## IN THE UNITED STATES INTERNATIONAL TRADE COMMISSION WASHINGTON, DC

In The Matter of:

Investigation No. 337-TA-

CERTAIN LARGE SCALE INTEGRATED CIRCUIT SEMICONDUCTOR CHIPS AND PRODUCTS CONTAINING SAME

# COMPLAINT OF PANASONIC CORPORATION LTD UNDER SECTION 337 OF THE TARIFF ACT OF 1930, AS AMENDED

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Motorola Inc.

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# In The Matter of CERTAIN LARGE SCALE INTEGRATED CIRCUIT SEMICONDUCTOR CHIPS AND PRODUCTS CONTAINING SAME

Investigation No. 337-TA-\_\_\_\_

## EXHIBITS TO THE COMPLAINT

EXHIBIT NO.	EXHIBIT TITLE	PUBLIC OR CONFIDENTIAL
1	Certified Copy of U.S. Patent No. 5,933,364	Public
2	Certified Copy of U.S. Patent No. 6,834,336	Public
3	Panasonic Annual Report	Public
4	Panasonic Corporation of North America Webpage	Public
5	IPO Report – US Patent Owners Ranking	Public
6	Freescale's website which has an overview of the entity	Public
7	Freescale's website showing worldwide information	Public
8	Freescale's website showing worldwide sales offices	Public
9	Article re Freescale in China	Public
10	Freescale Malaysia's Website	Public
11	Freescale Malaysia's website manufacturing sites	Public
12	Information from Freescale' Singapore's website	Public
13	Freescale Brochure	Public
14	Freescale 10k	Public

EXHIBIT NO.	EXHIBIT TITLE	PUBLIC OR CONFIDENTIAL
15	Mouser's website for ordering Accused Products	Public
16	Newark's website for ordering Accused Products	Public
17	Motorola's website re Motorola Inc.	Public
18	Certified Copy of Recorded Assignment of U.S. Patent No. 5,933,364	Public
19	Certified Copy of Recorded Assignment of U.S. Patent No. 6,834,336	Public
20	Foreign Counterparts of '336 Patent	Public
21	Freescale Brochure re StarCore	Public
22	Claim chart showing infringement of Independent Claims of the '364 Patent	Public
23	Claim chart showing infringement of independent claims in the '336 Patent by Freescale's StarCore DSP, SC140.	Public
24	Freescale's Brochure of DSP Products	Public
25	Information regarding StarCore Products	Public
26	Motorola's Website showing mobile phones	Public
27	Section 5 of SC140 DSP Core Reference Manual	Public
28	Freescale Technology Forum Presentation	Public
29	Declaration of Panasonic's Research and Development Domestic Industry	Confidential
30	Declaration of Panasonic Products practicing the Asserted Patents	Confidential
31	Claim chart showing practicing of the '364 Patent by Panasonic	Confidential

EXHIBIT NO.	EXHIBIT TITLE	PUBLIC OR CONFIDENTIAL
32	Claim chart showing practicing of the '336 Patent by Panasonic	Confidential
33	Declaration of Panasonic's Licensing Domestic Industry	Confidential
34	Exhibit listing Panasonic's Licensees	Confidential
35	Texas Instrument's Website describing its business	Public
36	Texas Instrument's Website describing its OMAP products	Public
37	Texas Instrument's Website regarding Manufacturing	Public
38	TI Investment in Semiconductor Research	Public
39	Copy of Redacted Texas Instrument License Agreement	Confidential
40	Declaration regarding TI's Domestic Investment	Confidential
41	Claim chart showing practicing of the '364 Patent by TI	Public
42	Claim chart showing practicing of the '336 Patent by TI	Public
43	Technical Brochure cited in Claim Chart in Exhibit 39	Public
44	Technical Brief cited in Claim Chart in Exhibit 39	Public
45	Declaration of Purchasing Accused Products in the United States	Public

## PHYSICAL EXHIBITS TO THE COMPLAINT

PHYSICAL EXHIBIT NO.	PHYSICAL EXHIBIT TITLE	PUBLIC OR CONFIDENTIAL
1	MSC8113	Public
2	MSC8113	Public
3	MSC8112	Public
4	MSC8122	Public
5	MSC8126	Public
6	MSC8144	Public

#### **APPENDICES TO THE COMPLAINT**

APPENDIX NO.	APPENDIX TITLE	PUBLIC OR CONFIDENTIAL
1	One certified copy and three additional copies of the prosecution history of '364 Patent	Public
2	Four copies of each references cited in prosecution history of '364 Patent	Public
3	One certified copy and three additional copies of the prosecution history of '336 Patent	Public
4	Four copies of each references cited in prosecution history of '336 Patent	Public

