," surrounded by a second well (204) having an opposite conductivity type, "N," from the first well. Additionally, in this example there is at least one transistor having a source (212) and drain region (210) also of opposite conductivity type, "N," from the first well (206) conductivity type, "P". The first well, second well, and source regions are coupled to a common potential at a single node (222–224)

3. Foreign Counterparts

63. The foreign patents and patent applications corresponding to the '557 Patent are:

a. European Patent No. EP0931379, issued on August 6, 2008 for designated states France, Great Britain, Germany, and Italy.

b. German Patent No. DE69637632.6, issued on August 6, 2008.

c. Japanese Patent No. JP3415854, issued on April 4, 2003.

d. Hong Kong Patent No. HK1021268, issued on October 10, 1996.

64. On information and belief, no other foreign applications or patents corresponding to the '557 Patent have been filed, abandoned, or rejected.

4. Licenses

65. As required under Commission Rule 210.12(a)(9)(iii), a list of licensed entities is attached to this Complaint. Exh. 50C. On information and belief, there are no other current licenses involving the '557 Patent.

C. U.S. Patent No. 6,002,630

1. Identification and Ownership of the '630 Patent

66. United States Patent No. 6,002,630, titled "On Chip Voltage Generation for Low Power Integrated Circuits," issued on December 14, 1999, to inventors Weitong Chuang, Chun-Hsiung Hung, and Kuen-Long Chang. Exh. 3. The '630 Patent issued from Application No. 09/029,945, filed on November 21, 1997. *Id.*

67. The '630 Patent has 3 independent claims and 34 dependent claims. *Id.* Macronix is asserting claims 1-6 and 10-16 of the '630 Patent in this Investigation.

68. The Asserted Claims of the '630 Patent are valid, enforceable, and currently in full force and effect until its expiration on November 21, 2017.

69. Macronix International Co., Ltd. owns by assignment the entire right, title, and interest in and to the '630 Patent. Exh. 6.

70. Pursuant to Commission Rule 210.12(c)(1), this Complaint is accompanied by a certified copy of the prosecution history of the '630 Patent and three copies thereof. App. C. Further, pursuant to Commission Rule 210.12(c)(2), this Complaint is accompanied by four copies of each technical reference identified in the prosecution history of the '630 Patent. App. F.

2. Non-Technical Description of the '630 Patent

71. The '630 Patent is directed to efficient powering of an integrated circuit. A trend in modern integrated circuit design is to use lower supply voltages to meet low power demands and on-chip voltage boosters or charge pumps can supply higher voltages where required. In certain applications, the external supply voltage supplied ranges between about 2.7 volts and about 3.6 volts; thus conventional voltage boosters or charge pumps would need to generate a 1.5 volt boost to be able to reach the correct range of on-chip voltages for all operating conditions, assuming a 0.2 volt safety margin. However, if the on-chip supply voltage was greater than 2.7 volts, *e.g.*, 3.5 volts, at least some of the 1.5 volt boost would be unnecessary and would lead to excessive power consumption. In those systems, there may be a significant amount of wasted power generating the boosted voltage.

72. The '630 discloses a "sense" circuit that can detect the voltage level of the external power supply, *e.g.*, between 2.7 volts and 3.6 volts, and control the voltage booster or charge pump circuits to produce sufficient amount of boost voltage for operating the integrated circuit components. In this way, the on-chip voltage supply does not generate excess boost voltage or waste significant energy generating excess boost voltage.

73. The '630 Patent technology can be used to generate on-chip voltages for use with memory circuits that include a number of word lines and bit lines that intersect to form memory cells in an array. Word line driving circuits are coupled to the word lines to supply the read voltage. The word line driving circuits are also coupled to the disclosed on-chip voltage supply circuit.

3. Foreign Counterparts

74. The foreign patents and patent applications corresponding to the '630 Patent is:

a. WO Application No. PCT/US1997/021513, Publication No. WO/1999/027537.

