CANADA

SUPERIOR COURT
(Class action)

PROVINCE OF QUÉBEC
DISTRICT OF MONTRÉAL

No 500-06-000712-147

ARCHIE MARTIN, residing and domiciled at [redacted]

Petitioner

vs

PANASONIC CORPORATION, a legal person, having its principal place of business at 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan;

-and-

PANASONIC CORPORATION OF NORTH AMERICA, a legal person, having its principal place of business at 2 Riverfront Plaza, Newark, NJ 07102;

-and-

PANASONIC CANADA INC., a legal person, having its principal place of business at 5770 Ambler Drive, Mississauga, Ontario L4W 2T3;

-and-

PANASONIC ECO SOLUTIONS CANADA INC., a legal person having its principal place of business at 5770 Ambler Drive, Mississauga, Ontario L4W 2T3,

-and-

SANYO ELECTRIC CO., LTD., a legal person, having its principal place of business at 5-5, Keihan-Hondori, 2-Chome, Moriguchi City, Osaka 570-8677, Japan;

-and-

SANYO ELECTRONIC DEVICE (USA) CORPORATION, a legal person, having its principal place of business at 2055 Sanyo Avenue, San Diego, California 92154;

-and-

TAIYO YUDEN CO., LTD., a legal person, having its principal place of business at 6-16-20, Ueno, Taito-ku, Tokyo 110-0005, Japan;

-and-

TAIYO YUDEN (USA) INC., a legal person, having its principal place of business at 10 North Martingale Road, Suite 575, Schaumburg, Illinois 60173;

-and-

NEC CORPORATION, a legal person, having its principal place of business at 7-1, Shiba 5-chome, Minato-ku, Tokyo 108-8001, Japan;

-and-

NEC TOKIN CORPORATION, a legal person, having its principal place of business at 7-1, Kohriyama 6-chome, Taihaku-ku, Sendai-shi, Miyagi 982-8510, Japan;

-and-

NEC TOKIN AMERICA, INC., a legal person, having its principal place of business at 2460 North First Street, Suite 220, San Jose, California 95131;

-and-

NEC CANADA INC., a legal person, having its principal place of business at 701-5995 Avebury Road, Mississauga, Ontario, L5R 3P9;

-and-

KEMET CORPORATION, a legal person, having its principal place of business at 2835 Kemet Way, Simpsonville, South Carolina 29681;

-and-

KEMET ELECTRONICS CORPORATION, a legal person, having its principal place of business at 2835 KEMET Way, Simpsonville, South Carolina 29681;

-and-

NIPPON CHEMI-CON CORPORATION, a legal person, having its principal place of business at 5-6-4, Osaki, Shinagawa-ku, Tokyo 141-8605, Japan;

-and-

UNITED CHEMI-CON CORPORATION, a legal person, having its principal place of business at 9801 West 25 Higgins Road, Rosemont, Illinois 60018;

-and-

HITACHI CHEMICAL CO. LTD., a legal person, having its principal place of business at Grantokyo South Tower, 1-9-2, Marunouchi, Chiyoda-ku, Tokyo, 100-6606, Japan;

-and-

HITACHI CHEMICAL COMPANY AMERICA, LTD., a legal person, having its principal place of business at 10080 North Wolfe Road, Suite SW3-200, Cupertino, California 95014;

-and-

HITACHI AIC INC., a legal person, having its principal place of business at 065, Kugeta, Moka-Shi Tochigi 321-4521, Japan;

-and-

HITACHI LTD., a legal person, having its principal place of business at 6-6 Marunouchi 1-chome, Chiyoda-ku, Tokyo 100-8280 Japan;

-and-

NICHICON CORPORATION, a legal person, having its principal place of business atKarasumadori Oike-agaru, Nakagyo-ku, Kyoto, 604-0845 Japan;

-and-

NICHICON (AMERICA) CORPORATION, a legal person, having its principal place of business at 927 East State Parkway, Schaumburg, Illinois 60173;

-and-

AVX CORPORATION, a legal person, having its principal place of business at One AVX Boulevard, Fountain Inn, South Carolina 29644;

-and-

RUBYCON CORPORATION, a legal person, having its principal place of business at 1938-1, Nishi-Minowa, Ina-City, Nagano 399-4593, Japan;

-and-

RUBYCON AMERICA INC., a legal person, having its principal place of business at 4293 Lee Avenue, Gurnee, Illinois 60031;

-and-

ELNA CO. LTD., a legal person, having its principal place of business at 3-8-11 Shin-Yokohama, Kohoku-ku, Yokohama, Kanagawa Prefecture, 222-0033, Japan;

-and-

ELNA AMERICA INC., a legal person, having its principal place of business at 879 West 190th Street, Suite 100, Gardena, California 90248;

-and-

MATSUO ELECTRIC CO., a legal person, having its principal place of business at 3-5-Sennari-cho, Toyonaka-shi, Osaka 561-8558, Japan;

-and-

MATSUO ELECTRONICS OF AMERICA INC., a legal person, having its principal place of business at 2134 Mains St., Suite 200, Huntington Beach, CA 92648 USA;

-and-

TOSHIN KOGYO CO., LTD., a legal person, having its principal place of business at Tsukasa Building, 2-15-4 , Uchikanda Chiyoda-ku, Tokyo;

-and-

VISHAY INTERTECHNOLOGY, INC., a legal person, having its principal place of business at 63 Lancaster Avenue, Malvern, Pennsylvania 19355;

-and-

SAMSUNG ELECTRO-MECHANICS, a legal person, having its principal place of business at Gyeonggi-Do Suwon-Si Youngton-Gu Maeyoung-Ro 150 (Maetan-Dong) 443-743, South Korea;

-and-

SAMSUNG ELECTRO-MECHANICS AMERICA INC., a legal person, having its principal place of business at 3333 Michelson Drive, Suite 500, Irvine, California 92612, USA;

-and-

SAMSUNG ELECTRONICS CANADA INC., a legal person, having its principal place of business at 2050 Derry Road West, Mississauga, ON L5N 0B9, Canada;

-and-

ROHM CO., LTD., a legal person, having its principal place of business at 21 Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585 Japan;

-and-

ROHM SEMICONDUCTOR U.S.A., LLC, a legal person, having its principal place of business at 2323 Owen Street, Suite 150, Santa Clara, California 95054;

-and-

TDK CORPORATION, a legal person, having its principal place of business at Shibaura Renasite Tower, 3-9-1 Shibaura, Minato-ku, Tokyo, Japan;

-and-

TDK-EPC CORPORATION, a legal person, having its principal place of business at Shibaura Renasite Tower, 3-9-1 Shibaura, Minato-ku, Tokyo, Japan;

-and-

TDK USA CORPORATION, a legal person, having its principal place of business at 525 RXR, Plaza, Uniondale, NY 11556;

-and-

TDK-EPC CORPORATION OF CANADA, a legal person, having its principal place of business at Suite 4400, 181 Bay Street, Brookfield Place, Toronto ON M5J 2T3, Canada

Respondents

MOTION TO AUTHORIZE THE BRINGING OF A CLASS ACTION AND TO ASCRIBE THE STATUS OF REPRESENTATIVE
(Art. 1002 C.C.P. and following)

TO ONE OF THE HONOURABLE JUSTICES OF THE SUPERIOR COURT OF QUEBEC, SITTING IN AND FOR THE DISTRICT OF MONTREAL, THE PETITIONER STATES THE FOLLOWING:

I. GENERAL PRESENTATION

1. The Petitioner wishes to institute a class action on behalf of the following group, of which he is a member, namely:

   - All persons and entities resident in Quebec who either purchased aluminum, tantalum or film capacitors manufactured by a Respondent or purchased products containing aluminum, tantalum or film capacitors manufactured by a Respondent (the "**Class**") from January 1, 2005 through to the present (the "**Class Period**").

A. The Respondents

2. the Respondents collectively will be referred to as "Respondents" and individually as follows:

AVX

3. The Respondent AVX Corporation ("AVX") was incorporated under Delaware laws. Kyocera Corporation of Japan, headquartered in Kyoto Japan, owns 72% of outstanding AVX common stock. AVX maintains a major global position in tantalum capacitors and a minor competitive position in film capacitors. In 2013, AVX acquired the Respondent Nichicon's tantalum capacitor manufacturing facilities in Japan and China. During the Class Period, AVX, either directly or through its subsidiaries and affiliates, manufactured and/or sold either tantalum capacitors, film capacitors, or both to purchasers around the world including Quebec, the United States and the rest of Canada.

Elna

4. The Respondent Elna Co., Ltd. is Japanese. During the Class Period, Elna Co., Ltd. either directly or through its subsidiaries and affiliates, manufactured and/or sold aluminum and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

5. The Respondent Elna America, Inc., is a wholly owned subsidiary of Elna Co., Ltd., and incorporated under California laws. Elna America Inc., either directly or through its subsidiaries and affiliates, sold aluminum and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

6. The Respondents Elna Co., Ltd. and Elna America, Inc. are referred to collectively herein as "**Elna**".

Hitachi

7. The Respondent Hitachi Ltd. is Japanese. The Respondent Hitachi Chemical Company, Ltd. is Japanese. The Respondent Hitachi Chemical Company, Ltd. is a wholly owned subsidiary of Hitachi Ltd. During the Class Period, Hitachi Chemical Company, Ltd., either directly or through its subsidiaries and affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

8. The Respondent Hitachi AIC Incorporated, is a wholly owned subsidiary of Hitachi Chemical Company, Ltd. and is Japanese. During the Class Period, Hitachi AIC Incorporated, either directly or through its subsidiaries and affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

9. The Respondent Hitachi Chemical Co. America, Ltd., a wholly owned subsidiary of Hitachi Chemical Company, Ltd. and is incorporated under California laws. As of October, 2009, Hitachi Chemical Co. America, Ltd. assumed responsibility for selling Hitachi AIC Inc.capacitors in North America .During the Class Period, Hitachi Chemical Co. America, Ltd., either directly or through its subsidiaries and affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

10. The Respondents Hitachi Chemical Company, Ltd., Hitachi AIC Incorporated, and Hitachi Chemical Co. America, Ltd. are referred to collectively herein as "**Hitachi**".

KEMET

11. Respondent KEMET Corporation was incorporated under Delaware laws. During the Class Period, KEMET Corporation, either directly or through its subsidiaries and affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

12. The Respondent KEMET Electronics Corporation is a wholly owned subsidiary of KEMET Corporation and is incorporated under United States laws. In fiscal year 2013, KEMET Electronics Corporation acquired a 34% economic interest in Respondent NEC Tokin Corporation and its tantalum operations. During the Class Period, KEMET Electronics Corporation, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

13. Respondents KEMET Corporation and KEMET Electronics Corporation is referred to herein as "**KEMET**".

Matsuo

14. The Respondent Matsuo Electric Co., Ltd. is Japanese. During the Class Period, Matsuo Electric Co., Ltd., either directly or through its subsidiaries and affiliates manufactured and/or sold tantalum capacitors, aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

15. Respondent Matsuo Electronics of America, Inc., is a wholly owned subsidiary of Matsuo Electric Co., Ltd. and was incorporated under California laws. During the Class Period, Matsuo Electronics of America, Inc., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

16. The Respondents Matsuo Electric Co., Ltd. and Matsuo Electronics of America, Inc. are referred to collectively herein as "**Matsuo**".