#### I. INTRODUCTION

- 1. This Complaint is filed by Panasonic Corporation ("Panasonic" or "Complainant") 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 into the United States, and the sale within the United States after importation of certain large scale integrated semiconductor chips ("LSI chips") and products containing the same (collectively, "Accused Products") by manufacturers/distributors Freescale Semiconductor, Inc. ("Freescale HQ"), Freescale Semiconductor Japan Ltd. ("Freescale Japan"), Freescale Semiconductor Xiqing Integrated Semiconductor Manufacturing Site ("Freescale Tianjin"), Freescale Semiconductor Innovation Center, ("Freescale Shanghai"), Freescale Semiconductor Malaysia Sdn. ("Freescale Malaysia"), Freescale Semiconductor Pte. Ltd. ("Freescale Singapore") and Freescale Semiconductor Taiwan Ltd. ("Freescale Taiwan") (collectively, "Freescale"), and retailers/downstream parties Mouser Electronics, Inc. ("Mouser"), and Premier Farnell Corporation d/b/a Newark ("Newark"), and Motorola Inc. ("Motorola") (collectively, "Respondents").
- 2. Respondents have engaged in unfair acts in violation of Section 337 through unlicensed importation, sale for importation and/or sale after importation of Accused Products that are covered by one or more the claims of Panasonic's U.S. Patent No. 5,933,364 ("the '364 Patent") and U.S. Patent No. 6,834,336 ("the '336 Patent") (collectively "the Panasonic Patents"). (Exhibit 1 and Exhibit 2).
- 3. Freescale's LSI chips are used in electronic devices including, cellular phones, electronics using wireless applications, home appliances, audio equipment, and other consumer electronics where there exists a need for LSI chips that contain both memory and logic circuitry,

are less susceptible to error during manufacture and assembly, and are small processors that can process data at high speeds.

- 4. The importation, sale for importation, and sales after importation of such LSI chips and products containing the same by Respondents directly and/or indirectly infringe or infringe through the doctrine of equivalents at least the following claims (collectively, "the Asserted Claims") of the following valid and enforceable United States patents owned by Panasonic: U.S. Patent No. 5,933,364, claims 1, 4, 5, and 6 (Exhibit 1); and U.S. Patent No. 6,834,336, claims 18-21, 24-27, and 30-32 (Exhibit 2).
- 5. Accordingly, the proposed Respondents have engaged in unfair acts in violation of Section 337 of the Tariff Act of 1930, as amended, through the importation, sale for importation into the United States, and sale after importation in the United States of the Accused Products.
- 6. By way of this Complaint, Panasonic seeks as relief as provided by Section 337(d) of the Tariff Act of 1930, as amended, a permanent exclusion order barring from entry into the United States all Accused Products that are imported into the United States, sold for importation, and/or sold within the United States after importation by or on behalf of the proposed Respondents, and which were covered by one or more of the Asserted Claims of the Panasonic Patents.
- 7. Panasonic also seeks, as relief, cease and desist orders pursuant to Section 337(f), prohibiting the importation into the United States, sales for importation, sales, offers for sale, advertising of sales, and/or the soliciting of sales within the United States after importation of any such infringing Accused Products.

#### II. COMPLAINANT

- 8. Panasonic is a Japanese corporation, formerly known as Matsushita Electric Industrial Co., Ltd., with its principal place of business located at 1006 Oaza Kadoma, Kadoma City, Osaka 571-8501, Japan. (Exhibit 3, P. 116). Panasonic has subsidiaries around the world including Panasonic Corporation of North America, which employs about 12,000 people in the region. (Exhibit 4).
- 9. Panasonic is a leading manufacturer of consumer electronics and semiconductor devices. Since its inception in 1918, Panasonic has devoted a great deal of resources to developing innovative, cutting-edge technologies. (Exhibit 3, P. 50). Through the 1980s and 1990s, Panasonic devoted a large group of scientists to the development of semiconductor devices, including microcontrollers, memory devices, integrated circuits, including LSI chips, and discrete semiconductors. (Exhibit 3, P. 30). Such devices are utilized in many of today's most popular electronic devices such as cellular telephones, audio equipment, home appliances, televisions, and DVD players, which require reliable components. (Exhibit 3, P. 31). LSI chips act as the "brains" of today's most popular electronic devices.
- 10. As a result of these efforts, Panasonic owns essential intellectual property rights in semiconductor technology and utilizes those rights in the consumer electronics marketplace. Panasonic protects its intellectual property in the semiconductor industry as well as its other technology by acquiring and enforcing United States and foreign patents, and other intellectual property rights. Currently, Panasonic is ranked seventh among major companies in the number of issued U.S. patents it owns. (Exhibit 5).
- Panasonic has a patent portfolio containing more than 94,000 U.S. and foreign patents and has widely licensed those patents throughout the world. (Exhibit 3, P. 39).

  Panasonic's licensees are using this patented technology in many countries, including the United

States. For example, the Panasonic Patents have been licensed to certain licensees that industrially utilize the Panasonic Patents in the United States.