75. On information and belief, no other foreign applications or patents corresponding to the '630 Patent have been filed, abandoned, or rejected.

4. Licenses

76. As required under Commission Rule 210.12(a)(9)(iii), a list of licensed entities is attached to this Complaint. Exh. 50C. On information and belief, there are no other current licenses involving the '630 Patent.

VI. SPECIFIC INSTANCES OF UNFAIR IMPORTATION AND SALE

77. On information and belief, Spansion manufactures, assembles, packages, and tests the Spansion NVM at foreign facilities. Spansion then sells for importation into the United States, imports, and/or sells within the United States after importation Spansion NVM.

78. Spansion's Product Selector Guide shows a large number of models of NVM devices available for purchase in the United States. Exh. 15. Further, as shown on the Spansion website, many models of Spansion NVM are available for purchase in the United States for shipment from the United States. Exh. 16. According to Spansion's website, Avnet Electronics Marketing is an authorized U.S. distributor of Spansion NVM in the United States. *Id.*

79. Samples of certain of the Accused Products, including Spansion's S29GL256S10TFI010 and S29GL01GS10TFI010 devices, were purchased in the United States from Avnet Electronics Marketing. A copy of the purchase receipt and photographs of the samples of S29GL064N90TFI02 and S29GL01GS10TFI01 are attached to the Complaint. Exh. 17, Exh. 18.

80. The Spansion NVM "S29GL064N90TFI02" is marked "334BB045" and the Spansion NVM "S29GL01GS10TFI010" is marked "233BB846." *Id.* On information and belief, the "BB" designation indicates the Spansion NVM was assembled and marked in Bangkok, Thailand. *See also*, Exh. 8 Spansion, 2012 10-K at 5. Thus, Spansion NVM have been imported into the United States, and will likely continue to be imported into the United States.

81. Physical samples of S29GL064N90TFI02 and S29GL01GS10TFI010, purchased as described above, are submitted as Physical Exh. 1 and Physical Exh. 2 to this Complaint.

82. Additionally, upon information and belief, the Spansion Respondents sell Spansion NVM to Downstream Respondents and other third parties for assembly into downstream products, including but not limited to automotive components, "infotainment" systems, access points, wireless local area network controllers, and network gateway systems, as well as many other devices. Such devices are sold for importation into the United States, imported, and/or sold within the United States after importation, and on information and belief, the Spansion Respondents and the Downstream Respondents are aware of such activities.

83. A Beats by Dr. Dre Studio Wireless Headband Headphones ("Beats Headphones") containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of the packaging and sample of the Beats Headphones, including a label indicating that the device was "Made in China" are attached to the Complaint. Exh. 41. A Spansion NVM (AL016J70BFI02) was found inside of the Beats Headphone. *Id.* Thus, Beats has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

84. A Delphi VW Jetta Golf RCD-510 Touch Radio ("Touch Radio") containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of the packaging and sample of the Delphi Touch Radio, including a label indicating that the device was "Assembled in Mexico" are attached to the Complaint. Exh. 44. A Spansion NVM (S29GL128N11TFI02) was found inside of the Delphi Touch Radio. *Id.* Thus, Delphi has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

85. A Delphi 2013-2014 GMC Acadia/Traverse/Enclave Navigation Radio Touchscreen ("Touchscreen") containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of the packaging and sample of the Delphi Touchscreen, including a label indicating that the device was "Assembled in Mexico" are attached to the Complaint. Exh. 45. A Spansion NVM (S29GL512S10DHI02) was found inside of the Delphi Touchscreen. *Id.* Thus, Delphi has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

86. A Harman HS A031 ("HS A031") infotainment system containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of the packaging and sample of the HS A031, including a label indicating that the device was "Made in Germany" are attached to the Complaint. Exh. 42. Two Spansion NVM (GL512N11FFA02 and AS008J70BFA04) were found inside of the HS A031. *Id.* Thus, Harman has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