NEC

17. The Respondent NEC Corporation is Japanese. The Respondent NEC Tokin Corporation is Japanese. The Respondent NEC Tokin Corporation is a wholly owned subsidiary of NEC Corporation. On March 12, 2012, KEMET and NEC-Tokin Corporation entered into an agreement whereby KEMET acquired 51% of NEC Tokin Corporation stock. Under the terms of the alliance, KEMET and NEC-Tokin would cross-sell both companies products. During the Class Period, NEC Tokin Corporation, either directly or through its subsidiaries and affiliates, manufactured and/or sold tantalum capacitors to purchasers around the world including the United States and Canada.

18. The Respondent NEC-Tokin America Inc. is a wholly owned subsidiary of NEC-Tokin Corporation and was incorporated under California laws. The Respondent NEC Canada Inc. is a wholly owned subsidiary of NEC Corporation and was incorporated under Canadian laws. During the Class Period, NEC-Tokin America Inc. and NEC Canada Inc. either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors to purchasers around the world including the United States and Canada.

19. The Respondents NEC Corporation, NEC-Tokin Corporation, NEC-Tokin America Inc., and NEC Canada Inc. are referred to collectively herein as "**NEC**".

Nichicon

20. Respondent Nichicon Corporation is Japanese. Nichicon designs, manufactures, and supplies capacitors and capacitor-related products on a global scale. Nichicon is an aluminum capacitor producer and produces plastic film capacitors. Nichicon had a significant line of tantalum capacitors which was the combination of its own operations and the former Tianjin factory of Matsushita Electric Industrial (Tantalum). In fiscal year 2013, Nichicon sold its tantalum operations to the Respondent AVX and exited the tantalum market. During the Class Period, Nichicon Corporation, either directly or through its subsidiaries and affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

21. The Respondent Nichicon (America) Corporation is a wholly owned subsidiary of Nichicon Corporation and incorporated under Illinois laws. During the Class Period, Nichicon (America) Corporation, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

22. The Respondents Nichicon Corporation and Nichicon (America) Corporation are referred to collectively herein as "**Nichicon**".

NCC

23. The Respondent Nippon Chemi-Con Corporation is Japanese. Nippon Chemi-Con Corporation has maintained the number one global market share position for aluminum electrolytic capacitors for more than twenty years and also sells film capacitors. During the Class Period, Nippon Chemi-Con Corporation, either directly or through its subsidiaries and affiliates, manufactured and/or sold aluminum capacitors and film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

24. The Respondent United Chemi-Con, Inc. is a wholly owned subsidiary of Nippon Chemi- Con Corporation, and incorporated under Illinois laws. During the Class Period, United ChemiCon, Inc., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

25. The Respondents Nippon Chemi-Con Corporation and United Chemi-Con, Inc. are referred to collectively herein as "**NCC.**"

Panasonic & Sanyo

26. The Respondent Panasonic Corporation is Japanese. During the Class Period, Panasonic Corporation, either directly or through its subsidiaries and affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors and film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

27. The Respondent Panasonic Corporation of North America is a wholly owned subsidiary of Panasonic Corporation and is incorporated under Delaware laws. The Defendant Panasonic Canada Inc. is a wholly owned subsidiary of Panasonic Corporation and is incorporated under Canadian laws. During the Class Period, Panasonic Corporation of North America and Panasonic Canada Inc., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

28. The Respondent Sanyo Electric Co., Ltd. is a wholly owned subsidiary of Panasonic Corporation, and is Japanese. During the Class Period, Sanyo Electric Co., Ltd., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

29. The Respondent Sanyo Electronic Device (U.S.A.) Corporation is a wholly owned subsidiary of Sanyo Electric Co., Ltd. and is incorporated under United States Laws. The Defendant Panasonic Eco Solutions Canada Inc. is a wholly owned subsidiary of Defendant Panasonic Corporation and is incorporated under Canadian Laws. During the Class Period, Sanyo Electronic Device (U.S.A.) Corporation and Panasonic Eco Solutions Canada Inc. either directly or through its subsidiaries and/or

affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors, and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

30. The Respondents Panasonic Corporation, Panasonic Corporation of North America, Panasonic Canada Inc., Sanyo Electric Co., Ltd., Sanyo Electronic Device (U.S.A.) Corporation, and Panasonic Eco Solutions Canada Inc. are referred to collectively herein as "**Panasonic**".

ROHM

31. The Respondent ROHM Co. Ltd. is Japanese. During the Class Period, ROHM Co. Ltd. either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

32. The Respondent ROHM Semiconductor, U.S.A., LLC, is a subsidiary of ROHM Co., Ltd. and is incorporated under Delaware Laws. During the Class Period, ROHM Semiconductor, U.S.A., LLC, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

33. The Respondent ROHM Company Limited and ROHM Semiconductor U.S.A., LLC, are referred to collectively herein as "**ROHM**".

Rubycon

34. The Respondent Rubycon Corporation is Japanese During the Class Period, Rubycon Corporation, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

35. The Respondent Rubycon America Inc. is a wholly owned subsidiary of Rubycon Corporation and is incorporated under Illinois laws. During the Class Period, Rubycon America Inc., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

36. Rubycon Corporation and Rubycon America Inc. are referred to collectively herein as "**Rubycon**".

TDK

37. The Respondent TDK Corporation is Japanese. During the Class Period, TDK Corporation, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

38. The Respondent TDK-EPC Corporation is Japanese. TDK-EPC Corporation is a TDK group company, is the manufacturer of TDK Corporation's electronic components, modules and systems. TDK-EPC Corporation was founded on October 1, 2009 from the combination of the passive components business of TDK Corporation and EPCOS AG which is German. TDK-EPC Corporation of Canada is a wholly owned subsidiary of TDK-EPC Corporation and is incorporated under Canadian laws. During the Class Period, TDK-EPC Corporation and TDK-EPC Corporation of Canada either directly or through its subsidiaries and/or affiliates, manufactured and/or sold aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

39. The Respondent TDK U.S.A. Corporation is a wholly owned subsidiary of TDK Corporation and is incorporated under New York laws. During the Class Period, TDK U.S.A. Corporation, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold aluminum capacitors and/or film capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

40. The Respondents TDK Corporation, TDK-EPC Corporation, TDK-EPC Corporation of Canada, and TDK U.S.A.Corporation are referred to collectively herein as "**TDK**".

Vishay

41. The Respondent Vishay Intertechnology, Inc. ("**Vishay**") is incorporated under Delaware laws. During the Class Period, Vishay, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum capacitors, aluminum capacitors and/or film capacitors to purchasers around the world including the United States and Canada.

Taiyo Yuden

42. The Respondent Taiyo Yuden Co., Ltd. is Japanese corporation. During the Class Period, Taiyo Yuden Co., Ltd., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum electrolytic capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

43. The Respondent Taiyo Yuden (USA) Inc. is a wholly owned subsidiary of Taiyo Yuden Co., Ltd. and is incorporated under United States laws. During the Class Period, Taiyo Yuden (USA) Inc., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum electrolytic capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

44. The Respondents Taiyo Yuden Co., Ltd., and Taiyo Yuden (USA) Inc. are collectively referred to herein as "**Taiyo Yuden**".

Toshin Kogyo

45. The Respondent Toshin Kogyo Co., Ltd., is Japanese. During the Class Period, Toshin Kogyo Co., Ltd., either directly or through its subsidiaries and/or affiliates, manufactured and/or sold aluminum and tantalum electrolytic capacitor products to purchasers around the world including the United States and Canada.

46. Toshin Kogyo Co., Ltd., is referred to herein as "**Toshin Kogyo**".

Samsung

47. The Respondent Samsung Electro-Mechanics is South Korean. Samsung Electro-Mechanics is a wholly-owned subsidiary of Samsung Group, a South Korean chaebol which is a business conglomerate. During the Class Period, Samsung Electro-Mechanics, either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum electrolytic capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

48. The Respondent Samsung Electro-Mechanics America, Inc. is a subsidiary of Samsung Electro-Mechanics and is incorporated under California laws. During the Class Period, Samsung Electro-Mechanics America, Inc. either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum electrolytic capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

49. The Respondent Samsung Electronics Canada Inc. is incorporated under Canadian laws. Samsung Electronics Canada Inc. is a wholly-owned subsidiary of Samsung Group, a South Korean *chaebol* which is a business conglomerate. During the Class Period, Samsung Electronics Canada Inc. , either directly or through its subsidiaries and/or affiliates, manufactured and/or sold tantalum electrolytic capacitors to purchasers around the world including Quebec, the United States and the rest of Canada.

50. The Respondents Samsung Electro-Mechanics, Samsung Electro-Mechanics America, Inc., and Samsung Electronics Canada Inc. are together referred to herein as **"Samsung"**.

51. The internal workings, communications, and corporate arrangements amongst the two or more unit business entities collectively referred to as Elna, Hitachi, KEMET, Matsuo, NEC, Nichicon, NCC, Panasonic, ROHM, Rubycon, TDK, Taiyo Yuden, and Samsung are kept secret, require document disclosure, and questioning to identify the actions of each unit corporation, and the unlawful conduct described herein is imputed to each defined collection of unit corporations and to each unit corporation.

B. General Facts:

Capacitors

(a) what capacitors do and how they work

55. Capacitors are electronic components that serve as one of the fundamental building blocks of all types of electrical circuits. Virtually every electrical circuit contains one or more capacitors. In the taxonomy of electrical components, capacitors are categorized as "passive" components. That is, capacitors do not require electrical power to operate. Instead, the physical properties of the materials that compose a passive component cause it to perform the task for which it is employed.

56. Generally, a capacitor is used in an electric circuit to store electrical charge. In this regard, it is distinguished from a battery in that a battery provides electrical charge to a circuit. Capacitors can store charges for long periods of time, even when removed from an electric circuit, and they can charge and discharge fully and instantaneously when required to do so. The amount of charge the capacitor can hold at a given voltage defines its capacitance.

57. In its basic form, a capacitor consists of two or more parallel conductive metal plates that are neither connected to nor touching each other, but are electrically separated by some form of insulating material. The insulating layer between a capacitor's plates is commonly called the dielectric. When a voltage is applied to the two plates, an electric field is created between them; positive charge will collect on one plate and negative charge on the other. The dielectric, a non-conductive material, does not permit the electric current to flow between the metal plates.

58. One way to visualize how a capacitor stores a charge is to imagine it as a municipal water tower hooked into a town's water supply. A water tower "stores" water pressure. When the water system pumps produce more water than a town needs, the excess is stored in the water tower. Then, at times of high demand, the excess water flows out of the tower to keep the pressure up. A capacitor stores electrical charge in the same way and can then release it when an electric circuit requires a charge to execute a task.