#### III. PROPOSED RESPONDENTS

- 12. On information and belief, proposed respondent Freescale Semiconductor Inc. ("Freescale HQ") is a corporation organized under the laws of the state of Delaware with its principal place of business at 6501 William Cannon Drive West, Austin, Texas. On information and belief, Freescale HQ manufactures, has manufactured, markets and distributes the Accused Products, including importing and selling the Accused Products for importation into the United States, and selling the Accused Products after importation into the United States. (Exhibit 6).
- 13. On information and belief, proposed respondent Freescale Semiconductor Japan Ltd. ("Freescale Japan") is a corporation organized under the laws of Japan with its principal place of business at ARCO Tower 15F, 1-8-1, Shimo-Meguro, Meguro-ku, Tokyo 153-0064, Japan. On information and belief, proposed respondent Freescale HQ is the parent corporation of proposed respondent Freescale Japan. (Exhibit 7). On information and belief, Freescale Japan distributes and sells the Accused Products for importation into the United States. (Exhibit 6, Exhibit 7, and Exhibit 8).
- 14. On information and belief, proposed respondent Freescale Semiconductor Xiqing Integrated Semiconductor Manufacturing Site ("Freescale Tianjin") is a corporation organized under the laws of the People's Republic of China with its principal place of business at No. 15 Xinghua Road, Xiqing Economic Development Area, Tianjin 300381, P.R.China. On information and belief, proposed respondent Freescale HQ is the parent corporation of proposed respondent Freescale Tianjin. (Exhibit 7). On information and belief, including its identification as an Integrated Semiconductor Manufacturing Site, Freescale Tianjin manufactures, distributes, and sells the Accused Products for importation into the United States. (Exhibit 6, Exhibit 7 and

- Exhibit 9). Freescale LSI chips were purchased and received in the United States and identify China as the location of manufacture, as shown in Exhibit 45.
- Innovation Center ("Freescale Shanghai") is a corporation organized under the laws of People's Republic of China with its principal place of business at Zhangjiang Building 20F Unit A, No. 560 Songtao Road, Pudong New District, Shanghai 210203, P.R. China. On information and belief, proposed respondent Freescale HQ is the parent corporation of proposed respondent Freescale Shanghai. (Exhibit 7). On information and belief, Freescale Shanghai manufactures, distributes, and/or sells the Accused Products for importation into the United States. (Exhibit 6, Exhibit 7, and Exhibit 9). Freescale LSI chips were purchased and received in the United States and identify China as the location of manufacture, as shown in Exhibit 45.
- 16. On information and belief, proposed respondent Freescale Semiconductor Malaysia Sdn. Bhd. ("Freescale Malaysia") is a corporation organized under the laws of Malaysia with its principal place of business at No. 2 Jalan SS 8/2, Free Industrial Zone, Sungai Way, 47300 Petaling Jaya, Selangor, Malaysia. On information and belief, proposed respondent Freescale HQ is the parent corporation of proposed respondent Freescale Malaysia. (Exhibit 7). On information and belief, Freescale Malaysia I manufactures, distributes, and/or sells the Accused Products for importation into the United States. (Exhibit 6, Exhibit 7, Exhibit 10, and Exhibit 11). Freescale LSI chips were purchased and received in the United States and identify Malaysia as the location of manufacture, as shown in Exhibit 45.
- 17. On information and belief, proposed respondent Freescale Semiconductor Taiwan Ltd. ("Freescale Taiwan") is a corporation organized under the laws of Taiwan with its principal place of business at 6F, Unit 6, 66, San-Chong Road, Taipei City 11560, Taiwan (Nangang

Software Park). On information and belief, proposed respondent Freescale HQ is the parent corporation of proposed respondent Freescale Taiwan. (Exhibit 7). On information and belief, Freescale Taiwan manufactures, distributes, and sells the Accused Products for importation into the United States. (Exhibit 7). Freescale LSI chips were purchased and received in the United States and identify Taiwan as the location of manufacture, as shown in Exhibit 45.

- ("Freescale Singapore") is a corporation organized under the laws of Singapore with its principal place of business at 10 Ang Mo Kio Street 65, 03-01/03 Techpoint, Singapore 569059. On information and belief, proposed respondent Freescale HQ is the parent corporation of proposed respondent Freescale Singapore. (Exhibit 7). On information and belief, Freescale Singapore manufactures, distributes, and sells the Accused Products for importation into the United States. (Exhibit 7, Exhibit 12). Freescale LSI chips were purchased and received in the United States and identify Singapore as the location of manufacture, as shown in Exhibit 45.
- 19. Hereafter, Freescale HQ and Freescale Japan, Freescale Tianjin, Freescale Shanghai, Freescale Malaysia, Freescale Singapore and Freescale Taiwan will be collectively referred to as "Freescale."
- 20. According to its website and corporate brochure, Freescale's business is focused on embedded semiconductor for use in cars, mobile phones, networking architecture and more. (Exhibit 6 and Exhibit 13). Panasonic is informed and believes that Freescale's business includes the manufacture and sale of LSI chips and products containing the same, including but not limited to its StarCore product family. (Exhibit 6, and Exhibit 13, P. 2., Exhibit 21, and Exhibit 24).

