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UNITED STATES DISTRICT COURT

NORTHERN DISTRICT OF CALIFORNIA, SAN FRANCISCO DIVISION

In Home Tech Solutions, Inc., individually and
on behalf of all others similarly situated,

Plaintiff,

vs.

Panasonic Corporation, Panasonic Corporation
of North America, Sanyo Electric Co., Ltd.,
Sanyo North America Corporation, AVX
Corporation, KEMET Corporation, KEMET
Electronics Corporation, NEC Tokin
Corporation, NEC Tokin America Inc.,
Nichicon Corporation, Nichicon (America)
Corporation, Nippon Chemi-Con Corporation,
United Chemi-Con, Inc., ROHM Company
Limited, ROHM Semiconductor U.S.A., LLC,
Rubycon Corporation, Rubycon America, Inc.,
Taiyo Yuden Co., Ltd., Taiyo Yuden (USA),
Inc., Vishay Intertechnology, Inc., Hitachi
Chemical Co., Ltd., Hitachi Chemical
Company America, Ltd., ELNA Co., Ltd.,
ELNA America, Inc., Matsuo Electric Co.,
Ltd., and Toshin Kogyo Co., Ltd.,

Defendants.

CASE NO.

CLASS ACTION

COMPLAINT

JURY TRIAL DEMANDED

1 Plaintiff In Home Tech Solutions, Inc. (“Plaintiff”), individually and on behalf of a Class
2 of all those similarly situated, brings this action for damages and injunctive relief under the
3 antitrust laws of the United States against the Defendants named herein, and alleges on the
4 investigation of counsel and on information and belief as follows:

5 **I. INTRODUCTION**

6 1. This antitrust class action arises out of a conspiracy among the world’s largest
7 manufacturers of high capacitance capacitors, including but not limited to tantalum capacitors
8 (“Tantalum Capacitors”), aluminum capacitors (“Aluminum Capacitors”), and supercapacitors
9 (“Supercapacitors”) (collectively, “Capacitors”)—to unlawfully allocate markets for those
10 products and to fix, raise, maintain, and/or stabilize the prices of those products sold directly to
11 customers in the United States. Plaintiff brings this class action on behalf of itself and all persons
12 and entities who directly purchased Capacitors or circuit boards containing Capacitors (“Capacitor
13 Products”) in the United States from the named defendants, any subsidiaries or affiliates thereof,
14 or any of their co-conspirators, between at least January 1, 2005 and the present (the “Class
15 Period”).

16 2. Capacitors are passive electronic components that store, filter, and regulate
17 electrical energy and current flow. Capacitors are used in most circuit boards. In their most basic
18 form, capacitors consist of a pair of conductors separated by an insulator. In general, they are used
19 for coupling, decoupling, filtering, oscillating, and wave shaping. Capacitors have applications in
20 data processing equipment, personal computers, communication systems, cellular phones,
21 consumer electronics, automotive systems, defense and aerospace systems, power management
22 systems, and other electronic devices. Capacitors are found in virtually any product that uses
23 electricity from a battery or an electrical outlet.

24 3. Capacitors come in a variety of shapes, sizes, and constructions, but can generally
25 be divided into two distinct fields. The first field, comprising the majority of capacitors by
26 volume and over 60% of the market by value, is ceramic capacitors. Ceramic capacitors are
27 ubiquitous in electronic circuits worldwide, but have limited and basic functionality due to their
28 low capacitance ratings. The second field, comprising nearly 40% of the worldwide capacitor

1 market, can be termed high-capacitance capacitors. High-capacitance capacitors are primarily
2 grouped into two types, electrolytic capacitors and supercapacitors. Electrolytic capacitors can be
3 made from Tantalum or Aluminum. Supercapacitors can be either electric double-layer capacitors
4 (“EDLC”) or hybrid supercapacitors. Both supercapacitors and electrolytic capacitors are
5 characterized by comparatively higher per-unit costs, and high capacitance ratings. These are used
6 in a variety of fields, from smartphones and laptops, to uninterruptible power supplies (UPS), to
7 automobile, bus, and train braking systems. While high-capacitance capacitors are relatively
8 interchangeable, depending on their function, ceramic capacitors occupy a separate market. In
9 particular, ceramic capacitors are useful in applications requiring up to tens of microfarads (.00001
10 F), while electrolytic capacitors and smaller supercapacitors range from hundreds of microfarads
11 up to tens of farads (.0001 F – 10 F), and certain high performance supercapacitors can range up to
12 thousands of farads (1000 F). At the upper range, supercapacitors can perform as functional
13 replacements for lithium-ion batteries.

14 4. Tantalum Capacitors use tantalum metal in their construction. Tantalum capacitors
15 are dielectric and have a high capacitance, meaning that they are able to store an electrical current
16 and maintain an electrical charge. Tantalum Capacitors comprise tantalum metal anode and a
17 manganese nitrate or conductive polymer electrolyte. Tantalum Capacitors tend to be used in
18 higher end applications and are considerably more expensive than many other capacitor types.

19 5. Aluminum Capacitors are an older technology compared to Tantalum Capacitors,
20 but utilize the same electrolytic principles to store an electrical current and maintain an electrical
21 charge. Aluminum Capacitors comprise an aluminum anode and either a paper spacer coated in
22 electrolyte or a conductive polymer electrolyte.

23 6. Supercapacitors come in two forms: “hybrid” supercapacitors, which utilize
24 lithium-ion technology, and electric double-layer supercapacitors, which are sometimes referred to
25 as “ultracapacitors.” Supercapacitors differ from traditional ceramic and electrolytic capacitors in
26 that they are capable of a much higher degree of capacitance, typically on orders of magnitude far
27 greater than other capacitors, such that they are capable of storing and discharging energy very
28 quickly. Supercapacitors are used to complement primary energy sources like combustion

1 engines, fuel cells, and batteries. They provide bursts of energy during peak power usages and can
2 store energy and capture excess power that otherwise would be lost. Many industry experts see
3 supercapacitors as resting on the cusp of the \$18 billion capacitor market and the \$95 billion
4 battery market, as improvements in supercapacitor technology will likely see supercapacitors
5 positioned to be effective replacements for many batteries, particularly given their nearly
6 unlimited capacity to recharge without degradation.

7 7. The capacitor industry is a multi-billion dollar industry. Global revenue for
8 capacitors was \$17.9 billion in fiscal year 2013 with 1.59 trillion units sold. By 2018, global
9 revenue for all capacitors is expected to reach \$23.3 billion. Although United States and European
10 manufacturers have made significant in-roads in the capacitor market, Japanese manufacturers
11 have traditionally dominated the capacitor industry. On information and belief, the conspiracy
12 alleged herein focused on agreements between manufacturers to fix the supply and price of
13 Capacitors, and to allocate markets among themselves, including agreements for certain firms not
14 to manufacture particular types of Capacitors.

15 8. Over the last decade, Defendants began to face declining demand and profits in the
16 Capacitor business. To stem the tide of these declines and ensure profitability among their
17 Capacitor business, Defendants agreed no later than January 1, 2005, to eliminate price
18 competition and allocate markets for Capacitors with the goal of fixing, raising, maintaining,
19 and/or stabilizing prices.

20 9. In early 2014, the U.S. Department of Justice (“DOJ”), China’s National
21 Development and Reform Commission (“NRDC”), the European Commission (“EC”), the
22 Japanese Fair Trade Commission (“JFTC”), and the Korean Fair Trade Commission (“KFTC”)
23 initiated investigations into anticompetitive practices in the capacitor market. On information and
24 belief, antitrust authorities conducted dawn raids in March and April 2014 on several capacitor
25 manufacturers in connection with their investigations into anticompetitive practices in the
26 capacitor market. Companies being investigated by these regulators include Defendants ELNA,
27 Matsuo Electric, Nippon Chemi-Con, Rubycon, Panasonic/Sanyo, Taiyo Yuden, Toshin Kogyo,
28 NEC Tokin, Hitachi Chemical, and Nichicon. According to industry news reports, the DOJ’s

1 investigation originates out of the San Francisco office of the Antitrust Division. Defendant
2 Panasonic is understood to have sought leniency from antitrust authorities in the United States and
3 China.

4 10. Certain of the named defendants, and their subsidiaries and affiliates, have a history
5 of engaging in anticompetitive conduct, having been implicated in several price-fixing
6 conspiracies involving component parts for electronic products, such as Dynamic Random Access
7 Memory (DRAM) chips, Cathode Ray Tubes (CRTs), and Lithium Ion Batteries. These
8 conspiracies are characterized by very similar features, including: (a) a concentrated market
9 dominated primarily by Asian companies; (b) significant barriers to entry; (c) inelastic demand for
10 the products at issue; (d) standardization or commoditization of products; (e) common
11 membership in trade associations that allow the defendants to exchange competitive information;
12 (f) pricing behavior that is inconsistent with a competitive market; and (g) a criminal investigation
13 which resulted in guilty pleas by one or more defendants in each of those cases.

14 11. As alleged herein, the named defendants entered into an illegal agreement,
15 combination, or conspiracy to raise and maintain prices, and allocate markets, for Capacitors. As
16 a result of Defendants' unlawful conduct, Plaintiff and members of the Class paid higher prices for
17 Capacitors and Capacitor Products than they would have paid in a competitive market.

18 **II. JURISDICTION AND VENUE**

19 12. Plaintiff brings this action to obtain injunctive relief and treble damages, as well as
20 reasonable attorneys' fees and costs, arising from Defendants' violations of Section 1 of the
21 Sherman Act (15 U.S.C. § 1).

22 13. Plaintiff purchased Capacitors and Capacitor Products from one or more
23 Defendants and has standing to bring federal antitrust claims for violation of Section 4 of the
24 Clayton Act.

25 14. This Court has subject matter jurisdiction pursuant to Sections 4 and 16 of the
26 Clayton Act (15 U.S.C. §§ 15 and 26) and 28 U.S.C. §§ 1331 and 1337.

27 15. Venue is proper in this judicial district pursuant to Section 12 of the Clayton Act
28 (15 U.S.C. § 22) and 28 U.S.C. § 1391(b) and (c) because many Defendants transact business in

1 this District, a substantial part of the events giving rise to Plaintiff's claims occurred in this
 2 District, and a substantial portion of the affected interstate trade and commerce was carried out in
 3 this District.

4 16. Defendants are subject to the personal jurisdiction of this Court by virtue of their
 5 nationwide contacts and other activities, as well as their contacts with the State of California.

6 **III. PARTIES**

7 **A. Plaintiff**

8 17. Plaintiff In Home Tech Solutions, Inc. is a Minnesota corporation with its principal
 9 place of business in Plymouth, MN. During the Class Period, Plaintiff purchased Capacitors and
 10 Capacitor Products in the United States directly from one or more Defendants and suffered injury
 11 as a result of Defendants' unlawful conduct.