59. The most commonly used dielectrics used in capacitors are composed of ceramics, aluminum, film, or a rare metal called tantalum.

(b) types of capacitors and their uses

60. Capacitors are usually distinguished from each other by whether they are electrolytic or electrostatic. Electrolytic capacitors are polarized, meaning that they have positive and negative leads that must be positioned the correct way in an electric circuit (i.e., the positive lead, the cathode, must go to the positive side of the power source, and the negative lead, or anode, must go to the negative side).

61. In contrast, electrostatic capacitors are not polarized (i.e., they do not have a positive and negative leads) and therefore can be installed in either direction with respect to the flow of current. Electrolytic capacitors have historically been considered to have higher capacitance than electrostatic capacitors. Due to their ability to hold larger charges, electrolytic capacitors have typically been used for power filtering, coupling, or buffering in sophisticated electrical devices, such as televisions, computers, mobile phones, smart phones, tablets, and technology used by the medical, military industrial and aerospace industries.

62. Film capacitors or plastic film capacitors are non-polarized capacitors with an insulating plastic film as the dielectric. The dielectric films, depending on the desired dielectric strength, are drawn in a special process to an extremely thin thickness, and are then provided with electrodes. The electrodes of film capacitors may be metalized aluminum or zinc applied directly to the surface of the plastic film, or a separate metallic foil overlying the film. Two of these conductive layers are wound into a cylinder shaped winding, usually flattened to reduce mounting space requirements on a printed circuit board, or layered as multiple single-layers stacked together, to form a capacitor body.

63. Electrolytic and electrostatic capacitors are further distinguished within these two categories by the material from which their dielectrics are made. Electrolytic capacitors use aluminum or tantalum dielectrics, whereas ceramic capacitors are electrostatic.

i) Electrolytic Capacitors

1. Aluminum Capacitor

64. Aluminum electrolytic capacitors are made of two aluminum foils and a paper spacer soaked in electrolyte. One of the two aluminum foils is covered with an oxide layer serving as the dielectric, and that foil acts as the anode, while the uncoated foil acts as a cathode. The anode, electrolyte-soaked paper and cathode are stacked. The stack is then wound up, placed into a cylindrical enclosure usually made of aluminum and connected to an electric circuit through surface mounting on printed circuit boards ("**PCBs**") or attached by radial or axial pins.

65. The thinness of the aluminum oxide layer dielectric allows for relatively high capacitance, though an aluminum capacitor's capacitance can only increase by increasing the surface area covered by the dielectric. This requires additional stacking and winding of the foil layers, thus increasing the capacitors' physical size. As a result, aluminum capacitors typically have lower volumetric efficiency than tantalum or certain types of ceramic capacitors. Further, aluminum capacitors have a higher propensity to leak the charge they hold as opposed to tantalum and certain types of ceramic capacitors.

66. Aluminum capacitors frequently are used in a variety of larger electronic devices, such as consumer audio and video devices, televisions, video game consoles, desktop and laptop computers, automotive electronics and power inverters.

2. Tantalum Capacitors

67. Tantalum capacitors exploit the tendency of tantalum metal to form a non-conductive protective oxide surface layer. They consist of tantalum powder sintered (i.e., formed by high pressure) into a pellet shape, often called a "sponge", as the negative plate of the capacitor, with the tantalum pentoxide forming on the pellet's surface serving as the dielectric, and an electrolytic solution or conductive solid serving as the positive plate. The dielectric layer thus can be very thin—thinner than the similar layer in, for instance, an aluminum electrolytic capacitor. Accordingly, a tantalum capacitor can have high capacitance in a small volume, and thus can have high volumetric efficiency. Tantalum capacitors historically have primarily been used in the computer end market, as well as the telecommunications end market.

68. Tantalum capacitors are, however, susceptible to short-circuiting or catastrophic thermal runaway failure and destruction by fire if subject to inconsistent voltage or voltage spikes, as such inconsistencies can tax and break down the capacitor's extremely thin dielectric. Aside from the risk of catastrophic failure, tantalum capacitors are generally reliable. They have high resistance to leaking charge and have lower equivalent series resistance (i.e., the speed at which electric charge is released from the capacitor) than aluminum electrolytic capacitors of the same capacitance rating. Accordingly, tantalum capacitors at times are used in complex electronic devices in which their small size and high capacitance are required, e.g., mobile phones, smart phones, personal computers, tablet devices and automotive electronics.

69. The Respondent tantalum capacitor manufacturers have, at various times over the last decade, claimed that shortages of raw tantalum ore have caused the high prices for their capacitors and the longer lead times for their production. Specifically, Respondents raised supply shock concerns to industry analysts and the investing public at various times in 1997, 2000, 2008, 2011 and 2012 based on concerns that certain tantalum mines were closing, other mines were not producing ore at the necessary levels, and the worry that tantalum's designation as a "conflict mineral" under Section 1502 of the *Dodd-Frank Wall Street Reform and Consumer Protection Act* H.R.4173 (**"Dodd-Frank"**) would reduce their access to ore and/or would increase the market premium for conflict-free tantalum ore. Dodd- Frank requires that companies sourcing tantalum use independent private sector auditors to audit their supply chains and submit annual conflict minerals reports to the Securities and Exchange Commission.

70. The availability and cost of tantalum ore, along with the numerous steps required to manufacture tantalum capacitors, has been explained by Respondents and some industry analysts as the reason why these capacitors have historically been so expensive. As a result, the use of tantalum capacitors is usually limited to applications where the specific high capacitance they provide is required.

3. Ceramic Electrostatic Capacitors

71. A ceramic capacitor is a non-polarized capacitor made out of two or more alternating layers of ceramic and metal in which the ceramic material acts as the dielectric and the metal acts as the electrodes. The ceramic dielectric is a mixture of finely ground granules of paraelectric or ferroelectric materials, modified by mixed oxides that are necessary to achieve the capacitor's desired characteristics. The great plasticity of ceramic raw material enables manufacturers to produce an enormous diversity of styles, shapes and dimensions of capacitors. Because the thickness of the ceramic dielectric layer can be easily controlled and produced by the desired application voltage, ceramic capacitors are available with rated voltages up to the 30 kV range. Currently, the smallest discrete ceramic capacitor is about the physical size of the head of a pin, though advances in materials science and refinement of manufacturing processes may eventually permit fabrication of even smaller components.

72. The most prevalent form of ceramic capacitor is known as a multilayer ceramic capacitor ("**MLCC**"). Industry analysts report that for fiscal year 2014, MLCCs are estimated to account for approximately 95% of the global ceramic market in terms of volume and approximately 94% in terms of value. MLCCs are constructed with alternating layers that result in single capacitors connected in parallel. This method, called "stacking" increases the component's capacitance because its surface area is increased by stacking up multiple layers of ceramic dielectric materials and metal electrode materials.

73. Technological and material advancements have permitted manufacturers to increase the number of layers in MLCCs while at the same time miniaturizing the components. The result of these improvements is that MLCCs tend to have higher greater volumetric efficiency than aluminum electrolytic capacitors, and can also compete with tantalum electrolytic capacitors in small form factor applications. Both aluminum and tantalum electrolytic capacitors, however, must increase in physical size to increase capacitance. The capacitance of aluminum electrolytic capacitors can be increased only through tightly winding aluminum metal foil, thereby increasing the surface area as well as the total size of the component. In similar fashion, capacitance in tantalum electrolytic capacitors is increased only by expanding the size of the tantalum pellet in the capacitor, which in turn increases the total size of the capacitor.

74. Currently, MLCCs typically cost only a fraction of aluminum or tantalum electrolytic capacitors. Ceramics, however, are not an easy cure for purchasers seeking to save costs on the electronic devices they produce that require high capacitance in a small form factor, e.g., mobile phones, smart phones and tablet computers. This is because electric circuits are designed to accommodate specific types of active and passive components with specific technical and operational characteristics, ceramic capacitors cannot immediately be integrated into PCBs or other types of circuits that require either aluminum or tantalum electrolytic capacitors. Stated differently, capacitors with differing capacitance, dielectric and form factor are not interchangeable with each other. Redesigning and re-engineering a product's electrical circuits is therefore required to accommodate any changes to the electrical components contained within them. This is a lengthy, resource-intensive effort that requires a product manufacturer essentially to redesign a product and change and redefine its supply chain resources, all while still working to meet ongoing demand for its finished products.

75. Tantalum capacitors, aluminum capacitors, and film capacitors manufactured and/or sold either directly or through the subsidiaries and affiliates of the Respondents are referred to collectively herein as "**Capacitors**".

76. Any products containing Capacitors is referred to herein as "**Capacitors Products**".

Market Conditions

77. Generally, capacitors are purchased by one of three categories of purchasers: (1) original equipment manufacturers ("**OEMs**") who install capacitors directly into their products; (2) electronic manufacturing service providers ("**EMS Providers**") who manufacture PCBs and other electric circuit products that contain capacitors and which are integrated into end-use products manufactured by others; and (3) third-party electronics distributors that sell capacitors to various consumers.

78. The demand for capacitors over the last decade has been largely tied to the demand for consumer electronics, which currently accounts for approximately 90% of global unit demand. The computer end-use market segment historically has accounted for a significant portion of global capacitor consumption, but that segment has experienced decreasing sales of high-passive component content laptops and desktops in recent years. Industry analysts have indicated that declining demand for these products has negatively impacted the demand for tantalum and aluminum capacitors, which have historically derived close to 50% of their revenues from the computer market. In addition, the consumer audio-video

segment, which has also historically accounted for a significant portion of global capacitor consumption, has also faced significant decreasing sales over the last decade due to portable music devices, tablets, and smart phones meeting modern consumers' audio-visual needs. The fall off of the audio-visual market had a significant impact on the demand for aluminum electrolytic capacitors.

79. Over the past decade, ceramic electrostatic capacitors have outperformed the other primary capacitor dielectrics (specifically the tantalum and aluminum electrolytics) in terms of volume of products globally consumed and the value of that demand. In terms of volume, industry data shows that unit consumption of ceramic capacitors over the last decade has increased 7%, from approximately 84% for fiscal year 2004 to an estimated 91% for 2014. During the same period, consumption of tantalum electrolytic capacitors dropped from approximately 2.5% of global volume for fiscal year 2004 to an estimated 1.1% for 2014, and consumption of aluminum electrolytic capacitors dropped from approximately 9.9% for fiscal year 2004 to an estimated 6.8% for fiscal year 2014.

80. The value of the tantalum electrolytic capacitors sold over the last decade has declined from approximately 12.6% of the global value for fiscal year 2004 to an estimated 10.4% for 2014, while the global value of aluminum electrolytic capacitors has declined from approximately 33.1% for fiscal year 2004 to an estimated 22.6% for 2014.

81. The North and South American market for capacitors accounts for approximately $2.2 billion for fiscal year 2014, or roughly 12 percent of the global market. Ceramics account for approximately 47% of capacitor consumption in the Americas, followed by aluminum capacitors with approximately 17%, and tantalum capacitors with 14%.