- 21. Panasonic is further informed and believes that Freescale imports into the United States, sells for importation into the United States, and/or sells after importation into the United States LSI chips that it made, or had made, overseas by Freescale Tianjin, Freescale Shanghai, Freescale Malaysia, Freescale Singapore and Freescale Taiwan, including the Accused Products addressed herein. (Exhibits 6-13). For example, Panasonic has received in the United States certain Accused Products which are manufactured outside the United States. (Exhibit 45).
- 22. The business operations of Freescale are described more fully at its website (http://www.Freescale.com) and in Freescale HQ's SEC 10-K filing. (Exhibit 13; Exhibit 14).
- 23. The individual Accused Products identified Exhibit 45 were purchased and delivered within the United States by the retailing respondents.
- 24. On information and belief, Mouser Electronics Inc. ("Mouser") is a corporation organized under the laws of Delaware, with its principal place of business at 1000 North Main Street, Mansfield, TX 76063 On information and belief, Mouser sells after importation the Accused Products, including on its website www.mouser.com. (Exhibit 15).
- 25. On information and belief, Premier Farnell Corporation d/b/a Newark ("Newark") is a corporation organized under the laws of Delaware, with its principal place of business at 7061 East Pleasant Valley, Independence, Ohio 44131. On information and belief, Newark sells after importation the Accused Products, including on its website www.newark.com. (Exhibit 16).
- 26. The Freescale LSI chips are also incorporated into downstream products, such as mobile phones.

27. On information and belief, Motorola Inc. is a corporation organized under the laws of Delaware with its principal place of business at 303 East Algonquin Road, Schaumburg, Illinois 60196. On information and belief, Motorola sells for importation, imports, or sells after importation downstream products, such as mobile phones, that incorporate Freescale's infringing LSI chips. (Exhibit 17). For example, Panasonic has received in the United States certain Accused Products which are manufactured outside the United States. (Exhibit 45).

#### IV. THE TECHNOLOGY-AT-ISSUE AND THE PANASONIC PATENTS

#### a. General Description of Technology-at-Issue

- 28. The asserted technology relates to semiconductor devices that are used as the "brains" of mobile phones, audio equipment, home appliances and various other consumer electronics.
- 29. LSI chips that incorporate memory and logic circuits on a single semiconductor die offer several advantages over other chips without these features, including, but not limited to, maximizing the use of all available space in the memory section of the chip without increasing the size of the chip, preventing unwanted interference between logic and memory, and elimination of soft errors in the memory section. Many of these advantages can be attributed to the fact that such LSI chips are more versatile, meaning the technology can be utilized in all chips regardless of the design specifications of the integrated circuits, are less susceptible to static electricity, and can be manufactured more efficiently.
- 30. Further, with the increase in demand for multimedia devices and miniaturization of electronic circuits, there has been a growing need for microprocessors that can process multimedia data at a high speed. Basic processing generally includes executing one instruction in a pipeline after the other. Another type of processing includes executing one instruction parallel to another instruction, provided that there are no interdependencies between the

instructions. Determining whether there are interdependencies and scheduling instructions according to any interdependencies utilizes significant resources of a processor. A processor may utilize Very Long Instruction Word ("VLIW") architecture to perform high speed processing. A VLIW processor generally includes programming for simultaneous execution of a number of internal operations in a number of internal operation units, but the determination of interdependencies and the scheduling of instructions is performed by a compiler instead of the processor. The benefits of a VLIW processor are that it does not need the scheduling hardware required by a parallel processor, it is more efficient than basic processing, and it offers significant computational power through reduced hardware complexity.

- 31. The products at issue pertaining to the '364 Patent include LSI chips that include metal layers for stabilizing the potential of the memory section of a chip that includes a logic section. Such LSI chips are improvements over prior chips and are used in a variety of electronic products, including cellular telephones, audio equipment and home appliances.
- 32. The products at issue pertaining to the '336 Patent include a VLIW processors that include (1) a unit for fetching VLIW instructions; and/or (2) a unit for executing VLIW instructions in parallel. Such VLIW processors are improvements over prior processors and are used in a variety of electronic products, including cellular telephones.

#### b. U.S. Patent No. 5,933,364

33. On August 3, 1999, United States Patent No. 5,933,364 ("the '364 Patent"), titled "Semiconductor Device with a Metal Layer for Supplying a Predetermined Potential to a Memory Cell Section," was duly and legally issued. (Exhibit 1). A copy of the certified copy of the '364 Patent is submitted with this Complaint as Exhibit 1, and the certified copy is submitted with the original of this Complaint.