12 **B. Defendants**

13 **a. Panasonic**

14 18. Defendant Panasonic Corporation, formerly known as Matsushita Electric
 15 Industrial Co., Ltd., is a business entity organized under the laws of Japan, with its principal place
 16 of business at 1006 Oaza Kadoma, Kadoma-shi, Osaka 571-8501, Japan. Panasonic Corporation
 17 manufactured Tantalum Capacitors at a plant in Tianjin, China, before selling that facility and its
 18 Tantalum Capacitor business to Nichicon. Panasonic Corporation re-entered the Tantalum
 19 Capacitor market with its acquisition of Sanyo Electric Co., Ltd., as described below. Panasonic,
 20 Corporation including through its subsidiaries and affiliates, participated in the conspiracy alleged
 21 in this Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor Products
 22 throughout the United States, including in this District, during the Class Period.

23 19. Defendant Panasonic Corporation of North America, formerly known as
 24 Matsushita Electric Corporation of America, is a Delaware corporation with its principal place of
 25 business at Two Riverfront Plaza, Newark, NJ 07102-5490. Panasonic Corporation of North
 26 America is a wholly-owned subsidiary of Panasonic Corporation. According to Panasonic
 27 Corporation's Annual Securities Report for the fiscal year ended March 31, 2013 (the 106th
 28 Business Term), Panasonic Corporation of North America is one of Panasonic Corporation's

1 principal consolidated subsidiaries. Panasonic Corporation has 100% of the voting rights in
2 Panasonic Corporation of North America. Panasonic Corporation and Panasonic Corporation of
3 North America share an interlocking directorate, meaning that Panasonic Corporation's
4 "employees concurrently hold position of directors or officers" in Panasonic Corporation of North
5 America. Panasonic, Corporation including through its subsidiaries and affiliates, participated in
6 the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Capacitors
7 and/or Capacitor Products throughout the United States, including in this District, during the Class
8 Period.

9 20. Defendants Panasonic Corporation and Panasonic Corporation of North America
10 are collectively referred to as "Panasonic."

11 **b. Sanyo**

12 21. Defendant Sanyo Electric Co., Ltd. is a business entity organized under the laws of
13 Japan with its principal place of business at 5-5 Keihan-Hondori 2-chome, Moriguchi City, Osaka
14 570-8677, Japan. In December 2009, Panasonic Corporation completed acquisition of a majority
15 of the voting stock of Sanyo Electric Co., Ltd., which became a consolidated subsidiary of
16 Panasonic Corporation. Sanyo Electric Co., Ltd. became a wholly-owned subsidiary of Panasonic
17 Corporation on April 1, 2011. Sanyo Electric Co., Ltd., including through its subsidiaries and
18 affiliates, participated in the conspiracy alleged in this Complaint and manufactured, marketed,
19 and/or sold Capacitors and/or Capacitor Products throughout the United States, including in this
20 District, during the Class Period.

21 22. Defendant Sanyo North America Corporation is a Delaware corporation with its
22 principal place of business at 2055 Sanyo Avenue, San Diego, California 92154. Sanyo North
23 America Corporation was a wholly-owned subsidiary of Sanyo Electric Co., Ltd. In December
24 2009, Sanyo North America Corporation became an indirect, consolidated subsidiary of Panasonic
25 Corporation. On April 1, 2011, Sanyo North America Corporation became an indirect, wholly-
26 owned subsidiary of Panasonic Corporation. As explained in detail below, Sanyo North America
27 Corporation, including through its subsidiaries and affiliates, participated in the conspiracy alleged
28 in this Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor Products

1 throughout the United States, including in this District, during the Class Period.

2 23. Defendants Sanyo Electric Co., Ltd. and Sanyo North America Corporation are
3 collectively referred to as “Sanyo.”

4 **c. AVX**

5 24. Defendant AVX Corporation (“AVX”) is a Delaware Corporation with its principal
6 place of business at 1 AVX Boulevard, Fountain Inn, South Carolina 29644. Kyocera Corporation
7 of Japan owns approximately 72% of the outstanding common stock of AVX. AVX describes
8 itself as a leading worldwide manufacturer and supplier of a broad line of passive electronic
9 components and related products. AVX, including through its subsidiaries and affiliates,
10 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold
11 Capacitors and/or Capacitor Products throughout the United States, including in this District,
12 during the Class Period.

13 **d. KEMET**

14 25. Defendant KEMET Corporation is a Delaware Corporation with its principal place
15 of business at 2835 Kemet Way, Simpsonville, South Carolina 29681. KEMET Corporation ships
16 approximately 32 billion capacitors annually. KEMET Corporation holds itself out as the largest
17 Tantalum Capacitor manufacturer in the world. KEMET Corporation, including through its
18 subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and
19 manufactured, marketed, and/or sold Capacitors and/or Capacitor Products throughout the United
20 States, including in this District, during the Class Period.

21 26. Defendant KEMET Electronics Corporation is a Delaware Corporation with its
22 principal place of business at 2835 Kemet Way, Simpsonville, South Carolina 29681. KEMET
23 Electronics Corporation is a wholly owned subsidiary of KEMET Corporation. KEMET
24 Electronics Corporation, including through its subsidiaries and affiliates, participated in the
25 conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Capacitors and/or
26 Capacitor Products throughout the United States, including in this District, during the Class
27 Period.

28 27. Defendants KEMET Corporation and KEMET Electronics Corporation are

1 collectively referred to as “KEMET.”

2 **e. NEC Tokin**

3 28. Defendant NEC Tokin Corporation is a business entity organized under the laws of
4 Japan, with its principal places of business at 7-1, Kohriyama 6-chome, Taihaku-ku, Sendai-shi,
5 Miyagi 982-8510 and 1-1, Asahicho 7-chome, Shirosi-shi, Miyagi 989-0223, Japan. Until
6 February 1, 2013, NEC Tokin Corporation was a wholly-owned subsidiary of NEC Corporation
7 (“NEC”). On February 1, 2013, KEMET Electronics Corporation acquired a majority interest in
8 NEC Tokin Corporation from NEC. KEMET Electronics Corporation and NEC now respectively
9 hold 51% and 49% voting interests, and 34% and 66% of the economic interest, in NEC Tokin.
10 NEC Tokin Corporation is a major manufacturer of Tantalum Capacitors including conductive
11 polymer Tantalum Capacitors and manganese oxide (MnO₂) Tantalum Capacitors, as well as
12 Supercapacitors.

13 29. Defendant NEC Tokin America Inc. is a California corporation with its principal
14 place of business at 2460 North First Street, Suite 220, San Jose, California 95131. NEC Tokin
15 America Inc. is a wholly-owned subsidiary of NEC Tokin Corporation. During the Class Period,
16 pricing decisions for Capacitors were made through marketing personnel of NEC Tokin America
17 Inc. working in conjunction with their counterparts at NEC Tokin Corporation in Japan. NEC
18 Tokin America Inc., including through its subsidiaries and affiliates, participated in the conspiracy
19 alleged in this Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor
20 Products throughout the United States, including in this District, during the Class Period.

21 30. Defendants NEC Tokin Corporation and NEC Tokin America Inc. are collectively
22 referred to as “NEC Tokin.”

23 **f. Nichicon**

24 31. Defendant Nichicon Corporation is a business entity organized under the laws of
25 Japan, with its principal place of business at Karasumadori Oike-agaru, Nakagyo-ku, Kyoto, 604-
26 0845 Japan. Nichicon Corporation, including through its subsidiaries and affiliates, participated in
27 the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Capacitors
28 and/or Capacitor Products throughout the United States, including in this District, during the Class

1 Period.

2 32. Defendant Nichicon (America) Corporation is an Illinois corporation with its
3 principal place of business at 927 East State Parkway, Schaumburg, IL 60183. Nichicon
4 (America) Corporation is a wholly-owned subsidiary of Nichicon Corporation. Nichicon
5 Corporation, including through its subsidiaries and affiliates, participated in the conspiracy alleged
6 in this Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor Products
7 throughout the United States, including in this District, during the Class Period.

8 33. Defendants Nichicon Corporation and Nichicon (America) Corporation are
9 collectively referred to as “Nichicon.”

10 **g. Nippon Chemi-Con**

11 34. Defendant Nippon Chemi-Con Corporation is a business entity organized under the
12 laws of Japan, with its principal place of business at 5-6-4 Osaki, Shinagawa-ku, Tokyo 141-8605,
13 Japan. Nippon Chemi-Con Corporation, including through its subsidiaries and affiliates,
14 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold
15 Capacitors and/or Capacitor Products throughout the United States, including in this District,
16 during the Class Period.

17 35. Defendant United Chemi-Con, Inc. is a New York Corporation with its principal
18 place of business at 9801 West Higgins Road, Rosemont, Illinois 60018. United Chemi-Con, Inc.
19 is a wholly-owned subsidiary of Nippon Chemi-Con Corporation. United Chemi-Con, Inc.,
20 including through its subsidiaries and affiliates, participated in the conspiracy alleged in this
21 Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor Products
22 throughout the United States, including in this District, during the Class Period.

23 36. Defendants Nippon Chemi-con Corporation and United Chemi-Con, Inc. are
24 collectively referred to as “Nippon Chemi-con.”

25 **h. ROHM**

26 37. Defendant ROHM Company Limited is a business entity organized under the laws
27 of Japan with its principal place of business at 21, Saiin Mizosaki-cho, Ukyo-ku, Kyoto 615-8585,
28 Japan. ROHM Company Limited, including through its subsidiaries and affiliates, participated in

1 the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Capacitors
2 and/or Capacitor Products throughout the United States, including in this District, during the Class
3 Period.

4 38. Defendant ROHM Semiconductor U.S.A., LLC is a Delaware limited liability
5 corporation with its principal place of business at 2323 Owen Street, Suite 150, Santa Clara,
6 California 95054. ROHM Semiconductor U.S.A., LLC, including through its subsidiaries and
7 affiliates, participated in the conspiracy alleged in this Complaint and manufactured, marketed,
8 and/or sold Capacitors and/or Capacitor Products throughout the United States, including in this
9 District, during the Class Period.

10 39. Defendants ROHM Company Limited and ROHM Semiconductor U.S.A., LLC are
11 collectively referred to as “ROHM.”

12 **i. Rubycon**

13 40. Defendant Rubycon Corporation is a business entity organized under the laws of
14 Japan with its principal place of business at 1938-1 Nishi-Minowa, Ina City, Nagano Prefecture,
15 Japan. Rubycon Corporation, including through its subsidiaries and affiliates, participated in the
16 conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Capacitors and/or
17 Capacitor Products throughout the United States, including in this District, during the Class
18 Period.

19 41. Defendant Rubycon America, Inc. is an Illinois company with its principal place of
20 business at 4293 Lee Avenue, Gurnee, Illinois 60031. Rubycon America, Inc. is a wholly-owned
21 subsidiary of Rubycon Corporation. Rubycon America, Inc., including through its subsidiaries
22 and affiliates, participated in the conspiracy alleged in this Complaint and manufactured,
23 marketed, and/or sold Capacitors and/or Capacitor Products throughout the United States,
24 including in this District, during the Class Period.

25 42. Defendants Rubycon Corporation and Rubycon America, Inc. are collectively
26 referred to as “Rubycon.”