82. Aluminum and tantalum electrolytic capacitor manufacturers have faced stagnant and/or reduced demand over the last decade. With specific regard to aluminum electrolytic capacitors, purchasers began to find them too volumetrically inefficient to be useful in many electronic devices sold today. Historically, most electronic devices have been larger physically than they are today. In the past, the larger footprint required by aluminum capacitors on PCBs found in devices such as televisions, stereo equipment, and personal computers was not problematic.

83. With the development of technologies and processes that allowed manufacturers to miniaturize certain types of capacitors while, at the same time, increasing their volumetric efficiency, manufacturers of electronic devices began to design and produce smaller, more portable and more functionally integrated products that met, if not surpassed, the complexity of predecessor devices that used aluminum capacitors. For many consumer-focused devices, e.g., smart phones, tablet computers, laptop computers, personal navigation devices, smaller capacitors with greater capacitance had to be used to execute the various complex tasks for which the devices were employed. Since many of these new electronic devices have essentially come to replace the devices that historically used bulky aluminum capacitors, e.g., tablets, smart phones, and personal music devices replacing televisions, personal computers and stereos, the market for aluminum electrolytic capacitors was relatively stagnant as of late 2004 and noticeably declined starting in late 2007 to early 2008.

84. With specific regard to tantalum electrolytic capacitors, demand declined over the last decade in large part because they were often unavailable and, as a result, expensive. Though tantalum electrolytic capacitors have a high volumetric efficiency and other operational characteristics often desired by OEMs and EMS Providers for use in small form factor applications, many purchasers over time came to expect that their demand for tantalum capacitors could not be economically met.

85. Manufacturing tantalum electrolytic capacitors is a labor and resource-intensive process. Industry sources have noted there are over 70 steps required to be taken to manufacture a tantalum electrolytic capacitor. The manufacturing process for these capacitors is completely different from that required for

making aluminum electrolytic or even ceramic capacitors, and it requires different raw materials, supply chains, and fabrication operations. Further, the limited availability of tantalum ore, especially when compared to availability of raw materials required to make other capacitors, has been claimed by tantalum capacitor manufacturers as a cause for limited production and high costs.

86. Many capacitor purchasers make products that specifically require tantalum electrolytic capacitors and the electrical circuits incorporated in these products cannot be redesigned and re-engineered to use any other capacitors. As a result, these purchasers have no choice but to weather the availability and cost issues attendant to using tantalum capacitors. Other purchaser's products, however, are not solely dependent on the specific performance tantalum capacitors provide the electric circuits they employ. In those instances, purchasers over time undertook the lengthy and resource intensive effort to redesign and re-engineer the electric circuits they employ in their manufactured products to incorporate more available and affordable capacitors containing dielectrics other than tantalum. This gradual, and therefore not immediate, process accounts for much of the decrease in demand for tantalum electrolytic capacitors over at least the last decade.

87. The decline in demand for both aluminum and tantalum electrolytic capacitors began in early 2000s, though it became more pronounced when the global economy crashed starting in late 2007. The global financial crisis caused consumer demand at all levels, globally and domestically, to fall significantly. According to industry data, consumption for capacitors dropped nearly 10% globally between fiscal year 2008 and 2009. Though economic stimulus packages orchestrated by the United States, Canada, China, and EU countries caused some growth in the volume of capacitors consumed in fiscal year 2011, global consumption still dropped year over year approximately 7% in 2012 and 14% in 2013.

88. By the close of fiscal year 2008, global consumption for aluminum electrolytic capacitors had already declined approximately 14% from 2005. This decline has continued to the present day, with consumption in 2014 estimated to be approximately 30% lower than it was in 2005. Similarly, by the close of fiscal year 2008, global consumption for tantalum capacitors dropped approximately 37% from 2005, and with consumption in 2014 estimated to be approximately 53% less than it was in 2005.

89. Capacitors are generally considered to be commodity products to the extent that similarly rated capacitors can be substituted for each other. However, Japanese and U.S. manufactured capacitors have been able to demand a premium over Chinese and Taiwanese manufactured capacitors because of their superior quality.

90. Historically, the two main problems with aluminum capacitors have been the use of a bad sealing (the seal that holds the wrapped foil/electrolyte in the canister) and the use of a bad electrolyte (the dielectric gel that separates the foils). Bad sealing will allow the electrolyte to leak or evaporate. A bad electrolyte can vaporize prematurely. When the electrolyte vaporizes, the capacitor will fail and may even explode. Once the capacitor fails, the product incorporating the capacitor will stop working or in some instances will self-destruct. For example, a computer power supply is designed to ensure that constant low voltages are supplied to the components in a computer. When a power supply capacitor fails, the result may be that voltages with huge fluctuations are passed on to the computer which can burn out motherboards, hard disk drives and other components.

91. Around October 2002, mainstream electronics journals began reporting widespread failures of capacitors sourced from Taiwan. The problem of low cost capacitors failing became known as "capacitor plague" and over the next several years such failures spread throughout the electronics industry. However, while Chinese and Taiwanese manufactured capacitors became infamous for using inferior electrolytes and inferior sealing, leading to premature failure, Japanese and U.S. manufactured capacitors earned a reputation for above-average quality (good electrolytes and good sealing) and long product life.

92. Canadian and U.S. demand for capacitors is different from demand in Asia to the extent that Canadian and U.S. Capacitor Product manufacturers focus on producing high cost durable products. Accordingly, Canadian and U.S. Capacitor purchasers and Capacitor Product manufacturers are less price sensitive than Asian purchasers because capacitor failures in their products can result in significant repair costs. For example, by 2005, Dell, a U.S. Capacitor Product manufacturer, spent approximately $420 million to fix problems caused by faulty capacitors it had installed in a three year period in over 11 million computers. Considering that capacitors are a comparatively small cost, Canadian and U.S. Capacitor Product manufacturers have been willing to pay a premium in order to protect their reputations and ensure product longevity.

93. While Japanese and U.S. Capacitor manufacturers had enjoyed a price premium over their Chinese counterparts, their ability to charge a premium began to did begin to falter in 2005 and especially in the wake of the 2007 economic downturn. As a result, Japanese and U.S. Capacitor manufacturers sought to take advantage of their market position by agreeing among themselves to raise the prices of their Capacitors.

94. Information from the U.S. International Trade Commission demonstrates that Japanese Capacitor manufacturers were able to charge an increasing premium for their aluminum capacitors as a result of their anticompetitive conspiracy from at least 2005 through to the present. U.S. Capacitor manufacturers were also able to charge similar premiums for their aluminum capacitors. Beginning in approximately January 2008, following the recession, the price gap between Japanese sourced aluminum capacitors and Chinese sourced capacitors significantly widened. This gap was the result of the collusion and unlawful conduct described within this Claim.

95. Information from the U.S. International Trade Commission demonstrates that a similar price gap as described in the aforementioned paragraph occurred with respect to the spread between Japanese sourced tantalum capacitors and capacitors sourced from other foreign manufacturers. Moreover, due to the correlation in pricing among tantalum capacitors and film capacitors, by no later than 2009, the Respondents were also able to impose supra-competitive prices for their film Capacitors.

Respondents' Anticompetitive Practices

96. In the context of this marked decline in demand for aluminum and tantalum electrolytic capacitors since at least the early 2000s, any price competition among the Respondents for the mutually interchangeable and substitutable components they produce would be sure to reduce any profitability they could hope to reap from these product markets. Specifically, given the significant costs related to running Respondents' respective capacitor manufacturing operations, keeping abreast of technological change and innovation, as well as the ongoing variable costs of raw materials, labor and distribution chain operations, Respondents' profit margins on aluminum and tantalum electrolytic capacitors would, by the operation of basic principles of economics, grow thinner if they were required to compete against each other for sales.

97. At least prior to the beginning of 2005, each of the Respondent were aware of the significant market share each of them held, both individually and collectively, in the mature, yet declining market for aluminum and tantalum electrolytic capacitors. Relatedly, each of the Respondents were also aware of the inability of capacitor manufacturers with smaller market share to successfully compete against them and meet market demand due to their evident capacity and resource constraints.

98. Additionally, at least prior to the beginning of 2005, Respondents were aware that their aluminum and tantalum electrolytic capacitors products of like capacitance, dielectric and form factor are in most instances mutually interchangeable for each other. For example, one manufacturer's aluminum electrolytic capacitors of a given capacitance and form factor often can be substituted for another

manufacturer's aluminum capacitors with the same capacitance and form factors; the same goes for tantalum electrolytic capacitors produced by different manufacturers with the same capacitance and form factors. Aluminum electrolytic capacitors, however, are not mutually interchangeable with tantalum electrolytic capacitors, and vice versa.

99. Further, Respondents were also aware of how fundamentally necessary capacitors are to the function of electric circuits, and how other types of passive electrical components (e.g., inductors, resistors) cannot serve as a substitute for or a functional equivalent to an aluminum or tantalum electrolytic capacitor.

100. Finally, Respondents were aware that all types of purchasers OEMs, EMS Providers and third-party distributors, are almost always committed to inflexible production or delivery deadlines to their respective customers, and therefore would incur any price increases on the capacitors they required to avoid the usually greater cost of production delays.

101. In their collective and individual consideration of the market conditions, the Respondents agreed to operate as a cartel to foreclose competition and protect each of its members from price competition. By forming this cartel, the Respondents intended to wring as much profitability out of the aluminum and tantalum electrolytic capacitors market as possible before their product portfolios for these capacitors becomes technologically obsolete or becomes consigned to the comparatively unprofitable niche market.

102. The Respondents together reached an agreement to act in concert and fix prices and reduce output on aluminum and tantalum electrolytic capacitors some time before, and in any event, no later than, January 1, 2005. This agreement was reached through both oral and written communication among executives, officers, sales representatives and employees of the Respondent companies. The exchanges of these communications occurred in person, through electronic or paper correspondence, text messaging or telephonic or video communications in the period preceding the beginning of the Class Period.

103. The specific date upon which the Respondents' cartel and their collusive behavior commenced (assuming it is even capable of determination given the nature of secret conspiracies) is information known only to the Respondents.

104. The Respondents intended to restrain trade in aluminum and tantalum electrolytic capacitors primarily in two ways.

1. First, the Respondents agreed to end price competition among themselves as to their respective aluminum and tantalum electrolytic capacitors product portfolios by acting in concert and fixing, raising, maintaining, or stabilizing the prices for these products, thereby removing the prices offered to purchasers from a competitive market.

2. To achieve their collective goal of artificially setting the price for their respective aluminum and tantalum electrolytic capacitor product portfolios, each of the Respondents shared with each other, either through correspondence or during in-person meetings, confidential and competitively sensitive information pertaining to their product pricing. By way of illustration and not limitation, the Respondents shared, among other things, information pertaining to the fixed and variable costs that impacted their product pricing. With knowledge of each other's competitively sensitive information, the Respondents were able to collectively determine and coordinate the pricing for the mutually interchangeable products in their respective capacitor portfolios.