- 34. In the late 1990's, semiconductor devices in which large-capacity memory circuits (such as dynamic random access memory, or DRAMs) and custom logic circuits (such as central processing units, or CPUs) were integrated in a single semiconductor chip, sometimes referred to as large scale integrated semiconductor chips, or LSIs, to satisfy consumer demand for smaller devices with increased functionality. This configuration, however, presented various problems with the semiconductor devices such as the increased expense of manufacture of semiconductor devices due to, in part, the increased size of the chips (which now included both memory and logic sections). In addition, a variation in the memory section of the chip could have unwanted effects on some circuits in the logic section of the chip.
- Shimakawa invented a semiconductor device design of a semiconductor chip that includes a memory section and logic section with a unique layout of metal wiring. Memory interconnects (i.e., wiring that connects memory cells, etc.) occupy a lesser number of wiring layers than do the logic interconnects for the logic section. Therefore, there are a certain number of layers above the memory section that are not utilized for memory interconnects. The inventors discovered that a metal layer formed in a specific layer of the LSI chip (and including the unutilized layers) may cover the memory section of the chip and supply a predetermined potential to the memory section of the chip. This new design (1) allowed for more effective use of the free space on the semiconductor chip, thus decreasing the size of such LSI chips and the manufacturing costs of such chips; (2) stabilized the potential supplied to the memory section to alleviate unwanted interference with the circuits in the logic section of the LSIs; and (3) eliminates soft errors generated in the memory section. The invention found in the '364 Patent

has become an essential feature of most of today's semiconductor devices, including those manufactured in the United States by Panasonic and its U.S. Licensees.

- 36. Panasonic is the assignee and owner of all rights, title and interest in and to the '364 Patent. A copy of the certified copy of the assignment of the '364 Patent, reflecting the chain of title and identifying ownership, is attached hereto as Exhibit 18, and the certified copy is submitted with the original of this Complaint.
- 37. Pursuant to Commission Rule 210.12, a certified copy of the prosecution history of the '364 Patent has been ordered from the United States Patent and Trademark Office and will be provided upon receipt. The original of this Complaint is accompanied by four copies of the prosecution history of the '364 Patent (Appendix 1) and four copies of each document referenced therein (Appendix 2).
  - 38. The '364 Patent is valid and in full force and effect.
- 39. A Japanese Patent Application, Laid Open Patent Publication H11-274424 (JP11274424), corresponding to the '364 was finally rejected. Further, a divisional to this application was regarded as withdrawn because a request for examination was not filed, and it was assigned Application Number is 2004-313597. With respect to the '364 Patent, no other foreign applications have been filed, and no other foreign counterpart applications have been rejected, withdrawn or abandoned.

#### c. <u>U.S. Patent No. 6,834,336</u>

40. On December 21, 2004, United States Patent No. 6,834,336 ("the '336 Patent"), titled "Processor for Executing Highly Efficient VLIW," was duly and legally issued. (Exhibit 2). A copy of the certified copy of the '336 Patent is submitted with this Complaint as Exhibit 2, and the certified copy is submitted with the original of this Complaint.

- 41. With the increased demand of multimedia devices, there has been a growing need for microprocessors that can process audio and image data. Microprocessors having a "Very Long Instruction Word" architecture ("VLIW Processor") are the processors of choice because of its capability to process such data at high speeds. However, VLIW processors were not without some limitations. VLIW processors include a number of internal operation units that simultaneously execute a number of operations in parallel that give the processor its high speed characteristic. However, a compiler is needed to investigate the source program for the VLIW processor and perform the scheduling of operations. This configuration presented various problems where the source program was large and inefficient, such as a 256-bit VLIW. Another problem with VLIW processers was that shorter word length processors, such as 32-bit VLIW, were unable to instruct simultaneous performance of more than two operations at a time.
- 42. Faced with these problems, Shuichi Takayama and Nobuo Higaki invented processor with VLIW that executes instructions of a comparatively short word length, but which has a high degree of parallelism and a highly efficient code structure, so that several operations can be simultaneously executed. For example, with the VLIW processor of Takayama and Higaki, three or more operations can be indicated by a single 32-bit VLIW instruction, where the field structure of the VLIW instruction for the processor includes operation fields of shorter word lengths. The invention found in the '336 Patent has become an essential feature of most of today's VLIW processor devices, including those manufactured in the United States by Panasonic and its U.S. Licensees.
- 43. Panasonic is the assignee and owner of all rights, title and interest in and to the '336 Patent. A certified copy of the assignment of the '336 Patent, reflecting the chain of title

and identifying ownership, is attached hereto as Exhibit 19, and the certified copy is submitted with the original of this Complaint.

- 44. Pursuant to Commission Rule 210.12, the original of this Complaint is accompanied by: one certified copy and three additional copies of the prosecution history of the '336 Patent (Appendix 3) and four copies of each document referenced therein (Appendix 4).
  - 45. The '336 Patent is valid and in full force and effect.
- 46. Foreign counterparts of the '336 Patent are identified in Exhibit 20. No other foreign applications have been filed, and no other foreign counterpart applications have been rejected, withdrawn or abandoned.