27 **j. Taiyo Yuden**

28 43. Defendant Taiyo Yuden Co., Ltd. is a business entity organized under the laws of

1 Japan with its principal place of business at 6-16-20, Ueno, Taito-ku, Tokyo 110-0005, Japan.
 2 Taiyo Yuden Co., Ltd. describes the capacitors business as its “core business.” The capacitors
 3 business represents about half of Taiyo Yuden Co., Ltd.’s consolidated net sales. Taiyo Yuden
 4 Co., Ltd., including through its subsidiaries and affiliates, participated in the conspiracy alleged in
 5 this Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor Products
 6 throughout the United States, including in this District, during the Class Period.

7 44. Defendant Taiyo Yuden (USA) Inc. is an Illinois corporation with its principal
 8 place of business at 440 Stevens Avenue, Suite 300, Solana Beach, California 92075. Taiyo
 9 Yuden (USA) Inc. is a wholly-owned subsidiary of Taiyo Yuden Co., Ltd. Taiyo Yuden (USA)
 10 Inc., including through its subsidiaries and affiliates, participated in the conspiracy alleged in this
 11 Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor Products
 12 throughout the United States, including in this District, during the Class Period.

13 45. Defendants Taiyo Yuden Co., Ltd. and Taiyo Yuden (USA) Inc. are collectively
 14 referred to as “Taiyo Yuden.”

15 **k. Vishay**

16 46. Defendant Vishay Intertechnology, Inc. (“Vishay”) is a Delaware corporation with
 17 its principal place of business at 63 Lancaster Avenue, Malvern, Pennsylvania 19355-2143.
 18 Vishay, including through its subsidiaries and affiliates, participated in the conspiracy alleged in
 19 this Complaint and manufactured, marketed, and/or sold Capacitors and/or Capacitor Products
 20 throughout the United States, including in this District, during the Class Period.

21 **l. Hitachi Chemical**

22 47. Defendant Hitachi Chemical Co., Ltd. is a business entity organized under the laws
 23 of Japan with its principal place of business located at Grantokyo South Tower, 1-9-2
 24 Marunouchi, Chiyoda-ku, Tokyo, 100-6606, Japan. Hitachi Chemical Co., Ltd., including through
 25 its subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and
 26 manufactured, marketed, and/or sold Capacitors and/or Capacitor Products throughout the United
 27 States, including in this District, during the Class Period.

28 48. Defendant Hitachi Chemical Company America, Ltd. is a New York corporation

1 with its principal place of business at 10080 North Wolfe Road, Suite SW3-200, Cupertino,
2 California 95014. Hitachi Chemical Company America, Ltd. is a wholly-owned subsidiary of
3 Hitachi Chemical Co., Ltd. Hitachi Chemical Company America, Ltd., including through its
4 subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and
5 manufactured, marketed, and/or sold Capacitors and/or Capacitor Products throughout the United
6 States, including in this District, during the Class Period.

7 49. Defendants Hitachi Chemical Co., Ltd. and Hitachi Chemical Company America
8 Ltd. are collectively referred to as “Hitachi Chemical.”

9 **m. ELNA**

10 50. Defendant ELNA Co., Ltd. is a business entity organized under the laws of Japan
11 with its principal place of business at 3-8-11 Shin Yokohama, Kohoku-ku, Yokohama, Kanagawa
12 Prefecture, 222-0033, Japan. ELNA Co., Ltd., including through its subsidiaries and affiliates,
13 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold
14 Capacitors and/or Capacitor Products throughout the United States, including in this District,
15 during the Class Period.

16 51. Defendant ELNA America, Inc. is a California corporation with its principal place
17 of business at 879 West 190th Street, Suite 100, Gardena, California 90248. ELNA America Inc.
18 is a wholly-owned subsidiary of ELNA Co., Ltd. ELNA America Inc., including through its
19 subsidiaries and affiliates, participated in the conspiracy alleged in this Complaint and
20 manufactured, marketed, and/or sold Capacitors and/or Capacitor Products throughout the United
21 States, including in this District, during the Class Period.

22 52. Defendants ELNA Co., Ltd. and ELNA America Inc. are collectively referred to as
23 “ELNA.”

24 **n. Matsuo Electric**

25 53. Defendant Matsuo Electric Co., Ltd. (“Matsuo”) is a business entity organized
26 under the laws of Japan with its principal place of business at 3-5 Sennari-cho, Toyonaka-shi,
27 Osaka 561-8558, Japan. Matsuo, including through its subsidiaries and affiliates, participated in
28 the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold Capacitors

1 and/or Capacitor Products throughout the United States, including in this District, during the Class
2 Period.

3 **o. Toshin Kogyo**

4 54. Defendant Toshin Kogyo Co., Ltd. (“Toshin Kogyo”) is a business entity organized
5 under the laws of Japan with its principal place of business at Tsukasa Building 2-15-4, Uchikanda
6 Chiyoda-ku, Tokyo, Japan. Toshin Kogyo, including through its subsidiaries and affiliates,
7 participated in the conspiracy alleged in this Complaint and manufactured, marketed, and/or sold
8 Capacitors and/or Capacitor Products throughout the United States, including in this District,
9 during the Class Period.

10 55. The acts alleged against Defendants in this Complaint were authorized, ordered, or
11 done by their officers, agents, employees, or representatives, while actively engaged in the
12 management and operation of Defendants’ businesses or affairs.

13 56. Each Defendant acted as the principal, agent, or joint venturer of, or for, other
14 Defendants with respect to the acts, violations, and common course of conduct alleged by
15 Plaintiff. Each Defendant or co-conspirator that is a subsidiary of a foreign parent acted as the
16 United States agent for Capacitors made by its parent company.

17 57. Various persons, partnerships, sole proprietors, firms, corporations, and individuals
18 not named as Defendants in this lawsuit, and individuals, both known and unknown, participated
19 as co-conspirators with Defendants in the offenses alleged in this Complaint, and performed acts
20 and made statements in furtherance of the conspiracy. Plaintiff reserves the right to name some or
21 all of these persons and entities as Defendants at a later date.

22 **IV. FACTUAL ALLEGATIONS**

23 **A. Capacitors**

24 58. Capacitors are one of five primary types of passive and electromechanical
25 components. Capacitors typically filter ripples or spikes in power supply and store energy to
26 provide a charge to other components on a printed circuit board. Capacitors can be made from
27 several types of dielectrics such as tantalum, glass, ceramic, aluminum, film, niobium oxide,
28 plastic, paper, barium titante, or other materials that conduct electrical current. Capacitors are

1 used in numerous electrical systems, including consumer electronics, mobile phones, and audio
2 amplifiers.

3 59. The capacitor was first discovered in Germany by Ewald Georg von Kleist in 1745
4 with a jar of water and a wire connected to an electrostatic generator. When he touched his hand
5 to the water he received a shock much greater than that of the generator on its own. Soon
6 thereafter, a Dutch physicist invented a similar capacitor, which was named the Leyden Jar. It was
7 not until Benjamin Franklin investigated the Leyden Jar that the shock phenomenon was correctly
8 identified. Franklin determined that the energy was stored not in the water as previously thought,
9 but rather in the glass itself. In this application, the glass acted as the dielectric. More simply, the
10 glass was polarized, and when the circuit was completed (with one's hand or a lead wire), the
11 energy was released.

12 60. In the modern day, a traditional capacitor comprises two parallel metal plates
13 separated by a dielectric material, such as a ceramic or air. Because the dielectric material is not
14 conductive, a positive charge accumulates on one plate (the anode) with a negative charge on the
15 opposite plate (the cathode). The capacitor may release this stored energy by connecting the two
16 plates through a conductive path that closes the circuit. The amount of energy a capacitor can
17 store is its "capacitance," which is measured in Farads (F). Capacitance depends on the
18 orientation of the metal plates and the properties of the dielectric material.

19 61. Capacitor design is a compromise between capacitance, resistance (the opposition
20 to the passage of an electric current through that conductor), and inductance (the property by
21 which a change in current flowing through a conductor creates a voltage in the conductor itself and
22 any nearby conductors). A capacitor designer must also consider manufacturing costs and size
23 restrictions when designing a capacitor.

24 62. Most modern capacitors fall into one of three categories: (1) ceramic capacitors;
25 (2) electrolytic capacitors; and (3) electric double layer capacitors ("EDLCs"), sometimes referred
26 to as "Supercapacitors" or "ultracapacitors." Ceramic capacitors, which are typically multilayer
27 ceramic capacitors ("MLCCs"), comprise the largest worldwide capacitor market, with more than
28 one trillion individual MLCCs produced and incorporated into electronic products each year.

1 MLCCs are cheap and easy to produce, and are available in sizes typically up to about 10
2 microfarads (.00001).

3 63. Electrolytic capacitors have properties that generally give them a greater volumetric
4 efficiency and reliability compared to ceramic capacitors, providing higher capacitance in a small
5 package. Electrolytic capacitors tend to be significantly more expensive than MLCCs.
6 Electrolytic capacitors have capacitance of up hundreds of thousands of micro Farads (.1 F), and
7 even into ranges of tens of Farads.

8 64. Supercapacitors provide the highest capacitance of commercially available
9 capacitors, measured up to thousands of Farads (1000 F). Supercapacitors are less suitable for
10 small applications, however. Supercapacitors can be packaged as small radial capacitors, typically
11 in the hundreds of thousands of microfarads, up to tens of Farads, or as large canister capacitors,
12 with capacitance ratings up to thousands of Farads.

13 65. The capacitor market is expected to exceed \$20 billion by 2018, as it is closely
14 connected to the growth of high technology applications, such as computers, digital cameras,
15 cellular telephones, televisions, other home electronics, and the growing smart-device market. As
16 the demand for electronic devices increases, so will the demand for smaller, more efficient
17 capacitors, especially Tantalum Capacitors and small-scale Supercapacitors.

18 66. In the worldwide battery market, there is speculation that advances in
19 Supercapacitor technology could render Supercapacitors a competitor to modern lithium-ion
20 batteries, particularly given their longevity and reliability.

21 67. Although different types of Capacitors are made for different applications, in
22 general Capacitors are a commodity product within their particular market segment, typically
23 defined by their capacitance ratings and their size.

24 **B. Electrolytic Capacitors**

25 68. An electrolytic capacitor uses an electrolyte solution as one of its "plates" to
26 achieve a larger capacitance per unit volume than MLCCs. Electrolytic capacitors are widely used
27 in power supplies, dampening alternating currents (AC) from direct current (DC) power
28 connections. Electrolytic capacitors tend to have higher leakage of current than a comparable dry

1 capacitor, such as an MLCC, and can have significant limitations in operating temperature range,
2 parasitic resistance and inductance. In addition, electrolytic capacitors run the risk that the
3 electrolyte may dry out or evaporate, and they generally require that voltage applied to the anode
4 never become negative relative to the cathode (i.e., they are “polarized”). Thus they cannot be
5 used with AC signals without a DC polarizing bias.