105. The Respondents were able to maintain the concerted pricing on their aluminum and tantalum electrolytic capacitors through regular interaction with and communication among members of the cartel on the topic of pricing, and by publishing pricing information and cross-reference materials (i.e., charts or other materials that identify which capacitors of a given Respondent are mutually interchangeable for capacitors of another Respondent) and sharing them with both the public and Respondents' largest third-party authorized distributors, most of whom distribute capacitors for a significant number of Respondents.

106. If at any time any of the Respondents priced any of its portfolio products outside the cartel's coordinated pricing, the Respondent would become aware either through notice from its fellow cartel members or from its largest third party authorized distributors. The pricing for the product at issue would then adjust back to the price determined by the cartel's members.

107. The Respondents had ancillary agreements with third party distributors and other entities to ensure that the pricing and supply of their Capacitors was coordinated and the terms and conditions of the same required third party distributors and other entities to report their sales to the Respondents and control the prices they charged to purchasers of Capacitors.

108. Respondents' concerted pricing has gone unnoticed to date for many reasons, including, by way of example and without limitation:

1. the sheer number and variety of aluminum and tantalum electrolytic capacitors in Respondents' respective product portfolios makes it difficult for purchasers to track market-wide movement in pricing, especially when purchasers are primarily interested in only products with a specific capacitance, dielectric and form factor;

2. pricing for these capacitors changes frequently; and

3. noncompetitive pricing is masked at times by high volume sales of these commoditized products, in which bulk purchasers may receive volume discounts.

109. Aside from concertedly setting non-competitive prices for their aluminum prices, the Respondents also agreed to concertedly quote product lead times to purchasers. This permitted the Respondents to meter out the supply of their mutually interchangeable products available on the market, thereby keeping demand high and, at times, unmet.

110. The Respondents agreed to restrain their output in an effort to curb the practice of certain purchasers who would buy large lots of products from the Respondents when prices appeared to be low, but would abstain when prices were higher. The Respondents intended their practice of quoting similar production lead times for their mutually interchangeable products to smooth out the inconsistent volume of purchases by these purchasers. At the same time, the Respondents intended this practice to complement their efforts to artificially maintain a non-competitive price for their products.

111. To achieve the cartel's goal of quoting uniform production lead times to purchasers, the Respondents regularly interacted and communicated with other Respondents in the cartel on the topic of product lead times.

112. The Respondents regularly provided to purchasers and the public pretextual excuses for the increase of production lead times, such as problems obtaining raw materials (e.g., tantalum ore) necessary for production, shipping delays, and production delays caused by natural disasters (e.g., the 2011 Tohoku earthquake and tsunami, typhoons in Asia, flooding in Thailand and other countries where Respondents' capacitor manufacturing facilities are located). Since the justifications the Respondents provided for

long production lead times were credible, customers were lulled into believing them, despite the Respondents' conspiracy. The Respondents concertedly coordinated to lengthen these production lead times unjustifiably in order to foster the cartel's scheme to maintain noncompetitive prices for the Respondents' aluminum and tantalum electrolytic capacitors.

113. The effects of Respondents' concerted and collusive actions were significant and, in fact, were counter to what the market would expect given the comparative and continual decline in demand for aluminum and tantalum electrolytic capacitors that began in the early 2000s. Notably, industry and government data suggests that per unit prices for aluminum and tantalum electrolytic capacitors began to stabilize in 2005.

114. From 2005 to present, industry data shows that per unit prices for tantalum electrolytic capacitors have increased approximately $0.008, or $8.82 per thousand.

115. In 2005, aluminum electrolytic capacitors began to stop their price decline from approximately $55.06 per thousand in 2003. In 2005, industry data shows that the price per unit for aluminum electrolytic capacitors was $46.76 per thousand units, and their per unit price hovered between approximately $40.00 and $46.00 per thousand until 2013. In effect, the Respondents' conspiracy permitted manufacturers of aluminum electrolytic capacitors (the Respondents herein) to slow the market-driven decline in price for their products, and to fix prices at supracompetitive levels.

Industry Characteristics Indicating and Facilitating Respondents' Conspiracy

116. For at least as long as the Class Period, the aluminum and tantalum electrolytic capacitor industry has demonstrated numerous characteristics that have served to facilitate the Respondents' conspiracy. By way of illustration and not limitation, the industry has exhibited (1) market concentration among a limited number of participants; (2) high barriers to entry for new market participants; (3) mutual interchangeability of the Respondents' products; (4) inelasticity of demand; (5) commoditization; (6) weak demand in a mature market; (7) a large number of purchasers with limited purchasing power; and (8) ease of information sharing among the Respondents.

1. Market Concentration

117. Despite the ascendency of ceramic capacitors as the dominant product in the global capacitors market, the market for aluminum and tantalum electrolytic capacitors remains quite significant. In 2004, the global volume of aluminum and tantalum electrolytic capacitors consumed was approximately 12% of the market. Consumption for 2014 is estimated to be approximately 8% of global volume. The revenues for these sales, given the higher per unit price of both aluminum and tantalum electrolytic capacitors relative to ceramic capacitors, is estimated to be $6 billion for fiscal year 2014 alone. Industry data shows that aluminum and tantalum capacitors together currently account for approximately 31% of North and South American capacitor consumption (most of which are presumably consumed in North America), which is valued at approximately $680 million.

118. Market power in the aluminum and tantalum electrolytic manufacturing industry itself is highly concentrated and is a fact that is conducive to the type of collusive activity alleged herein.

119. Though there are a relatively large number of companies that produce aluminum electrolytic capacitors and sell them into the global and Canadian markets, significant market power is concentrated in the Respondents. In all, industry data show that the 13 largest manufacturers of aluminum electrolytic capacitors account for approximately 92% of the market's current revenue. Specifically, industry analysts report that Respondents NCC, Nichicon, Rubycon, Panasonic, AVX and Elna currently together hold approximately 65% of the global market. Adding in the smaller market shares of the

Respondents Hitachi, Matsuo and Toshin Kogyo, the Respondents' collective share in the aluminum electrolytic capacitors market is approximately 70%.

120. Given the relatively small market share (i.e., mostly 3% or less) and capacity constraints of the other (non-Respondent) companies selling products in the global aluminum electrolytic capacitors market, the Respondents' concerted actions have impacted pricing and output in the aluminum capacitor market during the Class Period. There was not a reasonable threat that manufacturers who were not members of the cartel could undercut the cartel's concerted pricing and meet all or a significant part of market demand for mutually interchangeable aluminum capacitors at more competitive prices.

121. Industry data show that the seven largest manufacturers of tantalum electrolytic capacitors account for approximately 95% of the global market's current revenue. Industry analysts report that Respondents KEMET, NEC, Panasonic, AVX, Vishaym, Samsung, and ROHM together currently hold approximately 90% of the global market.

122. Given the relatively small market share (i.e., mostly 3% or less) and capacity constraints of the other companies selling products in the global electrolytic capacitors market, the Respondents' concerted actions have impacted pricing and output in the tantalum capacitor market during the Class Period. There was not a reasonable threat that manufacturers who were not included in the cartel could undercut the cartel's concerted pricing and meet all or a significant part of market demand for mutually interchangeable capacitors at more competitive prices.

2. High Barriers to Entry

123. In a market free of price fixing, higher profits draw in other market participants who wish to capture a share of profits. Where members of a cartel conspire to raise prices in a market, those higher prices generate higher profits for the cartel's members. In industries characterized by substantial barriers to entry, however, cartel members may be able to raise prices to supracompetitive levels and reap high levels of profits.

124. Companies seeking to manufacture and sell aluminum and tantalum electrolytic capacitors without having any prior involvement in the capacitors market face various significant barriers to their entry.

125. The electrolytic capacitors manufacturing industry is a mature one dominated by established corporations, each having diverse product portfolios, multinational operations and global market reach. These companies have significant experience in the global capacitors industry and established reputations with both sellers of raw materials and purchasers of finished capacitors. These companies typically have access to significant financial resources that not only allow them to commit the capital necessary to bring online new fabrication operations and facilities or to expand/retrofit existing ones to meet market demand and adjust to technological changes, but also to establish and secure necessary supply chain commitments for all raw materials they require. The Respondents are all established manufacturers in the electrolytic capacitors industry.

126. For a prospective capacitor manufacturer, setting up competitive manufacturing operations and supply chain operations is a significant financial and logistic hurdle to market entry. A new entrant seeking to build electrolytic capacitors fabrication operations and facilities faces not only the sizeable cost of building fabrication plants, but also the costs of acquiring the necessary production technology, hiring and retaining skilled and knowledgeable manpower, and securing the raw materials and supply chain commitments necessary to manufacture competitive products. These costs would exceed hundreds of millions of dollars. Many of the Respondent manufacturers have developed internal processing capabilities for raw materials and have established relationships with raw materials producers that all but insure that their requirements will be met.

127. These hurdles, however, are not the only barriers a new market entrant faces. For a new market entrant consistently to products and sell competitively and to create and sustain a diverse product portfolio, it must invest in substantial research and development operations. Additionally, the new entrant must create and maintain global sales and marketing operations so that its products can be attractive to capacitor purchasers and disrupt their existing relationships with the established electrolytic capacitor manufacturers.

128. Ultimately, to be competitive, a new market entrant has to commit to significant financial and operational undertakings to establish itself in an industry where, in the absence of any price manipulation, profit margins are not large and economies of scale must be achieved in order to reach profitability. Moreover, because the global demand for capacitors has shifted significantly in favor of ceramics over the last decade, a new market entrant's commitment of the necessary financing and resources to establish itself in the electrolytic capacitors market would be fraught with risk.

129. The fact that no new manufacturers have begun producing exclusively aluminum or tantalum electrolytic capacitors in well over a decade, other than through acquisition of companies or business units already producing specific electrolytic capacitor products, strongly suggests that the electrolytic capacitors market is foreclosed to new competition.

3. Mutual Interchangeability of Respondents' Electrolytic Capacitors

130. As noted above, capacitors of like capacitance, dielectric, and form factor are mutually interchangeable. A specific aluminum or tantalum electrolytic capacitor manufactured by one of the Respondents therefore can be exchanged for a product of another Respondent with the same technical and operational specifications. There are no other defining physical characteristics that differentiate Respondents' various aluminum or tantalum electrolytic capacitor products from each other.

131. Respondents are aware of the fungibility of their specific products. Indeed, Respondents have made product cross-reference materials available through their respective web sites, product catalogs, and/or other materials distributed to capacitor purchasers. These cross-reference materials identify a specific Respondents' capacitor product by either product number or technical and operational specifications, and it identifies specific mutually interchangeable products manufactured by competitor Respondents.