# V. <u>ACCUSED PRODUCTS OF PROPOSED RESPONDENTS AND</u> INFRINGEMENT OF THE PANASONIC PATENTS

#### a. Accused Products

- 47. Upon information and belief, Freescale offers a wide variety of semiconductor devices, including LSI chips, of various specifications. (Exhibit 13). Further, on information and belief, Freescale manufactures LSI chips in their foreign facilities. (Exhibits 7-12). Freescale's LSI chips are then assembled into downstream products, such as mobile telephones, audio equipment or home appliances by third party manufacturers. (Exhibit 6 and Exhibit 45). Freescale's LSI chips are also sold after importation in the United States by third party retailers. At this time without the benefit of discovery, Panasonic is unaware of the identity of all third party manufacturers, assemblers, or retailers.
- 48. Upon information and belief, Respondents unlawfully sell for importation, import or sell after importation into the United States devices that infringe at least claims 1, 4, 5, and 6 of the '364 Patent and/or claims 18-21, 24-27, and 30-32 of the '336 Patent. (Exhibit 22, Exhibit

23). Such infringing products include all Freescale products having a StarCore Digital Signal Processor Core (SC140, SC1400, SC3400, SC3850), such as Freescale part nos. MSC8154, MSC8154E, MSC8155, MSC8155E, MSC8156, MSC8156E, MSC8144, MSC8112, MSC8113, MSC8114, MSC8101, MSC8103, MSC8122, MSC8126, MSC7116, MSC7118, MSC7119, MSC7120, MXC300-30; all Freescale MSC and MXC products; part no. MPC8548E which is a Power Architecture family product and part no. SC29343VKP; all Freescale LSI chips having a design rule of 130 nm or smaller that include memory; and also products containing the same or a variant thereof, such as Motorola's mobile phones including the Aura, Motorokr E8, MotoRazr2 V9x, i576 Nextel, W510, Moto Z9, Motorazr v3, Motorazr2 v8, Moto z3, Motorola ZN5 GSM, Motorokr z6, Moto K1, and Clutch i465. (Exhibit 21, Exhibit 24, Exhibit 25, Exhibit 26, Exhibit 45).

#### b. Infringement of the '364 Patent

- 49. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States LSI chips that either directly or indirectly infringe or infringe through the doctrine of equivalents independent claim 1 and dependant claims 4, 5, and 6 of the '364 Patent. (Exhibit 1, Exhibit 21, Exhibit 22).
- 50. A claim analysis reading independent claim 1 of the '364 Patent on a representative LSI chips (Freescale part nos. SC29343 and MSC7116) is attached herewith. (Exhibit 22). The photographs in the claim chart illustrate that the analyzed semiconductor devices were made by Freescale in Singapore and China and purchased from a retailer located in the United States. (Exhibit 22, Figure 1). On information and belief, Freescale part no.

  MSC7116 and/or SC29343 is representative of all Freescale LSI chips having a design rule of

130nm or smaller that include memory, including but not limited to Freescale's StarCore Family of products. Further, Freescale part no. SC29343 represents chips incorporated into Motorola's downstream products. (Exhibit 25). Freescale part no. MPC8548E represents Freesale Power Architecture family products.

- 51. Accordingly, the LSI chips and products containing the same, including but not limited to all Freescale LSI chips having a design rule of 130nm or smaller that include memory and Motorola mobile phones containing the same, which are imported into the United States, sold for importation into the United States, and/or sold after importation into the United States by Respondents infringe claims of the '364 Patent.
- 52. Moreover, on information and belief, Freescale learned of the '364 Patent and its infringing products during the course of licensing negotiations in 2007 and 2008. To the extent that Freescale has third parties manufacture or design the Accused Products, on information and belief, Freescale contributes to and induces infringement of the '364 Patent claims by making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States its infringing LSI chips for incorporation into downstream products, with knowledge that these Accused Products infringe the '364 Patent, have no substantial non-infringing use, and are not a staple item. (Exhibit 6, Exhibit 21, Exhibit 24, Exhibit 25, and Exhibit 45).

#### c. Infringement of the '336 Patent

53. On information and belief, Respondents are making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States LSI chips that either directly or indirectly infringe or infringe through the doctrine

of equivalents independent claims 18, 24, or 30 and dependant claims 19, 20, 21, 25, 26, 27, 31 or 32 of the '336 Patent. (Exhibit 2, Exhibit 21, and Exhibit 23).

- 54. A claim analysis reading independent claims 18, 24, and 30 of the '336 Patent on a representative semiconductor device (Freescale StarCore SC140) is attached herewith. (Exhibit 23). On information and belief, Freescale part number StarCore SC140 is representative of Freescale's StarCore Family of Products, including but not limited to the MSC and MXC series products. (Exhibit 21, Exhibit 23, Exhibit 24, and Exhibit 25).
- 55. Accordingly, the LSI chips and products containing the same, including but not limited to Freescale's StarCore Family of products, which are imported into the United States, sold for importation into the United States, and/or sold after importation into the United States by Respondents infringe claims of the '336 Patent.
- Moreover, on information and belief, Freescale learned of the '336 Patent and its infringing products during the course of licensing negotiations in 2007 and 2008. To the extent that Freescale has third parties manufacture or design the Accused Products, on information and belief, Freescale contributes to and induces infringement of the '336 Patent claims by making, importing into the United States, selling for importation into the United States, and/or selling after importation into the United States its infringing LSI chips for incorporation into downstream products, with knowledge that these LSI chips and products containing the same infringe the '336 Patent, have no substantial non-infringing use, and are not a staple item. (Exhibit 6, Exhibit 21, Exhibit 23, Exhibit 24, and Exhibit 45).