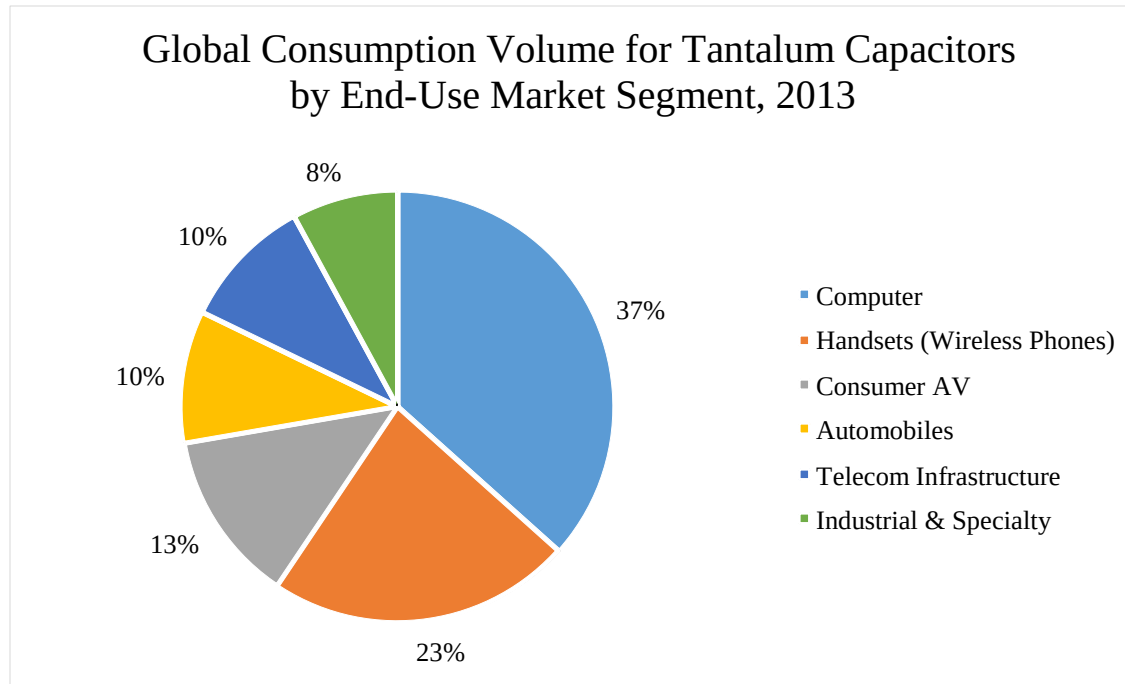
6 69. Another unique feature of electrolytic capacitors is their use of a thin oxidized layer
7 of metal as the dielectric. This microscopically thin layer of dielectric material allows electrolytic
8 capacitors to be much more volumetrically efficient than typical capacitors, such as MLCCs,
9 which utilize a separate material, usually ceramic (though previously glass, or mica), as the non-
10 conductive dielectric component. While electrolytic capacitors have some drawbacks when
11 compared to MLCCs, they provide a much higher capacitance to volume ratio, and are thus better
12 suited to high-powered circuitry, such as that in a mobile phone or laptop computer.

13 70. Electrolytic capacitors in common use fall into two categories: aluminum and
14 tantalum. In addition, while some electrolytic capacitors made of niobium are commercially
15 available from a few producers, they have not gained wide market acceptance.

16 C. Tantalum Capacitors

17 71. Tantalum is a chemical element with atomic number 73. It is a rare lustrous
18 transition metal that is highly corrosion-resistant. Tantalum is mined primarily in Australia,
19 however significant amounts of the metal are also found in China and Central Africa. Columbite-
20 tantalite, the metal ore from which tantalum is extracted, is considered a conflict mineral, because
21 it is mined in conditions of armed conflict and human rights abuses in Central Africa. Regulations
22 promulgated pursuant to the Dodd-Frank Wall Street Reform and Consumer Protection Act of
23 2010 (“Dodd-Frank”) require electronics companies to verify and disclose their sources of
24 tantalum, though those regulations have been subject to legal challenges.

25 72. Tantalum has several uses in industry, but its main use today is in Tantalum
26 Capacitors in electronic equipment such as mobile phones and computers. Tantalum Capacitors
27 are electrolytic capacitors, which uses tantalum’s unique properties to significant advantage. The
28 figure below identifies the primary end uses for Tantalum Capacitors:



73. The primary elements of Tantalum Capacitors include: (1) tantalum metal powder with a significant enough capacitance value per gram to be useful in a pressed anode; (2) tantalum metal wire used as the lead attach; (3) tantalite ore, the rare metal from which both tantalum powder and wire are engineered and produced; and (4) an electrolyte, either made of manganese nitrite or conductive polymer such as polypyrrole, polythiophene, or polyaniline.

74. In a Tantalum Capacitor, tantalum tends to form a non-conductive protective oxide surface layer, and thus naturally creates two-thirds of a traditional capacitor. A pellet of tantalum powder itself acts as one “plate” of the capacitor, while the non-conductive oxide layer acts as the dielectric. An electrolytic solution or a conductive solid is then used as the other “plate.” Thus, the dielectric, because it is a microscopically thin oxide coating on the tantalum pellet, is very thin, and adds negligible size and weight compared to other types of capacitors.

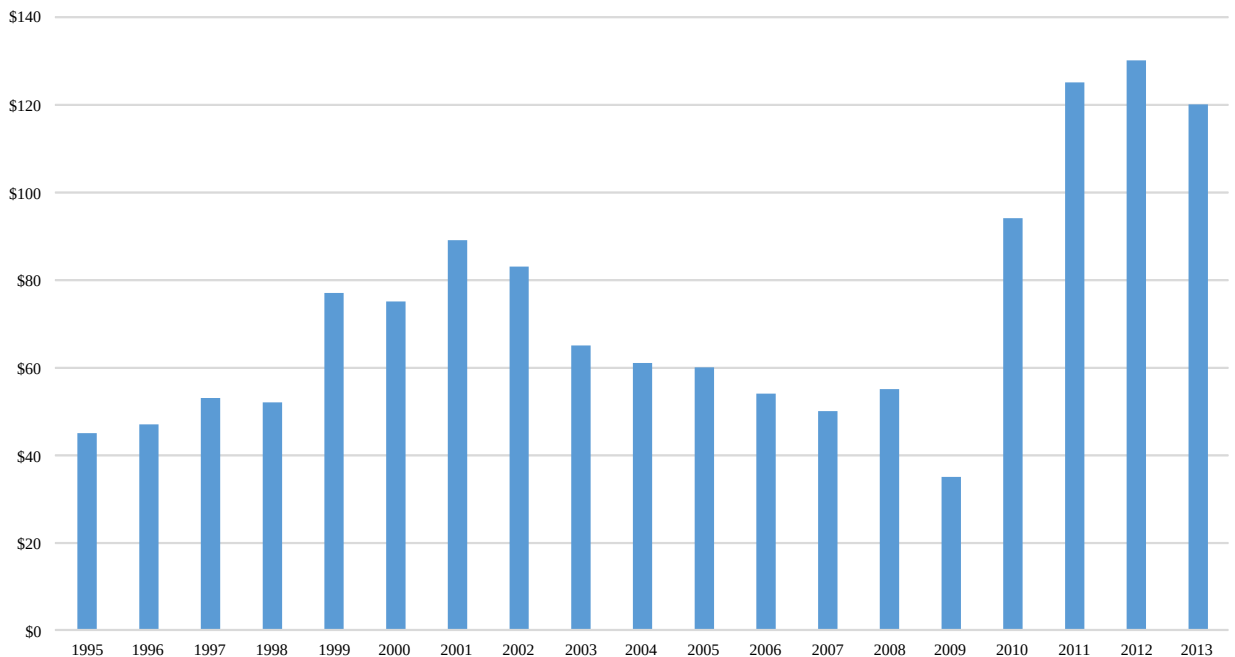
75. Tantalum’s thin dielectric oxide coating and its natural conductive properties allow a Tantalum Capacitor to have high capacitance in a small volume. This high capacitance relative to size gives Tantalum Capacitors a high volumetric efficiency, and makes them desirable for use in restricted-space applications requiring high capacitance, such as mobile phones, compact computing devices, and automotive electronics.

76. In addition to their volumetric efficiency, Tantalum Capacitors have very low

electrical leakage. As a result, they retain a charge for a long time and can tolerate hot environments up to 125 degrees Centigrade. Tantalum Capacitors also have lower equivalent series resistance than Aluminum Capacitors, a significant advantage in many designs.

77. Although Tantalum Capacitors generally provide superior performance over Aluminum Capacitors, common MLCCs, and similar capacitors, they are far more costly, relying on a significantly more expensive metal. Tantalum prices have averaged more than \$100 per pound since 2011. The average price per pound for tantalite ore appears in the table below:

**Average Price per Pound for Tantalite Ore under Contract
(USD/Pound)**



Source: Paumanok Group.

78. Raw materials, namely tantalum, account for approximately 57% of the cost of Tantalum Capacitors. As a result, Tantalum Capacitors are highly sensitive to changes in the price of raw tantalum. One industry commentator recently noted that the best strategy for Tantalum Capacitor manufacturers is to raise prices when they are subjected to higher raw material costs.

79. The price of Tantalum Capacitors has increased by 27% from 2003 to 2013. About 35% of the cost of producing Tantalum Capacitors is dependent on the cost of tantalum powder or wire (representing 60% of raw materials costs). From 2003 to 2009, however, Tantalum Capacitor prices appear to have grown at a faster rate than the underlying tantalum prices.

1 80. During 2011, Defendants increased their Tantalum Capacitor prices at least three
2 times. These prices increases, while ostensibly to cover increased costs of tantalite ore and
3 capacitor-grade tantalum powder, as alleged herein, were collusive in nature.

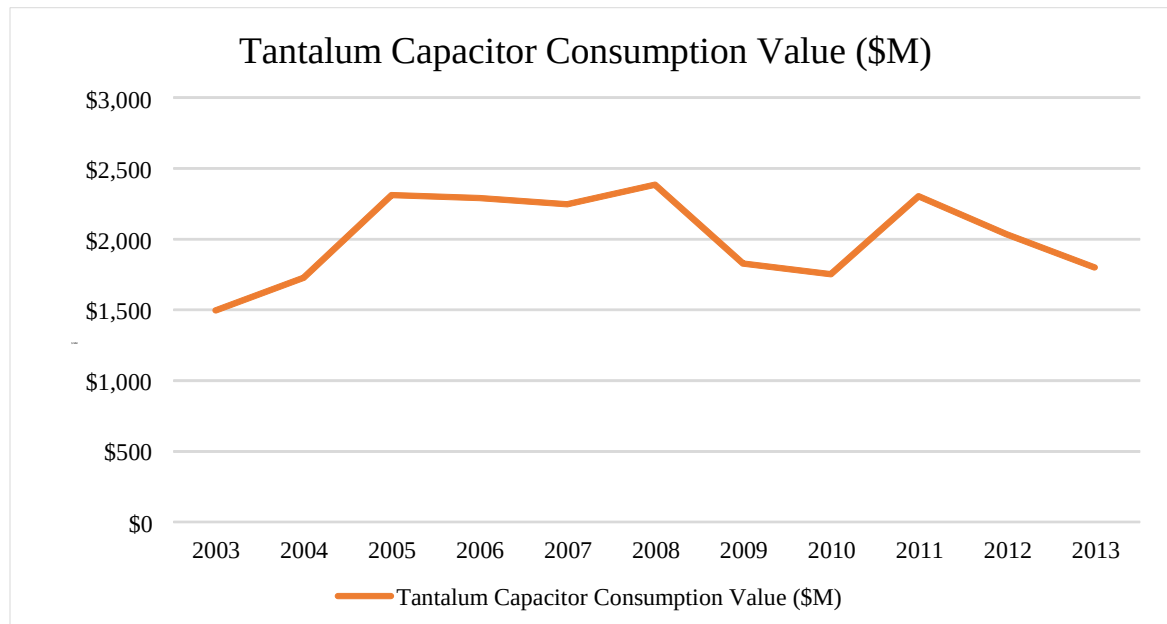
4 81. The collusive use of rising raw material costs as a pretext to increase prices of
5 manufactured goods is consistent with the prior practice of several Defendants. For instance, in
6 2007-08, Defendants Panasonic, Sanyo, and NEC Tokin—all of which also manufacture lithium
7 ion batteries—agreed to use the increased cost of cobalt, a significant raw input, as a pretext to
8 raise prices of lithium ion batteries. These Defendants established price formulas and bottom line
9 selling prices of their manufactured goods that keyed off the cost of the raw materials. Sanyo later
10 pled guilty to fixing the prices of lithium-ion batteries during that time period, and named
11 Panasonic as one of its co-conspirators.