132. In addition to many of the Respondents' products being directly interchangeable, products with differing capacitance, dielectric and form factor, depending on circuit design and certain technical requirements, can also be interchangeable for each other. There are a number of general rules recognized in the capacitors industry that govern such interchangeability, for example: (1) using a capacitor with a higher capacitance value than the circuit requires is sometimes acceptable; (2) a capacitor with a better capacitance tolerance can replace a looser tolerance component; (3) a capacitor with a higher voltage rating may be used in place of, or as a substitute for, a lower voltage rated component; (4) a physically smaller capacitor may be acceptable if lead spacing is the same and electrical specifications differences are acceptable; (5) a capacitor with a better temperature rating can replace a lower temperature rated component; (6) a capacitor with a more stable temperature coefficient can replace a component with a less stable temperature coefficient; (7) a capacitor with a lower dissipation factor can replace one with a higher dissipation factor; (8) a capacitor with a lower ESR can replace one with a higher ESR; (9) a capacitor with a higher ripple current rating can replace one with a lower ripple current rating; and (10) a capacitor with a lower leakage current rating can replace one with a higher leakage current rating.

133. Since purchasers are aware of the mutual interchangeability of Respondents' respective capacitor products of like capacitance, dielectric and form factor, along with the possibility that certain products that are not directly fungible can still replace each other, the Respondents present purchasers a broad portfolio of product choices that can meet their needs. Accordingly, but for the Respondents'

noncompetitive maintenance of pricing, price would be the primary means of competition among the Respondents in the aluminum and tantalum electrolytic capacitor market.

4. Inelastic Demand

134. Inelastic demand means that increases in price result in limited declines in quantity sold in the market. For a cartel to profit from raising prices above competitive levels, demand must be inelastic at competitive prices such that cartel members are able to raise prices without triggering a decline in sales revenue that would make the price increase unprofitable. In simple terms, demand is inelastic when the loss in volume arising from a price increase is small relative to the magnitude of the increase in price, allowing higher prices to increase revenues and profits.

135. The demand for aluminum and tantalum electrolytic capacitors is inelastic. When there are few or no substitutes for a product, purchasers have little choice but to pay higher prices in order to produce their product. As set forth above, capacitors serve as a fundamental component in the electric circuits employed to make functional a wide variety of products within different end-markets. No other type of passive electrical component (e.g., inductors, resistors) can serve as a substitute or a functional equivalent to a capacitor in an electric circuit. Accordingly, a purchaser that is either an OEM or an EMS Provider simply cannot design an electric circuit to bypass its need for a capacitor with a certain capacitance, dielectric and form factor.

136. Capacitors are also often a comparatively inexpensive cost input in electrical devices, so a purchaser facing higher prices for capacitors would generally pay that increased price rather than forgo its opportunity to sell the device that includes the capacitors.

137. Although the specific capacitors that Respondents manufacture are either mutually interchangeable for each other when a specific electric circuit is designed to incorporate them, this does not demonstrate price elasticity. Rather, this fact affirms the ubiquitous need for capacitance in electric circuits and the inability of purchasers of capacitors to forgo their use in their products or find a cost effective, functional substitute for them.

138. Indeed, demand inelasticity for capacitors is particularly acute when a given electric circuit or an electronic device requires not just a capacitor, but one with a specific capacitance, dielectric and form factor. In that instance, a purchaser has no choice but to buy a specific capacitor with the required technical and operational characteristics.

5. Commoditization

139. When a product is characterized as a commodity, market participants typically compete on the basis of price rather than other attributes such as product quality or customer service. Where competition occurs principally on the basis of price, it is easier to implement and monitor a cartel because price is more often objectively measurable and observable than non-price factors such as service.

140. Since aluminum and tantalum electrolytic capacitors are mass-produced products generally sold by the Respondents in lots of 1,000 pieces that have relatively standardized technical and operational characteristics for the various mutually interchangeable models manufactured and sold by the Respondents, the electrolytic capacitor products at issue are largely commoditized.

141. The Respondents recognize that their aluminum and tantalum capacitors are commoditized products. Based on the type of electrolytic capacitor they produce, Respondents face relatively similar raw materials and production costs. Accordingly, even without Respondents' sharing of confidential and competitively sensitive information as part of their price-fixing conspiracy, the Respondents would have

approximate knowledge of each other's costs and the bases for their respective prices. However, by having access to their co-conspirators' pricing information, the Respondents can more easily implement their scheme to maintain noncompetitive prices for aluminum and tantalum electrolytic capacitors.

6. Weak Demand

142. Static or declining demand is one factor which makes the formation of a collusive arrangement more likely. Under normal business conditions, when faced with weak demand conditions, firms will attempt to increase sales by taking market share from competitors by decreasing prices. For this reason, firms faced with static or declining demand have a greater incentive to collude to avoid price competition with competitors in order to ballast their declining business.

143. As alleged herein, the overall demand for aluminum and tantalum capacitors has declined significantly since the early 2000s. Demand for aluminum and tantalum electrolytic capacitors is closely tied to the demand for consumer electronics. Over the past decade, declining sales of desktop computers and television sets have weakened demand for passive electronic components and capacitors in particular. In 2012, for example, sales of televisions and desktop computers declined roughly 10% from the previous year, whereas demand for laptop computers declined only 2%. The impact of this decline in consumer electronic demand on capacitor demand is evident in the static growth observed by the overall market and the negative growth trends reported in some segments by certain Respondents.

144. For instance, Nichicon's 2013 Annual Report states that the company's 21.7% decrease in capacitor sales "is attributed to declining demand for digital home electronics and inverter equipment." Similarly, Taiyo Yuden's 2013 Annual Report notes that "[t]he electronics industry, to which [TaiyoYuden] belongs, has seen continued growth from the smartphone and tablet device markets. In contrast to this, the PC and television markets remain sluggish. Overall this has caused weaker demand for electronic components." AVX Corporation made the same observation in its 2013 Annual Report stating, "[o]verall sales prices for our commodity component products declined during 2013."

7. Large Number of Purchasers With Limited Purchasing Power

145. In a market with many purchasers, each of whom forms a small share of the total marketplace, there is less incentive for cartel members to cheat on collusive pricing arrangements, since each potential sale is small while the risk of disrupting the collusive pricing agreement carries large penalties.

146. In the market for aluminum and tantalum electrolytic capacitors, the Respondents each have historically sold and currently sell to a wide number of purchasers around the globe, the vast majority of whom during the Class Period make up no more than 10% of each Respondent's respective annual net sales, year over year.

147. Accordingly, the Respondents had many reasons during the Class Period to coordinate pricing and market supply availability with each other within the auspices of their cartel.

148. The Respondents concertedly priced their respective capacitor products during the Class Period, and also provided lockstep quotation of production lead times to purchasers.

8. Ease of Information Sharing Among Respondents

149. Due to common memberships in trade associations and interrelated business relationships between certain executives, officers, and employees of the Respondents, there were many opportunities both before and during the Class Period for the Respondents to collude by discussing competitive information regarding their respective aluminum and tantalum electrolytic capacitor products. The ease

of communication was facilitated by the use of meetings, telephone conversations, e-mail messages, written correspondence and text messaging. Respondents took advantage of these opportunities to discuss, and agree upon, their pricing for the various types of capacitors they produce.

150. Industry trade associations make a market more susceptible to collusive behavior because they can provide a pretext under which conspirators can exchange sensitive company information such as pricing and market allocation.

151. A number of industry trade associations exist in the capacitor industry. One of the largest trade associations for the industry, the Electronic Components Industry Association ("**ECIA**"), claims Respondents the AVX, KEMET and Panasonic as members. According the ECIA, its members are granted access to "industry peers and executive networking," and events where they can be "face-to-face with leaders of the authorized electronic components industry." Likewise, the European Passive Components Industry Association provides similar networking opportunities, and it includes the Respondents Nichicon, AVX, and Panasonic among its members.

152. Additionally, the Respondents are members of the the Power Sources Manufacturers Association ("PSMA") and regularly attend the yearly Applied Power Electronics Conference and Exposition ("**APEC**"), which has been held yearly since 1986 and is co-sponsored by organizations such as the PSMA.

153. Aside from these formalized means of exchanging information among each other, the Respondents have among them numerous informal links between their former and current colleagues, co-venturers, or partners employed by other Respondent companies. These links provided them the means and opportunity to exchange competitively sensitive information. Despite the billions of dollars of revenue generated by the capacitors industry worldwide, it is still a narrow segment of the overall electronic components industry, and the key decision-makers for the major producers had personal access to each other both directly and indirectly.

154. Further, the Respondents can procure relatively detailed competitive information from industry analysts. The capacitor industry is analyzed by a limited number of market research firms that deal in detailed industry data. Each of these firms offers, for a fee, market data on pricing, supply, and other key indicators of market activity as well as market projections. The capacity and pricing information procured by these analysts is provided directly from industry participants, including certain Respondents. Given the limited number of analysts that cover the capacitors industry, those that do are often provided highly detailed information and direct access to decision-makers for the capacitors manufacturers, including the Respondents.

Antitrust Investigations in the Capacitors Industry

155. Respondents' conspiracy to artificially fix, raise, maintain or stabilize prices for aluminum and tantalum electrolytic capacitors, as well as to restrict the output of such capacitors, has only recently been discovered by law enforcement and regulatory authorities in the United States and throughout Asia.

156. In April 2014, the Antitrust Division of the United States Department of Justice ("**DOJ**") confirmed to industry sources that the government has opened an investigation into price fixing in the capacitors industry, and sources report that this investigation is being conducted out by the United States Attorney's Office for the Northern District of California.

157. Media and industry sources have reported that this investigation has been ongoing for some time, and that the DOJ has been coordinating its efforts to investigate the capacitors industry with the People's Republic of China's National Development and Reform Commission ("**NDRC**"), an agency entrusted with regulating price-related anticompetitive activity by the Chinese State Council. During March 2014, the NDRC conducted several raids on Chinese operations of Japanese capacitors manufacturers.

158. Media and industry sources indicate that a member of the cartel—believed to be Panasonic, a Respondent in this action, has approached U.S. and Chinese authorities to self-report its involvement in the conspiracy and to request prosecutorial leniency and amnesty.

159. The U.S. *Antitrust Criminal Penalty Enhancement and Reform Act* H. R. 2675 ("**ACPERA**") provides leniency benefits for a participant in a price-fixing conspiracy that voluntarily discloses its conduct to the DOJ. A November 19, 2008 presentation on the DOJ's website explains that "[a conditional leniency] applicant must admit its participation in a criminal antitrust violation involving price fixing...before it will receive a conditional leniency letter." One of the leniency benefits for a conspirator that is accepted into the ACPERA program is that the applicant is not charged with a criminal offense and is not required to plead guilty to criminal charges.

160. By applying for leniency through ACPERA, the cartel member believed to be Panasonic is believed to have admitted to price fixing in the capacitors industry.

161. On or about July 2, 2014, the NDRC publicly confirmed its investigation into the capacitors industry through a report published in the China Price Supervision and Antitrust Journal and written by Xu Kunlin, Director-General of the NDRC's Price Supervision and Antimonopoly Bureau. In this report, Xu revealed that one Japanese capacitor company self-reported its cartel activity in March 2014, and that this company and other Japanese capacitor manufacturers held regular conferences to exchange market information related to their products. Media and industry sources have quoted Xu as saying that the Japanese manufacturer seeking amnesty would receive complete leniency.

162. The United States and the PRC, however, are not the only countries investigating price fixing in the capacitors industry.