87. A Harman HS 9335 ("HS 9335") infotainment system containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of

the packaging and sample of the HS 9335, including a label indicating that the device was "Made in Germany" are attached to the Complaint. Exh. 43. A Spansion NVM (GL064N90FFA02) was found inside the HS 9335. *Id.* Thus, Harman has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

88. A Ruckus Wireless ZoneFlex 7982 wireless access point device ("ZoneFlex 7982") containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of the packaging and sample of the ZoneFlex 7982, including a label indicating that the device was "Made in Malaysia" are attached to the Complaint. Exh. 19. A Spansion NVM (FL256SAIFRO) was found inside of the ZoneFlex 7982. *Id.* Thus, Ruckus has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

89. A Ruckus Wireless ZoneFlex 7352 wireless access point device ("ZoneFlex 7352") containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of the packaging and sample of the ZoneFlex 7352, including a label indicating that the device was "Made in China" are attached to the Complaint. Exh. 40. A Spansion NVM (FL256SAIFRO) was found inside of the ZoneFlex 7352. *Id.* Thus, Ruckus has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

90. A Tellabs 82.71323-NX Transponder ("Transponder") containing a Spansion NVM was purchased in the United States. A copy of the purchase receipt, and photographs of the packaging and sample of the Transponder are attached to the Complaint. Exh. 46. A Spansion NVM (S29GL064N90TF107) was found inside of the Transponder. *Id.* The Spansion NVM found inside the Transponder is marked "220BB932." *Id.* On information and belief, the

"BB" designation indicates the Spansion NVM was assembled and marked in Bangkok, Thailand. *See also*, Exh. 8 Spansion, 2012 10-K at 5. Thus, Tellabs has sold for importation, imported, and/or sold after importation into the United States products containing the Accused NVM.

91. It is not practical for Macronix to identify all devices sold for importation into the United States, imported, and/or sold within the United States after importation that contain infringing Spansion NVM. Spansion continues to market its infringing NVM worldwide via the Internet to prospective importers of infringing downstream products, and continues to provide instructions via the Internet to encourage such manufacturers to substitute infringing Spansion NVM for Macronix NVM in their products. *See* Exh. 47, Exh. 48. Macronix reserves its right to supplement its allegations, to amend the Compliant, and to add respondents in the future.

VII. UNLAWFUL AND UNFAIR ACTS OF RESPONDENTS—PATENT INFRINGEMENT

92. The Proposed Respondents have engaged in unfair trade practices, including the sale for importation, importation, and sale after importation of certain NVM and products containing same that infringe the Asserted Claims of the Asserted Patents.

A. Infringement of the '360 Patent

93. On information and belief, the Spansion NVM that are sold for importation, imported, and/or sold after importation by Spansion and/or the Downstream Respondents infringe claims 1-8 of the '360 Patent, either literally or under the doctrine of equivalents. For example, a chart that applies representative independent claim 1 of the '360 Patent to the Accused Products is attached to this Complaint. Exh. 20.

94. At present, Macronix has identified the Spansion Respondents and the Beats, Delphi, Harman, Ruckus, and Tellabs Respondents as respondents that have violated Section 337

with respect to the '360 Patent. However, because it is difficult to identify all sources of infringing Spansion NVM, and discovery may reveal that additional Downstream Respondents also have violated Section 337 with respect to the '360 Patent, Macronix reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to the '360 Patent.

B. Infringement of the '557 Patent

95. On information and belief, the Spansion NVM that are sold for importation, imported, and/or sold after importation by Spansion and/or the Downstream Respondents infringe at least claims 1-3, 7, and 9-13 of the '557 Patent, either literally or under the doctrine of equivalents. A chart that applies representative independent claims 1, 11, and 13 of the '557 Patent to the Accused Products is attached to this Complaint. Exh. 21.