12 82. Only limited information about Defendants' pricing mechanisms and decisions is
13 publicly available at this time. On information and belief, Defendants' pricing of Tantalum
14 Capacitors appears to be consistent with their practice of using rising raw material costs as a
15 pretext for raising prices.

16 83. The global market for Tantalum Capacitors is estimated at an annual \$1.8 billion.
17 This includes significant usage in smartphones where, for example, the iPhone uses Tantalum
18 Capacitors in sufficient quantity that Apple felt obligated to conduct audits to ensure that all of its
19 tantalum suppliers are "conflict free."

20 84. While Tantalum Capacitors encompass only 1.3% of all capacitor shipments by
21 volume, they account for 10.6% of the worldwide capacitor market by dollar value. The chart
22 below depicts the dollar value of Tantalum Capacitor sales between 2003 and 2013:

23
24
25
26
27
28



85. While Tantalum Capacitors are employed in a wide variety of end-use markets, the Capacitors themselves are very standardized. Along with the type of capacitor design (e.g., molded chip, coated chip, molded axial), Tantalum Capacitors also have common size dimensions. Therefore the end use application, such as a computer or a digital camera, is less important than the size of the molded chip capacitor. In order to further facilitate product standardization, surface mount Tantalum Capacitors are generally packaged in embossed plastic carrier tapes that are specifically designed for use with “pick and place” insertion equipment.

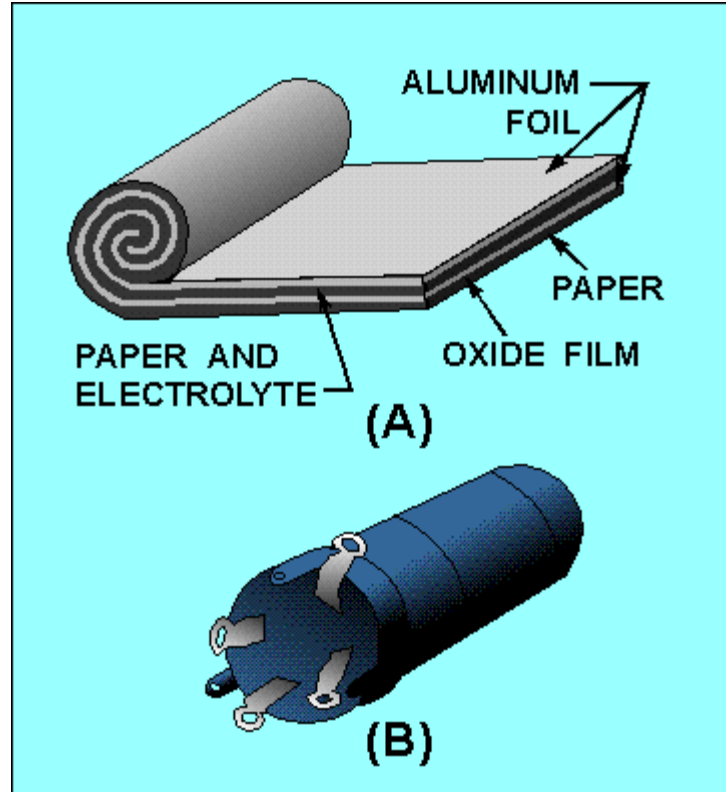
86. Of the different capacitor designs, molded chip Tantalum Capacitors have the highest level of standardization. These chips constitute 86% of the total share of Tantalum Capacitors sold in 2013.

87. In addition, the largest group of direct purchasers of Tantalum Capacitors are distributor companies. Distributors comprised 55% of sales in 2013. The high standardization of Tantalum Capacitors means that distributors can purchase them in large volumes, selling to end-use manufacturers based on common size and form characteristics.

D. Aluminum Capacitors

88. Aluminum Capacitors are a second type of electrolytic capacitor. An Aluminum Capacitor contains two conducting aluminum foil layers and a paper spacer coated in electrolyte.

One of the foils, which is coated with an insulating oxide layer, acts as the anode. The other foil layer, along with the liquid electrolyte, forms the cathode. These layers are then rolled together, fitted with pin connectors, and cased in aluminum, as shown in the figure below:



89. The insulated aluminum oxide on the surface of the aluminum foil acts as a dielectric. Because this layer is quite thin, the capacitor is able to have a relatively high capacitance in a small volume, as in Tantalum Capacitors. In an Aluminum Capacitor, the oxide has a dielectric constant which is considerably higher than most common polymer insulators, meaning that it can withstand a reasonably high voltage. The combination of high voltage and high capacitance allows for high energy density.

90. The cost of raw materials for Aluminum Capacitors is considerably less expensive than for Tantalum Capacitors, with etched aluminum anode foils costing approximately \$12 per pound in 2013. Aluminum Capacitors have a lower price and larger capacitance compared with other electrolytic capacitors. As a result, OEMs will continue to employ Aluminum Capacitors over Tantalum Capacitors where possible, such as in desktop computers.

1 91. Aluminum Capacitors, like Tantalum Capacitors, are highly standardized products.

2 92. Aluminum Capacitors, while growing in volume have only grown by
3 approximately 1% in revenue over the last decade as a result of the increased presence of Chinese
4 vendors. As a result, on information and belief, Defendants acted in concert to stabilize
5 Aluminum Capacitor prices.

6 93. The Aluminum Capacitor market is a roughly \$3.9 billion market worldwide, based
7 on 2013 sales figures. Fifty five percent of the market is comprised of radial leaded capacitors, as
8 in the figure above, and 17% is made up of vertical chip capacitors. Thus, at least 72% of the
9 market is comprised or plug-and-play standardized format capacitors.

10 **E. Supercapacitors**

11 94. Supercapacitors come in two forms: EDLCs and hybrid supercapacitors. Hybrid
12 supercapacitors are based on lithium-ion technology, and make up only about 10% of the \$400
13 million worldwide market for Supercapacitors. EDLCs, the focus of the Supercapacitor market in
14 this Complaint, make up 90% of the worldwide Supercapacitor market, with roughly \$356 million
15 in sales in 2013.

16 95. EDLCs are unique in that they do not use a dielectric. Instead, they store energy
17 using an electric double layer that is created at the interface between the electrolyte and the
18 conductive solid state material in the capacitor. The electric double layer performs the function of
19 a dielectric in a Supercapacitor.

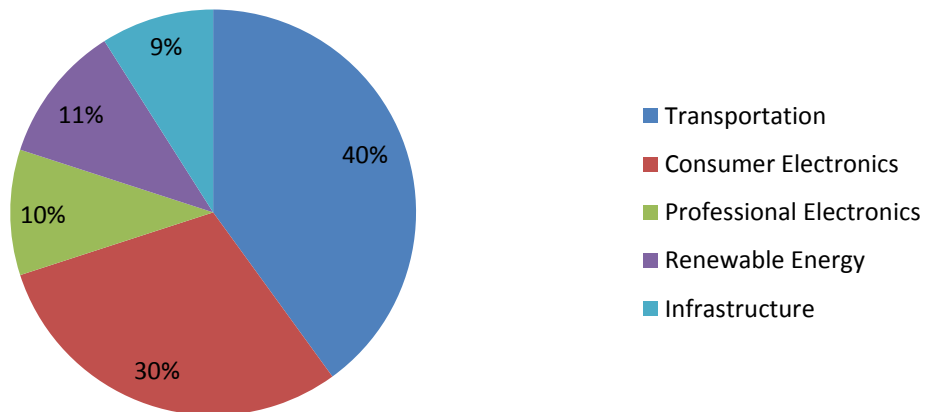
20 96. A Supercapacitor, like an Aluminum Capacitor, contains an electrode foil made of
21 activated carbon electrodes formed onto aluminum foil. That foil is then coiled with a separator.
22 An electrolyte exists between the two activated carbon electrodes. Electricity is charged and
23 discharged when the ions within the electrolyte are absorbed, moving to and from the electrode
24 surfaces.

25 97. Supercapacitors have a greater capacity than Aluminum Capacitors, but their larger
26 internal resistance is inappropriate for use as ripple absorption for alternating current circuits. As
27 a result, Supercapacitors are primarily used like rechargeable batteries to provide energy backup in
28 direct current circuits.

98. Supercapacitors are characterized by: (1) having high current and therefore being fast charging; (2) maintaining a longer life cycle that can charge and discharge tens of thousands of times; (3) being usable in a wide range of temperatures and offering stability at low temperatures; (4) having little safety risk; and (5) being environmentally friendly in that they do not use heavy metals.

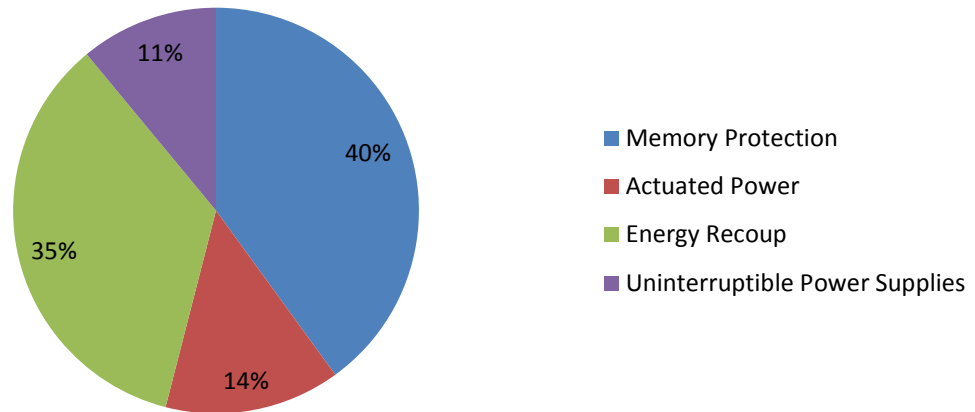
99. As shown in the chart below, major end-use markets for Supercapacitors include consumer electronics (e.g., audio systems, video cameras, electronic toys, etc.), professional electronics (e.g., security alarms, smoke detectors, SRAM, computer bridge power, etc.), transportation (e.g., high speed trains, brake recoup, track lifts, etc.), renewable energy (e.g., wind turbines, solar power, uninterruptible power supply (UPS) systems, etc.), and infrastructure (e.g., UPS for base stations, UPS for factories, SSD, etc.).