163. Media and industry sources report that the Japan Fair Trade Commission ("JFTC") has been investigating price fixing of aluminum and tantalum electrolytic capacitors for some time now. On or about June 24, 2014, the JFTC conducted raids of approximately eight capacitors manufacturers believed to be members of the cartel, including Panasonic, NEC , Hitachi, Nichicon, and NCC. According to media reports citing sources close to the JFTC's investigation, sales executives and other officials from the raided companies discussed and decided on price increases for capacitors for at least several years. It is reported that the JFTC suspects that the raided companies formed a cartel in order to boost profits after they had suffered financial setbacks following the global financial crisis stemming from the collapse of Lehman Brothers in 2008 and the 2011 Tohoku earthquake and tsunami in Eastern Japan.

164. Since the beginning of 2014, investigations into the capacitors industry also have been opened by the South Korean Fair Trade Commission, the Taiwanese Fair Trade Commission, and the European Commission's competition authority.

165. To date, few of the Respondents have commented about their being subject to these raids. Respondent Panasonic has confirmed that it was raided by both the JFTC and South Korean authorities.

166. Respondent Taiyo Yuden has admitted to having been raided by the NDRC and has stated that it is cooperating with Chinese authorities.

167. Respondent NEC Tokin has confirmed that it has been contacted or raided by American, Chinese and European authorities and has stated that it is cooperating with authorities.

168. Toshin Kogyo has confirmed that it has been contacted by Japanese, Chinese and Taiwanese authorities.

169. For some of the Respondents, especially Panasonic and Sanyo, these investigations are not the first time they have been scrutinized by law enforcement and competition authorities for anticompetitive behavior. These Respondents have a documented history of cartel behavior and antitrust price-fixing recidivism.

170. Both Panasonic and Sanyo have been investigated by the DOJ in the last several years for participating in price-fixing conspiracies involving automotive parts and lithium ion battery cells.

171. Panasonic pled guilty for its role in a nearly six and a half year-long conspiracy to fix prices of switches, steering angle sensors, and automotive high intensity discharge ballasts installed in cars sold in the United States and elsewhere.

172. Panasonic agreed to pay a $45.8 million criminal fine, and a number of its executives pled guilty in exchange for limited fines and imprisonment.

173. Sanyo agreed to plead guilty for its role in a year and a half long conspiracy to fix prices on cylindrical lithium ion battery cells sold worldwide for use in notebook computer battery packs, and agreed to pay a $10.731 million criminal fine.

Fraudulent Concealment

174. Petitioner and members of the Class did not discover, and could not have discovered through the exercise of reasonable diligence, the existence of the conspiracy alleged herein until in or about March 2014, when investigations by the DOJ and competition and law enforcement authorities in the People's Republic of China, Japan, Taiwan, South Korea and the European Commission were made public.

175. Respondents engaged in a secret conspiracy that did not give rise to facts that would put Petitioner or the Class on inquiry notice that there was a conspiracy among capacitor manufacturers to artificially fix, raise, maintain or stabilize prices for aluminum or tantalum electrolytic capacitors, as well as to restrict their respective output by unjustifiably extending production lead times. In fact, the Respondents had secret discussions about price and output and, in furtherance of the conspiracy, they agreed not to discuss publicly the nature of the scheme. The Respondents also gave pretextual justifications for the pricing changes and the reductions in output that occurred during the Class Period.

176. The Respondents relied on a variety of market-based explanations for pricing changes and reductions in output through extension of production lead times in order to conceal the conspiracy.

177. With regard to aluminum electrolytic capacitors, Respondents often attributed price changes and increased production lead times to difficulties procuring the necessary raw materials to manufacturer their products.

178. For example, in 2010, Respondents the Nichicon, NCC, and Panasonic each made a number public statements to industry and technology media in which they attributed supply limitations and price quote adjustments to shortages of aluminum foil and increasing costs for other raw materials required for manufacturing.

179. These explanations are belied by industry reports and data that characterize aluminum foil as a widely available raw material, and aluminum electrolytic capacitors as being the product least susceptible to raw material price shocks.

180. With regard to tantalum electrolytic capacitors, Respondents often attributed price changes and increased production lead times to difficulties procuring the necessary tantalum to manufacturer their products.

181. For example, in 2010 and 2011, the Respondents Vishay and Panasonic each made a number public statements to industry and technology media attributing supply limitations and pricing adjustments for their tantalum electrolytic capacitors to raw materials supply issues.

182. These explanations are belied by industry and other media reports that criticize the lack of true visibility into the market for tantalum, highlight tantalum capacitor manufacturers' close ties and business arrangements with tantalum mining operations, and recognize manufacturers' efforts to process certain raw materials in-house.

183. Additionally, these explanations are belied by certain other Respondents, such as KEMET, which noted in a 2010 "Tantalum Market Update" letter in that: the tantalum capacitor industry is running at or near capacity, as witnessed by the increased lead times. *This immediate issue is not the result of raw material availability but due to the lack of investment in capacity over the last 10 years, a consequence of industry pricing pressures which have driven margins to a point where we have been unable to realize reinvestment economics.* (Emphasis added.).

184. Aside from the product-specific explanations noted above, the Respondents at various times during the Class Period also issued a multitude of other non-market excuses for pricing changes and reductions in output, such as labor shortages and shipping delays due to weather in Asia.

185. More specifically, from 2011 to 2013, the Respondents Hitachi, NCC, Nichicon, Rubycon and Elna attributed some degree of production delays to the lasting effects of the 2011 Tohoku earthquake and tsunami in eastern Japan.

186. Further, 2011, Respondents NEC Tokin and ROHM attributed production delays to flooding in Thailand.

187. Even if the explanations the Respondents provided were partially grounded on real events, the Respondents still unjustifiably and disproportionately manipulated prices or extended production lead times beyond any reasonably justifiable adjustments necessary to account for any actual pricing impact or lead time increases. Indeed, the excuses given by Respondents for their price changes and extended production lead times were always misleading (if not outright false), because they lulled Petitioner and members of the Class into believing that the price changes and extended production lead times were the normal result of competitive and economic market forces, rather than the product of collusive, unlawful efforts. As alleged herein, the Respondents and their co-conspirators made statements in the media in support of price changes that were presumed to be true and were designed to convince members of the Class to pay purportedly legitimate prices.

188. The Respondents' explanations for price changes and extended lead times were pretextual, and materially false or misleading, and served only to cover up the Respondents' conspiracy. As a result of Respondents' fraudulent concealment of their conspiracy, the running of any statute of limitations has been tolled with respect to any claims that Petitioner and the Class members have as a result of the anticompetitive and unlawful conduct alleged herein.

Effects of Respondents' Conspiracy on the Canadian Market for Capacitors and Capacitors Products

189. The Respondents' combination and conspiracy as set forth herein has had the following effects, among others:

1. Restraint on price competition among Respondents in the sale of their respective Capacitors during the Class Period to direct and indirect purchasers in Canada;

3. Prices for Capacitors manufactured and/or sold by Respondents during the Class Period to direct and indirect purchasers in Canada and elsewhere have been raised, fixed, maintained, and stabilized at artificial and non-competitive levels causing Class members to pay an Indirect Overcharge for Capacitor Products in Canada;

5. The supply of Respondents' Capacitors available for sale during the Class Period to direct and indirect purchasers in Canada and elsewhere has been artificially and unjustifiably restrained causing Class members to pay an Indirect Overcharge for Capacitor Products in Canada; and

6. Direct and indirect purchasers of the Respondents have been deprived of the benefit of free and open competition in the market for Capacitors.

190. As a direct and proximate result of the Respondents' anticompetitive and unlawful conduct described herein, the Petitioner and the Class have been injured during the Class Period in that:

1. They paid more for Capacitors they purchased directly from the Respondents, or their subsidiaries and affiliates, or from third-party electronics distributors than they would have in the absence of Respondents' unlawful conduct; (**"Direct Overcharge"**) and;

2. They paid more for Capacitor Products purchased from OEMs, EMS Providers, Capacitor Product resellers, or any other producer or manufacturer of Capacitor Products than they would have in the absence of Respondents' unlawful conduct (**"Indirect Overcharge"**).

191. As a result of the unlawful conduct of the Respondents, Class members paid supra-competitive prices for Capacitors and Capacitor Products. Due to the Respondents' anticompetitive and unlawful conduct described herein and the monies paid by the Petitioner for the Capacitor Product, the Petitioner, and similarly situated Class members , paid an Indirect Overcharge:

(a) to the Respondents through the OEM and reseller of the Capacitor Product and,

(b) to the Respondents Panasonic, ROHM, and KEMET, because of the correspondence between the prices they charge for Capacitors and the price paid for the Capacitor Product by the Petitioner.

192. As a result of the Respondents' control of the Capacitor market and their anticompetitive and unlawful conduct described herein, the Respondents unduly restrained and injured competition and Class members paid Direct and Indirect Overcharges.

C. Fault

193. The Respondents have engaged in a continuing agreement, understanding, and conspiracy in restraint of trade and other anticompetitive activities to artificially raise, fix, maintain, or stabilize the price of Capacitors sold in Canada and contained in Capacitor Products sold in Canada.

(a) From 2005, through agreements, verbal and written communications, and meetings amongst their employees and executives, the Respondents conspired, agreed, and arranged to engage in unlawful conduct described herein to

(i) fix, maintain, increase, and control the prices of Capacitors;

(ii) control the supply of Capacitors in Canada;

(iii) control the supply of Capacitors to Capacitor Products manufacturers selling Capacitor Products in Canada;

They thereby engaged in conduct that was contrary to ss. 45(1)(a),(b), and (c) of the *Competition Act*, R.S.C., 1985, c. C-34 (the "Competition Act")

(b) Between 2005 and March 11th, 2010, by

(i) communicating, in writing and orally, to raise, fix, maintain or stabilize prices for Capacitors, and to set artificial and unjustified production lead times to limit available supply of Capacitors;

(ii) agreeing to coordinate and manipulate the prices and available supply of

Capacitors directly sold to purchasers in Canada and elsewhere in a manner that deprived the purchasers of free and open price competition;

(iii) issuing or signaling to each other price announcements, price quotations and production lead times for Capacitors in accordance with the agreements the Respondents reached among themselves;

(iv) selling Capacitors to purchasers in Canada at noncompetitive and artificial prices Respondents collusively determined; and

(v) providing pretextual justifications to purchasers and the public to explain any raises, maintenance, or stabilization of the prices for Respondents' Capacitors.

(vi) creating and engaging in ancillary agreements with third-party electronics distributors and other entities to encourage the utilization of the Respondents' Capacitors and decrease the use of alternatives in Capacitor Products

(vii) penalizing or sanctioning Class members or third-party electronics distributors who made efforts to utilize alternatives to the Respondents' Capacitors for some of their Capacitor Products;

(viii) penalizing or sanctioning third-party electronics distributors who did not adhere to the Respondents' agreements to coordinate and manipulate the prices and available supply of Capacitors directly sold to purchasers in Canada and elsewhere in a manner that deprived the purchasers of free and open price competition;

the Respondents influenced upward and discouraged the reduction of the price, and influenced upward the sales of Capacitors, and discouraged the reduction of the price of Capacitor Products, and thereby engaged in conduct that was contrary to s. 61(1)(a) of the *Competition Act* as in force up to March 11,

2009 and engaged in conduct that contravened s. 45(1)(d) of the *Competition Act* as in force up to March 11th, 2010 by restraining or injuring competition unduly.