96. At present, Macronix has identified the Spansion Respondents and the Beats, Delphi, Harman, Ruckus, and Tellabs Respondents as respondents that have violated Section 337 with respect to the '557 Patent. However, because it is difficult to identify all sources of infringing Spansion NVM, and discovery may reveal that additional Downstream Respondents also have violated Section 337 with respect to the '557 Patent, Macronix reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to the '557 Patent.

C. Infringement of the '630 Patent

97. On information and belief, the Spansion NVM that are sold for importation, imported, and/or sold after importation by Spansion and/or the Downstream Respondents infringe at least claims 1-6 and 10-16 of the '630 Patent, either literally or under the doctrine of equivalents. A chart that applies representative independent claims 1 and 10 of the '630 Patent to the Accused Products is attached to this Complaint. Exh. 22.

98. At present, Macronix has identified the Spansion Respondents and the Delphi, Harman, Ruckus, and Tellabs Respondents as respondents that have violated Section 337 with respect to the '630 Patent. However, because it is difficult to identify all sources of infringing Spansion NVM, and discovery may reveal that additional Downstream Respondents also have violated Section 337 with respect to the '630 Patent, Macronix reserves all rights to supplement its allegations to identify additional respondents that have violated Section 337 with respect to the '630 Patent.

VIII. HARMONIZED TARIFF SCHEDULE ITEM NUMBERS

99. The Spansion NVM and Accused Products are believed to fall within, at least, Heading Nos. 8523 (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37); subheading Nos. 8523.51.00 (Semiconductor media: solid-state non-volatile storage devices); 8471.30.01 (Portable automatic data processing machines, weighing not more than 10 kg, consisting of at least a central processing unit, a keyboard and a display); 8517.62.0050 (Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus: other). These HTS numbers are intended for illustration only and are not intended to be restrictive of the devices or products accused.

IX. RELATED LITIGATION

100. On information and belief, the Asserted Patents have not been the subject of any court or agency litigation.

X. THE DOMESTIC INDUSTRY

101. An industry in the United States, relating to the NVM protected by the Asserted Patents, exists or is in the process of being established under 19 U.S.C. § 1337(a)(3)(A)-(C),

comprising significant investments in physical operations, employment of labor and capital, and substantial exploitation of the Asserted Patents through engineering and research and development.

A. Macronix/IBM Research and Development

102. In May 2005, Macronix, IBM, and Infineon announced a joint research project to develop NVM using phase-change memory arrays. (Exh. 23 (IBM, Infineon, and Macronix Launch Announcement).) The research is conducted at IBM's TJ Watson Research Center in Yorktown Heights, New York; at IBM's semiconductor wafer fabrication facility in Burlington, Vermont; and previously at the IBM Almaden Research lab in San Jose, CA (hereinafter, the "MXIC/IBM NVM Project"). *Id.*

103. Phase change NVM is based on semiconductor material that can be changed rapidly between an ordered, crystalline phase having lower electrical resistance to a disordered, amorphous phase with much higher electrical resistance; since no electrical power is required to maintain either phase, PCM memory devices are non-volatile. Exh. 27Phase Change Memory: Replacement or Transformational.

104. Macronix's investments in the MXIC/IBM NVM Project have funded important research and development that is widely recognized for its technical contributions. For example, the Project studies prepared and evaluated various phase change materials for optimal performance in a PCM device. Exh. 25.

105. As early as December of 2006, the MXIC/IBM PCM Project announced that they had desgned, built, and demonstrated a prototype phase change NVM memory device that performed more than 500 times faster than conventional flash memory devices. Exh. 26 Promising New Memory Chip Technology.

106. In 2010, MXIC entered into a further agreement with IBM to continue to co-develop phase change NVM technology. Exh. 28 Macronix Extends Phase-Change Memory Alliance with IBM.