#### VI. THE DOMESTIC INDUSTRY

#### a. Panasonic's Domestic Industry – Research and Development

57. A Domestic Industry, under Subparts (A), (B) and (C) of Section 337(a)(3), exists by virtue of a Panasonic's activities within the United States, including research and

development related to semiconductor devices that practice one or more of the claims of the Panasonic Patents ("Panasonic Products").

#### i. Economic Prong

58. Panasonic has made significant investments in plant and equipment, and employs a significant amount of labor and capital in the United States for the exploitation of the Panasonic Patents. Panasonic's wholly owned subsidiary, Panasonic Corporation of North America, has a research and design facilities in San Jose, California and Mt. Laurel, New Jersey. Within both the San Jose and Mt. Laurel facilities is the Panasonic Semiconductor Development Center ("PSDC"). In the San Jose facility, PSDC's sole activities involve researching and developing circuitry for LSI chips, including LSI chips that practice the Panasonic Patents. PSDC includes salaried research and development employees and equipment of substantial value for the research, design, and development of circuitry for LSI chips that practice the Panasonic Patents. (Exhibit 29).

#### ii. Technical Prong

- 59. The circuitry for LSI chips designed in San Jose by PSDC is utilized in Panasonic products that practice the Panasonic Patents. (Exhibit 30).
- 60. A comparison of information about Panasonic products that utilize Panasonic's domestic industry shows that they are protected by at least claim 1 of the '364 Patent. (Exhibit 31).
- 61. A comparison of information about Panasonic product that utilize Panasonic's domestic industry shows that they are protected by at least claim 1 of the '336 Patent. (Exhibit 32).

#### b. Panasonic's Domestic Industry - Licensing

62. A Domestic Industry, under Subpart (C) of Section 337(a)(3), exists by virtue of a Panasonic's substantial investment in the exploitation of the subject patents.

#### i. Economic Prong

63. Panasonic's substantial investment in the United States in the enforcement and licensing of the Panasonic Patents constitutes a domestic industry. Panasonic invested substantial amounts in the United States towards analyzing third party products in comparison to the Panasonic Patents, and Panasonic has invested substantial amounts in the United States towards negotiating licenses for the Panasonic Patents. (Exhibit 33). In the United States, Panasonic continues to invest in licensing the Panasonic Patents, including investments towards maintenance of the existing licenses and also towards seeking additional licensees of the Panasonic Patents. These investments in licensing constitute a substantial investment in exploiting the Panasonic Patents.

#### ii. Technical Prong

64. Panasonic does not need to make the additional showing that the technical prong of the domestic industry requirement has been satisfied because it is relying on the substantial investment in enforcement and licensing of the Panasonic Patent to satisfy the requirements of the economic prong of the domestic industry requirement.

#### iii. Licenses to the Panasonic Patents

65. As a result of Panasonic's investments in licensing the Panasonic Patents, the '364 Patent and the '336 Patent are licensed for value to the Panasonic Patents Licensees.

(Exhibit 33). The Panasonic Patents Licensees are listed in Confidential Exhibit 34.

#### c. Panasonic's Domestic Industry - Industry of Licensees

66. A Domestic Industry, under Subparts (A), (B) and (C) of Section 337(a)(3), exists by virtue of a Panasonic Patents Licensee's activities related to semiconductor devices that practice one or more of the claims of the Panasonic Patents ("Licensee Devices").

#### i. Economic Prong

- 67. At least one of the Panasonic Patents Licensees, Texas Instruments, Inc. ("Texas Instruments"), has made significant investments in plant and equipment, and employs a significant amount of labor and capital in the United States for the design, development, testing, marketing, sale and service of semiconductor devices that practice the Panasonic Patents, including its LSI chips containing the C64x DSP Core, such as the OMAP family of products. (Exhibit 35, Exhibit 36). Texas Instruments is a semiconductor company that has its headquarters in Dallas, Texas, and employs approximately 9,900 persons in the state of Texas. (Exhibit 35). Texas Instruments invested substantially in a facility for fabricating semiconductor chips in Dallas, Texas. (Exhibit 37, stating, "[Texas Instruments] increases its DSP fab capacity with announcement of a new, \$2 billion DMOS fabrication facility to be built in Dallas primarily for the manufacturing of DSPs."). Additionally, Texas Instruments has made substantial investments in the exploitation of the Panasonic Patents by virtue of its substantial engineering and research and development of semiconductor devices within the United States. (Exhibit 38). A confidential copy of Panasonic's License with Texas Instruments is submitted with this Complaint as Confidential Exhibit 39.
- 68. As a result of its domestic investments, Texas Instruments' introduced semiconductor devices containing its C64x DSP core (including Part Nos. TMS320TCI6488 and

OMAP 1510CGZG2 from the OMAP family of products) for use and sale in the United States. (Exhibit 36).

69. A detailed analysis of Texas Instrument's substantial investment in the United States relating to the Licensee Products is set forth in the declaration in Confidential Exhibit 40.