**Global Consumption Value for
Supercapacitors by End-Use Segment, 2012**



100. Major circuit applications for Supercapacitors include uninterruptible power supplies (UPS), memory protection, actuated power, and energy recoup.

Global Consumption Value for Supercapacitors by Circuit Application, 2012



101. Many of the Supercapacitor configurations are standardized across the industry. These include: screw terminal (large can), radial leaded/cylindrical (small can), snap mount, module assembly, coin cell, and surface mount. The end-use dictates the configuration demanded. For example, coin cell Supercapacitors are used primarily for mounting in consumer audio and video imaging for complementary metal-oxide-semiconductor (CMOS) protection, whereas screw terminal (large can) Supercapacitors are typically used for energy storage applications and actuated power applications. Large can Supercapacitors are assembled into modules to achieve the desired voltage.

102. The largest cost in producing Supercapacitors is the cost of raw materials, primarily the activated carbon. Depending on the configuration, the cost of raw carbon can make up between 25% and 62% of the cost of the Supercapacitor. The primary factor in determining the proportion of carbon costs relative to other costs is the size of the Supercapacitor: the larger the can the more costly the carbon material. Larger cans use carbon cloth, which is estimated to be roughly \$200 per pound, whereas smaller cans use carbon powder, which costs about 5% to 10% of the cost per pound for cloth (\$10 to \$20 per pound).

Cost Structure for the Production of Carbon Supercapacitors, CY2012

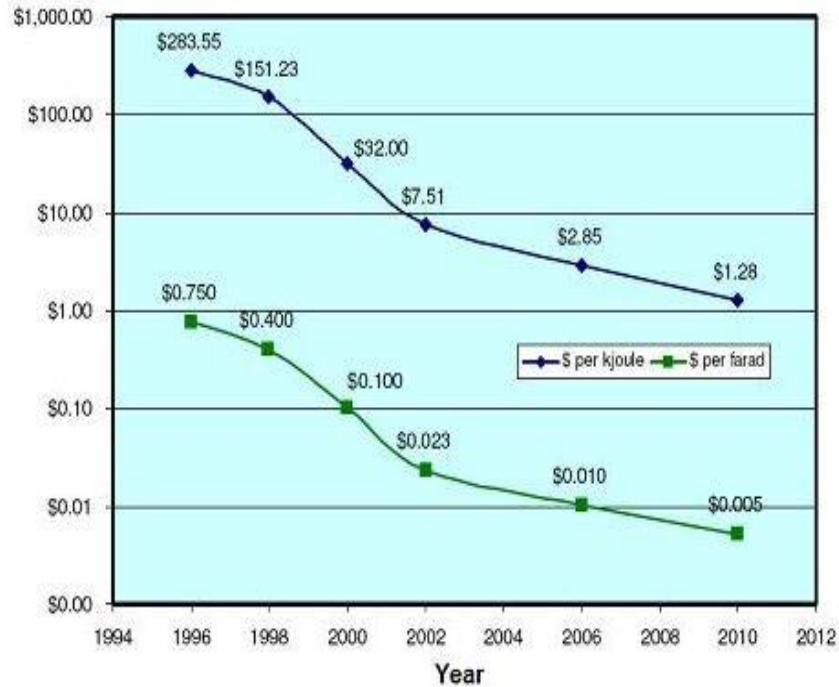
Cost Category	% Cost
Variable Raw	49%
Variable Overhead	15%
Variable Labor	8%
Variable Other Mfg.	11%
Fixed Costs	17%

Raw Material Breakdown for the Production of Carbon Supercapacitors, CY2012

Raw Material	Overall	Radial Leaded	Snap Mount
Carbon	50%	25%	62%
Can/Sleeve	14%	23%	8%
Electrolyte	9%	4%	6%
Rubber End Seal	8%	15%	5%
Separator	7%	7%	8%
Electrode Tab Material	5%	15%	6%
Lead Wires/Lugs	7%	11%	5%

103. Supercapacitor manufacturers also have significant market positions in other capacitor dielectrics. This is because Supercapacitors are a logical extension of the other capacitor product lines, and access to distribution channels and existing customers is already built into the existing dielectric business. Companies with large market positions in large can Aluminum Capacitors or large can polypropylene film capacitors have leadership positions in large can Supercapacitors, as do the major suppliers of radial leaded and coin cell capacitors area already serving the consumer electronic market, either captively (e.g., Panasonic and NEC Tokin) or through sales of other capacitor dielectrics (e.g., Rubycon).

104. The pace of decline for Supercapacitor prices has decreased over time. In other words, the larger price decreases seen in the technology's infancy leveled off in the mid-2000s. Between 1998 to 2002, Supercapacitor prices fell over 50% per year on average (both in terms of dollar per kilojoule and dollar per farad), but during 2002 to 2006, prices fell by only 22% (\$/kJ) and 19% (\$/F) per year.



F. The Structure and Characteristics of the Capacitor Market Made it Susceptible to Collusion

105. As alleged in this Complaint on information and belief, Defendants combined and conspired to limit the supply of Capacitors, to allocate markets including by specific types of Capacitors, and to fix, raise, stabilize or maintain Capacitor prices.

106. Defendants effected their combination and conspiracy, beginning no later than January 1, 2005, through in-person, telephonic, and electronic communications among their executives, officers, sales representatives, and other employees.

107. The structure and characteristics of the Capacitor market during the Class Period facilitated Defendants' conspiracy. These features included significant barriers to entry, inelastic demand, the existence of trade associations and other common forums, market concentration, cross-licensing among established competitors, vertical integration and captive supply of raw materials, and a history of anticompetitive conduct by certain Defendants.

1. Barriers to Entry

108. High barriers to entry by a new firm into a market are important to cartelization because they prevent the threat of new entrants from undercutting the cartel's supracompetitive prices. During the Class Period, there were significant barriers to entry into the Capacitor market.

1 A new entrant into the market would have faced expensive and lengthy start-up costs, including
2 millions of dollars associated with research and development, manufacturing plants, and
3 equipment, energy, and transportation.

4 109. Constructing the fabrication facilities necessary for manufacture is expensive. For
5 example, it is estimated that NEC Tokin recently invested 12 billion JPY (about \$116 million
6 USD) in the development of a new production facility after flooding in Thailand destroyed its
7 prior Tantalum Capacitor plant. Furthermore, with each Capacitor typically priced in the cents,
8 manufacturers must benefit from massive economies of scale in order to be successful.

9 110. The cost of raw materials, specifically the cost of active carbon and carbon cloth,
10 serves as a barrier to entry for the manufacture of Supercapacitors.

11 111. One of the largest barriers to entry is the high cost of production. For example, the
12 steps necessary to produce Tantalum Capacitors are complex and expensive. They require the
13 formation of the anode from capacitor-grade tantalum metal powder, as well as racking, formation,
14 impregnation, assembly, epoxy molding, testing, packing onto reels, and shipping.

15 112. The production of capacity-grade tantalum metal power, one of the key raw
16 materials for Tantalum Capacitors, is extremely difficult. Some have described the process as a
17 “black art.” Only a limited number of facilities worldwide attempt to produce the complicated
18 chemistry necessary to manufacture capacity-grade tantalum metal powder.

19 113. Sources of tantalite ore are limited in that major Tantalum Capacitor manufacturers
20 avoid using conflict minerals that directly or indirectly finance or benefit armed groups in Central
21 Africa including the Democratic Republic of Congo. Industry organizations have created
22 standards programs for “conflict free” mineral certification. In accordance with the Dodd-Frank
23 and regulations promulgated by the U.S. Securities and Exchange Commission (“SEC”),
24 beginning in 2014, companies must make public disclosures if they used conflict minerals—
25 including tantalum—that are necessary to the functionality or production of their products.¹ The

26 _____
27 ¹ Whether the regulatory requirement of such disclosures violates the First Amendment is the
28 subject of ongoing and costly litigation.

1 cost of due diligence and compliance related to these disclosure requirements is a significant
2 barrier to entry.

3 114. Similarly, any new entrant into the Capacitor market would have to comply with
4 various environmental regulations in whatever location it builds fabrication facilities. Compliance
5 with such regulations would require extensive testing and the receipt of governmental approvals,
6 all of which would take many years.

7 115. Likewise, a new entrant into the Capacitor market would face significantly higher
8 prices than the established competitors because of vertical integration and long-term supply deals
9 of the raw materials inherent in Capacitors. For example, in Aluminum Capacitors, capacitor foil
10 is available on the open market, but established competitors with a captive supply of capacitor foil
11 pay approximately one-third of the open market price. Likewise, several major producers of
12 Tantalum Capacitors have a captive supply of tantalum, allowing them to achieve not only cheaper
13 prices, but a guaranteed supply of a difficult to obtain material.

14 2. Inelasticity of Demand

15 116. Elasticity describes the responsiveness of demand for a product to a change in the
16 product's price. Demand is inelastic when an increase in a product's price does not drive
17 consumer demand down. Inelastic demand facilitates cartelization because it allows cartel
18 members to raise prices without fear that consumers will purchase cheaper substitute products.

19 117. During the Class Period, demand for Capacitors was, and continues to be, inelastic
20 because there are no close substitutes for these products.

21 118. High performance electronic devices, such as mobile phones, laptops, and modern
22 automotive braking systems, have specific capacitance requirements that can only be met by
23 electrolytic or Supercapacitors.

24 3. Trade Associations and Other Common Forums

25 119. Defendants are members of several passive electronic components trade
26 associations and attended, spoke at, or presented at a number of trade shows, conferences, and
27 forums on Capacitors during the Class Period. These trade associations and other common forums
28 provided an opportunity for Defendants to meet and discuss prices and other aspects of their

1 conspiracy.

2 120. Trade associations for the Capacitor market, including Tantalum Capacitors,
3 Aluminum Capacitors, and Supercapacitors, in general include the Tantalum-Niobium
4 International Study Center (“TIC”), the Electronic Components Industry Association (“ECIA”),
5 and the European Passive Components Industry Association (“EPCIA”), among others.

6 121. During the Class Period, Defendants AVX, KEMET, NEC Tokin, Nichicon,
7 Panasonic, Sanyo, and Vishay were members of TIC. Daniel Persico, NEC Tokin’s Associate
8 Senior Vice President of Global Sales and Marketing, served as President of TIC in 2012. He
9 previously worked for KEMET as Vice President of Strategic Marketing and Business
10 Development. During the Class Period, the TIC executive committee also included: William
11 Millman, AVX Tantalum Division Director of Quality and Technology; Hiroya Nishimoto, Sanyo
12 Electronic Components (Hong Kong) President; and Yehuda Hogeg, Vishay Senior Vice President
13 of Tantalum Capacitors.