107. By 2012, the MXIC/IBM NVM Project was advanced to the stage of providing device performance data, implementation opportunities, performance comparisons for completing technologies, and identification of device performance enhancements for applications such as smartphone web browsers. Exh. 27 Phase Change Memory: Replacement or Transformational.

108. Each type of memory technology, *e.g.*, EEPROM, ROM, NOR, NAND, and phase change NVM devices, has dedicated transmission interfaces and controllers. Exh. 29 The Flash Memory Interface-Standardization, Low-Pin Count and High Performance.

109. Macronix is actively researching and developing transmission interfaces and controllers for PCM devices, including technologies that practice the Asserted Patents.

110. Macronix has invested significant monetary resources in plant, equipment, and labor utilized in the MXIC/IBM NVM Project. Those monetary investments are summarized in Confidential Exh. 51C.

111. On information and belief, IBM has also invested significant monetary resources in plant, equipment, and labor utilized in the MXIC/IBM NVM Project. In addition to specific direct investments in the project, IBM also provides semiconductor fabrication and characterization services to the MXIC/IBM NVM Project that draw upon its billions of dollars of investments in semiconductor fabrication plant, equipment, and labor operating in the United States.

112. Apart from the monetary value, Macronix's investments in the MXIC/IBM NVM Project are important to the development of next generation NVM devices in the United States. While much of the resulting phase change technology remains confidential, certain aspects of the technology has been disclosed in the technical literature. Exh. 24 contains a partial bibliography of those technical publications that demonstrates the significance of Macronix's investments in domestic research and development of PCM technology. Further, the MXIC/IBM NVM Project publications are widely cited in the technical literature, further demonstrating the importance of those investments in research and development. *See* Exh. 24, *see also* Exh. 61.

113. Exh. 58C, Exh. 59C, and Exh. 60C are claim charts that apply an exemplary claim of each of the Asserted Patents to a representative product from the MXIC/IBM NVM Project protected by the Asserted Patents.

114. On information and belief, based on Macronix's confidential information and IBM's publicly available information, concerning their investments in plant, equipment, labor, and research and development conducted via the MXIC/IBM NVM Project currently constitutes and/or is in the process of establishing a domestic industry.

B. Macronix's Engineering Investments

115. A domestic industry exists in the United States based on Macronix's significant investment in plant and equipment, significant employment of labor and capital, and substantial investment in the exploitation of the '360 and '557 Patents through engineering and technical support for products covered by those patents. *See* Exh. 55C.

116. Macronix employs a team of engineers at its Milpitas, California facility. *See* Exh. 51C. These engineers design and develop reference designs, design-in Macronix NVM into customer products, and provide technical support for Macronix's products that practice the '360

and '557 Patents. Macronix's engineers based in the United States work with chipset vendors, are field application engineers, or work in the quality assurance field.

117. Macronix's Milpitas engineers spend approximately almost 100% of their time working on NVM projects that practice the '360 and '557 Patents.

118. Exh. 56C and Exh. 57C are exemplary claim charts comparing representative products to a representative claim of the '360 and '557 Patents. Physical Exh. 3 and Physical Exh. 4 are samples of the representative products addressed in exemplary claim chart Exh. 56C and Exh. 57C, respectively. Photographs of Physical Exh. 3 and Physical Exh. 4 are attached as Exh. 33.

119. Macronix incurs labor expenses for the engineering work that is directly attributable to its exploitation of the '360 and '557 Patents. *See* Exh. 51C. In addition to the compensation it pays its engineers, Macronix incurs travel-related expenses directly related to its engineering work. *See* Exh. 51C.

120. Macronix also employs personnel in Milpitas to support its engineering work, including a management and administrative department. These expenses, too, are directly attributable to Macronix's exploitation of the '360 and '557 Patents. *See* Exh. 51C.