#### ii. Technical Prong

- 70. A comparison of information about products that include a C64x DSP core manufactured by TI and claim 1 of the '364 Patent shows that Licensee Devices practice at least claim 1 of the '364 Patent. (Exhibit 41).
- 71. A comparison of information about an OMAP product (which includes a C64x DSP core) manufactured by TI and claim 1 of the '336 Patent shows that Licensee Devices practice at least claim 1 of the '336 Patent. (Exhibit 42).

#### VII. SPECIFIC INSTANCES OF UNFAIR IMPORTATION

- 72. On information and belief, Freescale manufactures infringing LSI chips. (Exhibits 7-13). On information and belief, Respondents import into the United States, sell for importation into the United States, and/or sell after importation into the United States infringing LSI chips. (Exhibit 22, Exhibit 23). The specific instances of importation of Accused Products set forth below are a representative example of the unlawful importation and/or sale after importation of infringing products.
- 73. As described in the declaration submitted herewith as Exhibit 45, Complainant purchased and received in the United States representative samples of the infringing Freescale semiconductor devices. More specifically, Freescale LSI chips were purchased and received in the United States from proposed respondents Mouser and Newark, and also within downstream products of proposed respondent Motorola that were purchased and received in the United States. (Exhibit 45).

- 74. Photographs of these sample devices are attached to the declaration in Exhibit 45, respectively. These photographs show that they are marked "MSIA" signifying that they were manufactured in Malaysia, "TAIW" signifying that they were manufactured in Taiwan, "CHINA" signifying that they were manufactured in China, "SNGPR" signifying that they were manufactured in Singapore, "KOREA" signifying that they were manufactured in Korea, and "PHIL" signifying that they were manufactured in Philippines. On information and belief, Physical Exhibits submitted herewith were imported into the United States or sold for importation into the United States, and then sold after importation.
- 75. Upon information and belief, Freescale's infringing LSI chips may be classified under at least 8542 ("Electronic integrated circuits; parts thereof") of the Harmonized Tariff Schedule ("HTS") of the United States. More specifically, the Accused Products may be classified under Subheading No. 8542.31.00 ("Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits"). Upon information and belief Motorola downstream products containing the infringing LSI chips may be classified under at least Subheading No. 8517.12.0050 ("Telephone sets, including telephones for cellular networks or for other wireless networks; other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network), other than transmission or reception apparatus of heading 8443, 8525, 8527 or 8528; parts thereof: Telephone sets, including telephones for cellular networks or for other wireless networks: Other radio telephones designed for the Public Cellular Radiotelecommunication Service"). These HTS numbers are intended for illustration only, and are not intended to be restrictive of the devices and products accused.

#### VIII. OTHER PROCEEDINGS

76. The Panasonic Patents have not been the subject of any court or agency litigation, foreign or domestic.

#### IX. REQUESTS FOR RELIEF

- 77. Respondents have infringed, and will continue to infringe, the Panasonic Patents unless the United States International Trade Commission prohibits the importation into, and the sale in, the United States of Freescale's LSI chips and products containing the same.
- 78. Wherefore, pursuant to ITC Rule 210.12 (a)(10), Panasonic respectfully requests that the Commission:
  - A. Institute an immediate investigation pursuant to Section 337 of the Tariff Act of 1930, as amended, into the proposed Respondents' unfair acts and methods of competition in the importation into the United States, and the sale for importation into the United States, and the sale after importation of the Accused Products that infringe the Panasonic Patents;
  - B. Schedule and conduct a hearing pursuant to Section 337(c) for purposes of receiving evidence and hearing argument concerning whether there has been a violation of Section 337, and following the hearing, to determine that there has been a violation of Section 337;
  - Issue a permanent exclusion order pursuant to Section 337(d) excluding from entry into the United States products, including the Accused Products of
     Freescale, that infringe the Panasonic Patents;
  - D. Issue a permanent exclusion order pursuant to Section 337(d) excluding from entry into the United States products, including the Accused Products of Freescale as distributed by Mouser Electronics, that infringe the Panasonic Patents;

- E. Issue a permanent exclusion order pursuant to Section 337(d) excluding from entry into the United States products, including the Accused Products of Freescale as distributed by Newark, that infringe the Panasonic Patents;
- F. Issue a permanent exclusion order pursuant to Section 337(d) excluding from entry into the United States products, including the Accused Products of Motorola which contain Accused Products of Freescale, that infringe the Panasonic Patents;
- G. Issue a permanent exclusion order pursuant to Section 337(d) excluding from entry into the United States products, including the Accused Products of Freescale and products containing the same imported into the United States by third parties, that infringe the Panasonic Patents;
- H. Issue an order or orders pursuant to Section 337(f) to cease and desist unfair acts and methods of competition, including assembling, testing, marketing, distributing, offering for sale, selling, or otherwise transferring in the United States the Accused Products that infringe the Panasonic Patents; and
- I. Grant such other and further relief as the Commission finds appropriate and just under the law, based upon the facts complained of herein and determined in the investigation and the authority of the Commission.

Dated: April 1, 2010 Respectfully submitted,
Counsel for Complainant
PANASONIC CORPORATION

By: One Of Their Attorneys

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