14 122. During the Class Period, TIC held annual General Assemblies which facilitated
15 collusion and afforded Defendants the opportunity to meet and discuss Tantalum Capacitor
16 pricing, production, standards, and other matters. TIC’s General Assemblies during the Class
17 Period were as follows:

TIC General Assembly Locations	Dates
Pattaya, Thailand	October 16–20, 2005
Innsbruck, Austria	October 15–17, 2006
Rio de Janeiro, Brazil	October 21–24, 2007
Shanghai, China	October 19–21, 2008
Tallinn, Estonia	October 18–21, 2009
Lake Tahoe, Nevada	October 3–6, 2010
Almaty, Kazakhstan	October 16–19, 2011
Cape Town, South Africa	October 7–10, 2012
York, England	October 13–16, 2013

123. During the Class Period, Defendants AVX, KEMET, Panasonic, ROHM, and Vishay, or their affiliates were members of ECIA. During the Class Period, members of ECIA's board of directors included: James A. Bruorton, KEMET Vice President of Global Distribution Sales and Business Development; Joel Smejkal, Vishay Senior Vice President of Global Distribution Sales; and Keith Thomas, AVX Vice President.

124. ECIA sponsors numerous industry meetings and trade shows including the ECIA Executive Conference and the Electronic Component & Technology Conference. ECIA also sponsors the annual Capacitor and Resistor Technology Symposium ("CARTS International"), which was held during the Class Period as follows:

CARTS International Locations	Dates
Palm Springs, California	March 21–24, 2005
Orlando, Florida	April 3–6, 2006
Albuquerque, New Mexico	March 26–29, 2007
Newport Beach, California	March 17–20, 2007
Jacksonville, Florida	March 30–April 2, 2009
New Orleans, Louisiana	March 15–18, 2010
Jacksonville, Florida	March 28–31, 2011
Las Vegas, Nevada	March 26–29, 2012
Houston, Texas	March 25–28, 2013
Santa Clara, California	March 31–April 3, 2014

ECIA's meetings and symposia facilitated collusion and functioned as a means for Defendants to cooperate and discuss Capacitor pricing, production, standards, and other matters.

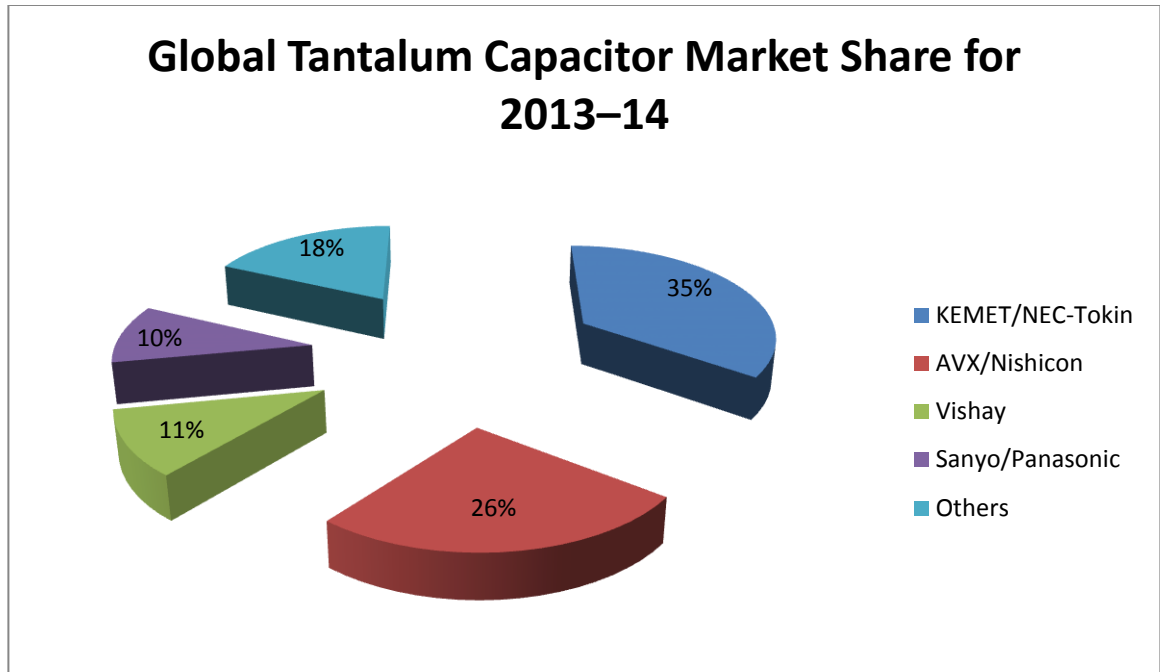
125. During the Class Period, EPCIA's members included Defendants AVX, Nichicon, Panasonic, and Vishay. EPCIA held meetings semi-annually, often hosted by one of its member companies. For instance, EPCIA's November 2010 meeting was held at Vishay's facilities in Selb, Germany. EPCIA's meetings facilitated collusion and functioned as a means for Defendants

1 to cooperate and discuss pricing, production, standards, and other matters.

2 **4. Market Concentration**

3 126. The smaller the number of firms in a market, the more conducive a market is to
4 cartelization. Certain Capacitor markets are highly concentrated. For example, the market for
5 Tantalum Capacitors has seen significant consolidation in the last several years. Panasonic now
6 controls Sanyo's Tantalum Capacitor business, having first acquired a majority of Sanyo's voting
7 stock in December 2009, and then completing its acquisition of Sanyo in April 2011. In March
8 2012, Kemet entered an agreement with NEC to purchase a majority of the common stock of NEC
9 Tokin, which produces various components including Tantalum Capacitors, relays, and
10 Supercapacitors. The KEMET-NEC Tokin transaction closed in February 2013. Also in
11 February 2013, AVX agreed to acquire Nichicon's Tantalum Capacitor business.

12 127. Taking into account the collective market shares of all Defendants, the Tantalum
13 Capacitor market is heavily concentrated. During the Class Period, the alleged cartel members
14 held more than an 80% market share. In 2012-13, Defendants' respective shares of the Tantalum
15 Capacitor market were as follows: KEMET (23%), AVX (21%), NEC Tokin (11%), Vishay
16 (11%), Sanyo/Panasonic (10%), and Nichicon (4%). Following further consolidation of the
17 industry, in 2013-14, Defendants' respective market shares were as follows: KEMET/NEC Tokin
18 (35%), AVX/Nishicon (26%), Vishay (11%), and Sanyo/Panasonic (10%). These market shares
19 are illustrated in the following chart:



5. Cross-Licensing Among Established Competitors

128. Intellectual property sharing agreements in the Capacitor market has given Defendants opportunities to collude on pricing, and has created significant barriers to entry for would-be competitors.

129. While many of these licenses and agreements are undisclosed or not made available to the public, hints can be gleaned from public disclosures. For example, in Defendant Vishay Corporation's 2013 Annual Report, the company notes that "We are engaged in discussions with various parties regarding patent licensing and cross patent licensing issues. . . . During the past few years, we settled several suits which we had initiated to enforce our intellectual property rights. We are receiving royalties on sales of these companies' products which use our technology."

130. Other examples are publicly disclosed. For example, in May 2013, Defendants KEMET Electronics Corp. and NEC-Tokin entered into both a joint venture and a cross-licensing and technology development agreement. As a part of this agreement, KEMET and NEC-Tokin agreed to license to each other all patents, trade secrets, and other intellectual property rights covering Tantalum and Aluminum Capacitors, and providing a framework for collaborative research.

131. With the combined patent portfolio of two of the world's largest Tantalum Capacitor businesses, it is hard to imagine a company being capable of manufacturing modern Tantalum Capacitors without infringing some technology. In addition, as Vishay Corporation noted in its 2013 Annual Report, "we have observed that in the current business environment, electronic component and semiconductor companies have become more aggressive in asserting and defending patent claims against competitors." It would be no surprise then that potential entrants to the Tantalum Capacitor market would face significant barriers to entry

6. Vertical Integration and Captive Supply of Raw Materials

132. In addition to intellectual property and production costs, limitations on access to the raw materials needed to produce Capacitors prevented would-be competitors from entering the market. For example, the May 2013 agreement between NEC-Tokin and KEMET provided NEC-Tokin with access to KEMET's vertically integrated tantalum powder supply chain. Not only does this guarantee NEC-Tokin a supply of tantalum powder, but with their combined market share, it could foreclose access to this supply chain by any other potential competitors.

133. Cross-licensing and patent protection extends to the markets for raw materials for Capacitors. For example, the market for tantalum itself is the subject of much consolidation and cross-licensing, which tends to foreclose opportunities for would-be competitors to obtain necessary supplies, particularly if they want to avoid running afoul of conflict-free requirements.

134. Methods of processing and refining tantalum into powder for use in Capacitors has been the subject of much cross-licensing and consolidation. For example, Cabot Supermetals, formerly a subsidiary of Cabot Corporation, reached cross-license agreements covering tantalum powder technologies with Honeywell Electronic Materials in 2005 and The H.C. Starck Group (a major competitor of Cabot) in 2011. Cabot Supermetals was then sold in early 2012 to Global Advanced Metals ("GAM"), the world's largest producer and refiner of tantalum, for at least \$450 million.

135. Cabot Corporation, through its Cabot Supermetals subsidiary, formerly supplied half the world's tantalum powder, and was a major supplier of tantalum for Vishay, KEMET, and AVX, amongst others. These manufacturers are now likely supplied by GAM.

136. The H.C. Starck Group, formerly owned by Bayer, and currently privately held by Advent International and Carlyle Group, is another major supplier of tantalum powder for use in Tantalum Capacitors. Starck had previously acquired TTA, a Thai tantalum manufacturer, as well as V-Tech-Fansteel, a Japanese tantalum metal powders supplier. Through Starck's extensive cross-licensing agreement with Cabot, now owned by GAM, a significant portion of the world's supply of tantalum flows through two suppliers, both with close ties to the defendants and to each other.

137. In addition to supplying tantalum to many of the defendants, companies such as H.C. Starck and Global Advanced Metals are members of industry groups in which Defendants participate. For example, both H.C. Starck and GAM are members of the previously mentioned TIC, along with Defendants AVX, KEMET, NEC Tokin, and Vishay.

138. These captive supply arrangements are not limited to tantalum, as Defendants Nippon Chemi-con, Nichicon, and Rubycon all have captive Aluminum Capacitor foil supplies that allow them to purchase foil at roughly one-third of the market rate.

139. Thus, the supply chain of necessary raw materials not only provides significant barriers to entry to would-be producers of Capacitors, but it also presents further opportunities for Defendants to collude and fix the pricing of their Capacitors.

7. History of Anticompetitive Conduct

140. Many of the Defendants have a history of anticompetitive conduct, and have either been involved, or are currently involved, in antitrust investigations into price-fixing in other technology-related markets. Significantly, much of this conduct occurred during the Class Period identified in this case. To the extent this prior conduct involved electronics components, those products were marketed through the same or related channels as Tantalum Capacitors, Aluminum Capacitors, and Supercapacitors and were overseen by some of the same divisions, or departments of the Defendants for at least part of the Class Period. Defendants including Nippon Chemi-Con, Nichicon, and Rubycon view their movement into Supercapacitor technology as logical extensions of their Aluminum Capacitor product lines.