121. In further support of its exploitation of the '360 and '557 Patents in the United States, Macronix has made investments in plant and equipment. Specifically, Macronix has made investments in rental property (*see* Exh. 51C) and equipment (*see* Exh. 51C) to support its engineering work. Both of these investments are directly attributable to Macronix's exploitation of the '360 and '557 Patents in the United States.

122. In sum, Macronix has made significant investments in the United States in furtherance of its exploitation of the '360 and '557 Patents. *See* Exh. 51C Investment Values.

C. IBM Investments in Products Containing Macronix NVM

123. With respect to the '360 and '557 Patents, on information and belief, a domestic industry in the United States also exists under 19 U.S.C. § 1337(a)(2) and (3) due to Macronix's licensee's significant investment in plant, equipment, labor, and/or substantial investment in the exploitation of the Asserted Patents, including engineering and research and development with respect to articles protected by those patents. *See* Exh. 52C. On information and belief, products developed, designed, manufactured, and/or supported in the United States by Macronix's licensee IBM incorporate technology protected by the '360 and '557 Patents.

124. On information and belief, IBM is a New York corporation headquartered in Armonk, NY. Exh. 30 IBM 2012 Annual Report at 144.

125. On information and belief, as of December 31, 2012, IBM had approximately $12.8 billion in plant and other property, of which $6.5 billion was in the United States. Exh. 30 IBM 2012 Annual Report at 138.

126. On information and belief, IBM's Systems and Technology segment responsible for the development and manufacture of Power computing systems, storage products, and microelectronics, had total assets of $8.2 billion. *Id.*

127. On information and belief, as of December 31, 2012, IBM had approximately 434,246 employees worldwide. *Id.* at 63. On information and belief, a significant number of these employees are in the United States, and based on the proportion of plant and property in the United States, it can be estimated that approximately one half of these employees, or roughly 217,000 employees, are located within the United States.

128. On information and belief, over the period of 2010-2012, IBM spent $19 billion on research and development. *Id.* at 2. On information and belief, a significant amount of this research and development takes places in the United States.

129. IBM has identified that in fiscal year 2012, its Systems and Technology segment, which is responsible for the development and manufacture of computing systems, storage products, and microelectronics, reported revenues of approximately $17.7 billion. *See Id.* at 26.

130. On information and belief, IBM's microprocessor products, including the L8A product, incorporate the technology protected by the '360 Patent. Exh. 53C is a chart comparing independent claim 1 of the '360 Patent to IBM's L8A product. Exh. 53C shows that the IBM L8A product practices at least one claim of the '360 Patent. Photographs of the L8A are attached as Exh. 37.

131. On information and belief, IBM's Systems and Technology segment designs and manufactures microprocessors such as the L8A product at its fabrication facility located in East Fishkill, NY. *See* Exh. 31 IBM Microprocessors to Power the New Wii U System from Nintendo (June 7, 2011). IBM's Systems and Technology segment's Microelectronics OEM revenue was approximately $1.5 billion in 2012. *See* Exh. 30 IBM 2012 Annual Report at 138.

132. On information and belief, IBM's System x® family of products includes the IBM System x3650 M4 which incorporates Macronix products that practice the technology protected by the '557 Patent. On information and belief, IBM provides extensive technical support services in the United States for IBM's System x family of products." *See* Exh. 49. IBM System x, BladeCenter, PureFlex and Flex System support (Jan. 2013). Exh. 54C is a chart comparing independent claim 1 of the '557 Patent to IBM's System x, Model 4. Photographs of IBM's System x, Model are attached as Exh. 38.

133. On information and belief, IBM's Systems and Technology segments designs and manufactures IBM's System x® family of products, the IBM System x3650 M4. IBM's Systems

and Technology segment's Servers revenue was approximately $11.9 billion in 2012. *See* Exh. 30 IBM 2012 Annual Report at 138.

134. On information and belief, the publicly available information concerning IBM's domestic investments in plant, equipment, labor, and research and investment constitute a domestic industry with respect to the '360 and '557 patents.