194. The Respondents are competitors who manufacture and/or sell Capacitors to individuals OEMs, EMS Providers, and third party distributors.

195. Since 2005, the Respondents have controlled the global supply of Capacitors. Industry data for the aluminum capacitor market shows that the 13 largest manufacturers of aluminum capacitors account for approximately 92% of the market's current revenue. Specifically, industry analyst reports show that NCC, Nichicon, Rubycon, Panasonic, AVX and Elna, Hitachi, Matsuo and Toshin Kogyo currently account for at least 70% of the global supply of aluminum capacitors. Industry data for the tantalum capacitor market shows that the seven largest manufacturers of tantalum capacitors account for approximately 95% of the global market's current revenue. Specifically, industry analyst reports show that the Respondents KEMET, NEC, Panasonic, AVX, Vishay, Samsung, and ROHM currently account for at least 90% of the global supply of tantalum capacitors. Additionally, the Respondents also account for a substantial portion of the global supply of film capacitors and garner a significant amount of the film capacitor markets current revenues.

196. The Respondents used their market dominance to conspire with one another to lessen competition and to enforce the conspiracies, agreements, and arrangements described herein upon Class members.

197. As a result of these breaches of ss. 45 and 61 of the *Competition Act*,

(a) Class members suffered loss and damage, including the payment the Direct Overcharge and Indirect Overcharge in amounts to be proven at trial, and

(b) Class members have incurred and will continue to incur investigation and prosecution costs in amounts to be proven at trial.

II. FACTS GIVING RISE TO AN INDIVIDUAL ACTION BY THE PETITIONER

198. Petitioner purchased in Quebec several products, that contained capacitors manufactured by Respondents. More particularly, the Petitioner purchased a Panasonic Viera plasma television and an Onkyo audio system, which contain capacitors manufactured by Respondents, the whole as more fully appears in copies of invoices, filed herewith as exhibits P-1 and P-2 respectively.

199. Due to the Respondents' conduct, Petitioner was deprived of the benefit of free market competition, and consequently, was charged a higher price for the product he purchased.

200. Petitioner suffered damages equivalent to the difference between the artificially inflated price that he paid for said product and the price that he should have paid in a free market system.

201. Respondents' conduct was kept a secret and was unknown to the Respondent at the time that he purchased said product.

202. Petitioner has since discovered that this situation is being investigated by the DOJ and other authorities.

203. Petitioner's damages are a direct and proximate result of the Respondents' conduct.

204. In consequence of the foregoing, Petitioner is justified in claiming damages.

III. FACTS GIVING RISE TO AN INDIVIDUAL ACTION BY EACH OF THE MEMBERS OF THE GROUP

205. Every member of the Class has either purchased Capacitors and/or purchased products containing Capacitors from January 1, 2005 through to the present.

206. Each member of the Class has paid an artificially inflated price for their Capacitors due to the Respondents' unlawful conduct, the collusion among the Respondents, and its impact on competition.

207. Every member of the Class has suffered damages equivalent to the difference between the artificially inflated price that they paid for a Capacitor, and/or Capacitor products, and the price that they should have paid in a free market system.

208. Every member of the Class suffered damages equivalent to either the direct overcharge, indirect overcharge, or both.

209. All of the damages to the Class members are a direct and proximate result of the Respondents' conduct.

210. In consequence of the foregoing, members of the class are justified in claiming damages.

IV. CONDITIONS REQUIRED TO INSTITUTE A CLASS ACTION

A) The composition of the class renders the application of articles 59 or 67 C.C.P. difficult or impractical

211. Capacitors are used in products that are widespread in Quebec.

212. Petitioner is unaware of the specific number of persons who purchased Capacitors directly or indirectly, however, considering the multitude of products that contain Capacitors, it can be estimated that it is in the hundreds of thousands (if not millions).

213. Class members are numerous and are scattered across the entire province.

214. In addition, given the costs and risks inherent in an action before the courts, many people will hesitate to institute an individual action against the Respondents. Even if the Class members themselves could afford such individual litigation, the court system could not as it would be overloaded. Further, individual litigation of the factual and legal issues raised by the conduct of the Respondents would increase delay and expense to all parties and to the court system.

215. These facts demonstrate that it would not be possible to contact each and every member of the class to obtain mandates and to join them in one action;

216. In these circumstances, a class action is the only appropriate procedure for all of the members of the Class to effectively pursue their respective rights and have access to justice;

B) The questions of fact and law which are identical, similar, or related with respect to each of the Class members

217. The recourses of the Class members raise identical, similar or related questions of fact or law, namely:

a. Did the Respondents conspire, agree or arrange to fix, maintain or control the price for the supply of Capacitors?

b. Did the Respondents conspire, agree or arrange to fix, maintain, control, prevent, lessen or eliminate the production or supply of Capacitors?

c. Did the Respondents commit an offence under s. 45 of the *Competition Act*?

d. Did the Respondents take any actions to conceal this unlawful agreement, combination, collusion, and/or conspiracy?

e. Did the Respondents' conduct cause the prices of Capacitors to be sold at artificially inflated and non-competitive levels?

f. Were members of the class prejudiced by the Respondents' conduct?

g. Are members of the class entitled to remedies, including but not limited to injunctive relief, and if so, what is the nature and extent of such injunctive relief?

h. Are the Respondents liable to pay compensatory, moral, punitive and/or exemplary damages to members of the class, and if so, in what amount?

218. The interests of justice favor that this motion be granted in accordance with its conclusions;

V. NATURE OF THE ACTION AND CONCLUSIONS SOUGHT

219. The action that the Petitioner wishes to institute on behalf of the members of the class is an action in damages and an injunctive remedy;

220. The conclusions that the Petitioner wishes to introduce by way of a motion to institute proceedings are:

GRANT the class action of the Plaintiff and each of the members of the class;

ORDER the Defendants to permanently cease from continuing or maintaining the agreement, combination, collusion, and/or conspiracy alleged herein;

DECLARE the Defendants solidarily liable for the damages suffered by the Petitioner and each of the members of the class;

CONDEMN the Defendants to pay to each member of the class a sum to be determined in compensation of the damages suffered, and ORDER collective recovery of these sums;

CONDEMN the Defendants to pay interest and additional indemnity on the above sums according to law from the date of service of the motion to authorize a class action;

ORDER the Respondents to deposit in the office of this court the totality of the sums which forms part of the collective recovery, with interest and costs;

ORDER that the claims of individual class members be the object of collective liquidation if the proof permits and alternately, by individual liquidation;

CONDEMN the Defendants to bear the costs of the present action including expert and notice fees;

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class;

A) The Petitioner requests that he be attributed the status of representative of the Class

221. Petitioner is a member of the class.

222. Petitioner is available to dedicate the time necessary for the present action before the Courts of Quebec and to collaborate with class attorneys in this regard.

223. Petitioner has the capacity and interest to fairly and adequately protect and represent the interest of the members of the class;

224. Petitioner has given the mandate to his attorneys to obtain all relevant information with respect to the present action and intends to keep informed of all developments;

225. Petitioner, with the assistance of his attorneys, is ready and available to manage and direct the present proceedings in the interest of the group members that the Petitioner wishes to represent, and is determined to lead the present proceedings until final resolution of the matter, the whole for the benefit of the class.

226. Petitioner does not have interests that are antagonistic to those of other members of the class;

B) The Petitioner suggests that this class action be exercised before the Superior Court of justice in the district of Montreal

227. A great number of the members of the class reside in the judicial district of Montreal.

228. The Petitioner's attorneys practice their profession in the judicial district of Montreal;

229. The present motion is well founded in fact and in law.

FOR THESE REASONS, MAY IT PLEASE THE COURT:

GRANT the present motion;

AUTHORIZE the bringing of a class action in the form of a motion to institute proceedings in damages and for injunctive relief;

ASCRIBE the Petitioner the status of representative of the persons included in the class herein described as:

- All persons and entities resident in Quebec who either purchased aluminum, tantalum or film capacitors manufactured by a Respondent or purchased products containing aluminum, tantalum or film capacitors manufactured by a Respondent (the "**Class**") from January 1, 2005 through to the present (the "**Class Period**").

IDENTIFY the principle questions of fact and law to be treated collectively as the following:

a. Did the Respondents conspire, agree or arrange to fix, maintain or control the price for the supply of Capacitors?

b. Did the Respondents conspire, agree or arrange to fix, maintain, control, prevent, lessen or eliminate the production or supply of Capacitors?

c. Did the Respondents commit an offence under s. 45 of the *Competition Act*?

d. Did the Respondents take any actions to conceal this unlawful agreement, combination, collusion, and/or conspiracy?

e. Did the Respondents' conduct cause the prices of Capacitors to be sold at artificially inflated and non-competitive levels?

f. Were members of the class prejudiced by the Respondents' conduct?

g. Are members of the class entitled to remedies, including but not limited to injunctive relief, and if so, what is the nature and extent of such injunctive relief?

h. Are the Respondents liable to pay compensatory, moral, punitive and/or exemplary damages to members of the class, and if so, in what amount?

IDENTIFY the conclusions sought by the class action to be instituted as being the following:

GRANT the class action of the Plaintiff and each of the members of the class;

ORDER the Defendants to permanently cease from continuing or maintaining the agreement, combination, collusion, and/or conspiracy alleged herein;

DECLARE the Defendants solidarily liable for the damages suffered by the Petitioner and each of the members of the class;

CONDEMN the Defendants to pay to each member of the class a sum to be determined in compensation of the damages suffered, and ORDER collective recovery of these sums;

CONDEMN the Defendants to pay interest and additional indemnity on the above sums according to law from the date of service of the motion to authorize a class action;

ORDER the Respondents to deposit in the office of this court the totality of the sums which forms part of the collective recovery, with interest and costs;

ORDER that the claims of individual class members be the object of collective liquidation if the proof permits and alternately, by individual liquidation;

CONDEMN the Defendants to bear the costs of the present action including expert and notice fees;

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class;

DECLARE that all members of the class that have not requested their exclusion, be bound by any judgment to be rendered on the class action to be instituted in the manner provided for by the law;

FIX the delay of exclusion at thirty (30) days from the date of the publication of the notice to the members, date upon which the members of the class that have not exercised their means of exclusion will be bound by any judgment to be rendered herein;

ORDER the publication of a notice to the members of the group in accordance with article 1006 C.C.P.

RENDER any other order that this Honourable court shall determine and that is in the interest of the members of the class;

THE WHOLE with costs to follow

Montréal, September 25, 2014

Merchant Law Group LLP

MERCHANT LAW GROUP LLP
Attorneys for Petitioner