XI. GENERAL EXCLUSION ORDER

135. Pursuant to 19 U.S.C. § 1337(d)(2)(A) and (B), Macronix seeks a general exclusion order to exclude all infringing Spansion NVM and downstream products containing such NVM. Issuance of a general exclusion order ("GEO") is appropriate because such an order is necessary to prevent circumvention of an exclusion order limited to products of the named Respondents. In addition, a GEO is warranted because there is a pattern of violation of Section 337, and it is difficult to identify the source of all of the infringing products.

136. On information and belief, both the infringing Spansion NVM and a wide range of consumer products containing infringing Spansion NVM are widely offered for sale and sold via stores and websites of various distributors and retailers in the United States, including as yet-to-be identified distributors and retailers. Generally speaking, these distributors and retailers or manufacturers of consumer products do not identify the source of the NVM contained in their products. Moreover, the manufacturers and sellers of consumer products containing NVM typically obtain such NVM from multiple sources, making it possible that a given consumer product purchased from one particular seller may include NVM from any one of multiple overseas manufacturers. Therefore, due to the complex nature of the supply chains for NVM, a GEO is necessary to prevent circumvention of a limited exclusion order limited to the Accused Products of the Proposed Respondents.

137. Macronix's investigation into the importation of infringing Spansion NVM has uncovered at least eight entities which, on information and belief, are engaged in the manufacture, and/or sale for importation, importation, and sale within the United States after importation of infringing Spansion NVM or products containing the same. Macronix has named as Proposed Respondents those entities for which it has evidence of importation of infringing Spansion NVM or products containing the same. Thus, there is already some evidence of unauthorized importation into the United States of infringing articles by numerous foreign entities. However, given the wide range of products into which NVM are incorporated, many more entities that are importing or are capable of importing infringing products into the United States likely exist and cannot be identified without discovery. Because determining the identity of numerous, unnamed infringers is difficult, if not impossible, a general exclusion order is necessary in order to fully protect Macronix.

138. At least for the foregoing reasons, the issuance of a general exclusion order excluding all infringing Spansion NVM and products containing such NVM is appropriate in this matter.

XII. RELIEF REQUESTED

139. WHEREFORE, by reason of the foregoing, Macronix respectfully requests 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(a)(1)(B)(i) and (b)(1), with respect to violation of Section 337 by Respondents based upon its sale for importation, importation, and/or sale after importation into the United States of certain NVM and products containing same that infringe one or more of the Asserted Claims of Macronix's United States Patent Nos. 6,552,360; 6,100,557; and 6,002,630;

(b) Schedule and conduct a hearing on said unlawful acts and, following said hearing:

(c) Issue a permanent general exclusion order, pursuant to 19 U.S.C. § 1337(d), excluding from entry into the United States all Spansion NVM and downstream products containing Spansion NVM that infringe one or more of the Asserted Claims of Macronix's United States Patent Nos. 6,552,360; 6,100,557; and 6,002,630; or, in the alternative, issue a permanent limited exclusion order specifically directed to each named Respondent and its subsidiaries and affiliates, barring from entry into the United States all Accused Products, that infringe one or more of the Asserted Claims of Macronix's United States Patent Nos. 6,552,360; 6,100,557; and 6,002,630;

(d) Issue a permanent cease and desist order, pursuant to 19 U.S.C. § 1337(f), directing Respondents to cease and desist from selling for importation into the United States, importing, selling after importation into the United States, offering for sale, marketing, advertising, demonstrating, sampling, warehousing inventory for distribution, offering for sale, selling, distributing, licensing, testing, providing technical support, use, or other related commercial activity involving imported Accused Products that infringe one or more of the Asserted Claims of Macronix's United States Patent Nos. 6,552,360; 6,100,557; and 6,002,630.

(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.

Date: December 27, 2013

Respectfully submitted,

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