141. For example, Defendants and their affiliates have been implicated in and/or pled

1 guilty to price fixing of several other electronics components and related products.

2 142. In May 2010, NEC, one of the corporate parents of NEC Tokin and joint venturer
3 with KEMET, was fined €10,296,000 by the EC for its participation in a cartel that fixed prices of
4 dynamic random access memory (DRAM) between July 1998 and June 2002. The DOJ agreed
5 not to bring criminal charges against NEC in exchange for its cooperation in the DOJ's
6 investigation of the DRAM cartel.

7 143. In December 2012, the EC announced that it had imposed a € 157,500,000 fine on
8 Panasonic and its affiliates for their participation in a cartel that fixed prices of cathode ray tubes
9 (CRT).

10 144. In September 2013, Sanyo pled guilty to one count of conspiring to fix the prices of
11 cylindrical lithium ion battery cells sold in the United States and elsewhere for use in notebook
12 computer battery packs from about April 2007 to about September 2008 in violation of Section 1
13 of the Sherman Act. In its plea agreement, Sanyo admitted that Panasonic was one of its co-
14 conspirators.

15 145. These entities' established anticompetitive conduct in various technology-related
16 markets is illustrative of Defendants' corporate conduct, which has included illegal activity aimed
17 at generating profits at the expense of consumers.

18 146. Criminal investigations into price-fixing cartels in the DRAM, CRT, lithium ion
19 battery cell, and other technology-related markets were conducted in this District by the San
20 Francisco office of the DOJ's Antitrust Division.

21 **G. Government Investigations of Defendants**

22 147. The DOJ, EC, NRDC, JFTC, and KFTC commenced investigations into certain
23 Defendants for alleged anticompetitive practices in the Capacitor industry.

24 148. On April 2, 2014, industry reporting service MLex reported that these antitrust
25 regulators were engaged in an industry probe:

26 The US Department of Justice and China's National Development
27 and Reform Commission are probing anticompetitive conduct
28 among capacitor manufacturers, MLex has learned.

1 Japan-based NEC Tokin confirmed that it has been contacted by
2 Chinese, US and European regulators as part of an investigation
into capacitors and is cooperating with the probes.

3 It is understood that the NDRC conducted a dawn raid in the probe
4 on March 19. The European Commission declined to comment on
the probe.

5 The DOJ's investigation is understood to originate out of the
6 antitrust division's San Francisco office, where prosecutors have
7 spent the past decade investigating cartels in the computer parts
8 industry that led to millions of dollars in fines against makers of
memory, LCDs, cathode ray tubes, optical disk drives and lithium-
ion batteries.

9 It is understood that a grand jury empaneled in San Francisco
10 federal court has issued subpoenas to several capacitor
manufacturers.

11 "The Antitrust Division is investigating the possibility of
12 anticompetitive conduct in the capacitor industry," DOJ
13 spokeswoman Gina Talamona said Wednesday.

14 149. On May 8, 2014, MLex reported that the Capacitors investigation had expanded
15 and now involved multiple competition regulators around the globe:

16 Panasonic confirmed that its Korean subsidiary has been visited by
17 antitrust investigators as part of an inquiry into capacitors. The
18 latest move adds to the scrutiny already under way in China and
the US, while another manufacturer, NEC Tokin, has said it also
received inquiries from European regulators.

19 * * *

20 Akira Kadota, a Panasonic spokesman, said a subsidiary in South
21 Korea that sells capacitors has recently been inspected by the
22 country's Fair Trade Commission. The company is cooperating
with the investigation. Kadota declined to comment further.

23 A spokesman for Japan's Taiyo Yuden confirmed to MLex in
24 April that the company's China office had also been inspected by
25 Chinese officials, and that the company is fully cooperating with
26 the investigation. The spokesman, Nobuyuko Hiorhata, said the
company couldn't comment when contacted this week about the
Korean raids.

1 Spokesmen for capacitor manufacturers Rohm, Rubycon, Nitsuko,
2 Nippon Chemi-Con, and Murata declined to comment on whether
they had been contacted by Korean or other antitrust authorities.

3 It is understood that China's National Development and Reform
4 Commission and the US Department of Justice are also
investigating anticompetitive activity in the capacitor market.

5 China's NDRC conducted a dawn raid in the probe in March, and
6 Japan-based NEC Tokin confirmed last month that it has been
7 contacted by Chinese, US and European regulators as part of an
investigation into capacitors and is cooperating with the probes....

8 It is understood that lawyers for NEC also met with the NDRC in
9 mid-April. An NEC spokesman declined to comment this weekn
when contacted by MLex about the Korean inquiry.

10 150. It is significant that the DOJ's investigation into price-fixing in the Capacitor
11 market is criminal rather than civil. The DOJ's Antitrust Division Manual states that "[i]n general,
12 current Division policy is to proceed by criminal investigation and prosecution in cases involving
13 horizontal, *per se* unlawful agreements such as price fixing, bid rigging, and customer and
14 territorial allocations."

15 151. Before the DOJ engages in a criminal investigation, a DOJ Antitrust Division
16 attorney must prepare a memorandum requesting authority to conduct a grand jury investigation.
17 The memorandum must set forth detailed information, including, *inter alia*: (1) the companies,
18 individuals, industry, and commodity involved; (2) the estimated amount of commerce involved
19 on an annual basis; (3) the geographic area affected and the district where the investigation will be
20 conducted; (4) the suspected violation and a summary of the supporting evidence; and (5) the
21 significance of the violation from an antitrust enforcement standpoint. The memorandum then
22 must go through an extensive chain of review, from the section or field office chief to the Director
23 of Criminal Enforcement to the Assistant Attorney General, who must ultimately approve the
24 investigation.

25 152. Based on the DOJ's standards for conducting a criminal investigation into
26 anticompetitive behavior, the existence of a criminal investigation into the Capacitor industry
27 further supports the existence of the conspiracy alleged herein.
28

153. According to MLex, “It is understood that the US might be looking into more than one type of capacitor and that the investigation arises out of a leniency application from a previous investigation” under the Antitrust Criminal Penalty Enhancement and Reform Act (“ACPERA”). On information and belief, the DOJ’s investigation into anticompetitive conduct in the Capacitor industry is an outgrowth of its investigation into anticompetitive conduct in the lithium ion battery market in which Sanyo’s guilty plea implicated Panasonic as a co-conspirator, as described above.

154. On May 27, 2014, MLex reported that the government investigations were “understood to have been launched after a whistleblower, said to be Panasonic, approached regulators in at least the US and China. ... [Panasonic] has acknowledged being contacted by Korean authorities in relation to the probe....”

V. TRADE AND COMMERCE

155. During the Class Period, each Defendant, or one or more of its subsidiaries, sold Capacitors in the United States in a continuous and uninterrupted flow of interstate commerce and foreign commerce, including through and into this judicial district.

156. During the Class Period, Defendants collectively controlled a substantial portion of the market for Capacitors in the United States.

157. The activities of Defendants in connection with the production, sale, and/or importation of Capacitors, and the conduct of Defendants and their co-conspirators as alleged in this Complaint: (a) constituted United States domestic interstate trade or commerce; (b) constituted United States import trade or import commerce; and/or (c) were within the flow of and had a direct, substantial, and reasonably foreseeable effect on United States domestic trade or commerce and/or United States import trade or commerce. Given the marketing, importation, and sales by Defendants of Capacitors in the United States, and the volume of affected commerce, as alleged in this Complaint, such effects were direct and substantial.

158. In addition, because the United States is one of the world’s largest markets for Capacitors, it is reasonably foreseeable that Defendants’ wrongful conduct, as alleged in this Complaint, would raise and artificially inflate prices for Capacitors sold in the United States, and would have an effect on United States domestic trade or commerce and/or United States import

1 trade or commerce.

2 159. Such effects, including the artificially raised and inflated prices that Plaintiffs and
3 members of the proposed Class paid for Capacitors during the Class Period, caused antitrust injury
4 in the United States to Plaintiff and members of the proposed Class, and give rise to their claims
5 under Section 1 of the Sherman Act.

6 **VI. CLASS ACTION ALLEGATIONS**

7 160. Plaintiff brings this action on behalf of itself and all others similarly situated (the
8 “Class”) pursuant to Federal Rules of Civil Procedure 23(a), 23(b)(2), and 23(b)(3). The Class is
9 defined as follows:

10 All persons and entities who directly purchased a Capacitor or a
11 Capacitor Product, as defined herein, in the United States from any
12 Defendant or any subsidiary or affiliate thereof, or any co-
13 conspirator, between January 1, 2005 and the present. Excluded
from the Class are Defendants, their parent companies, subsidiaries
and affiliates, any co-conspirators, all governmental entities, and
any judges or justices assigned to hear any aspect of this action.

14 161. Plaintiff does not know the exact size of the Class because such information is in
15 the exclusive control of Defendants. Due to the nature of the trade and commerce involved,
16 however, Plaintiff believes that the Class members are numerous and geographically dispersed
17 throughout the United States, rendering joinder of all Class members impracticable.

18 162. There are questions of law or fact common to the Class, which questions relate to
19 the existence of the conspiracy alleged, and the type and common pattern of injury sustained as a
20 result thereof. These questions of law or fact common to the Class include, but are not limited to:

21 **a. whether Defendants engaged in a contract, combination, and/or**
22 **conspiracy to fix, raise, maintain, or stabilize prices of Capacitors sold in the United States;**

23 **b. whether Defendants engaged in a contract, combination, and/or**
24 **conspiracy to restrict output of Capacitors sold in the United States;**

25 **c. whether Defendants engaged in a contract, combination, and/or**
26 **conspiracy to allocate markets for Capacitors sold in the United States;**

27 **d. whether Defendants’ conduct caused the prices of Capacitors sold in**
28 **the United States to be at artificially high and noncompetitive levels;**

1 e. whether Plaintiff and the other members of the Class were injured by
2 Defendants' conduct, and, if so, the appropriate classwide measure of damages for Class
3 members; and

4 f. whether Plaintiff and the Class are entitled to, among other things,
5 injunctive relief, and if so, the nature and extent of such injunctive relief.

6 163. These and other questions of law and fact are common to the Class, and
7 predominate over any questions affecting only individual Class members.

8 164. Plaintiff's claims are typical of the claims of the Class because Plaintiff directly
9 purchased Capacitors and Capacitor Products from one or more of the Defendants during the Class
10 Period.

11 165. Plaintiff will fairly and adequately represent the interests of the Class in that
12 Plaintiff is a direct purchaser of Capacitors and Capacitor Products and has no conflict with any
13 other members of the Class. Furthermore, Plaintiff has retained competent counsel experienced in
14 antitrust, class action, and other complex litigation.

15 166. Defendants have acted on grounds generally applicable to the Class, thereby
16 making final injunctive relief appropriate with respect to the Class as a whole.

17 167. This class action is superior to the alternatives, if any, for the fair and efficient
18 adjudication of this controversy. Prosecution as a class action will eliminate the possibility of
19 repetitive litigation. There will be no material difficulty in the management of this case as a class
20 action.

21 168. The prosecution of separate actions by individual Class members would create the
22 risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for
23 Defendants.

24 **VII. ACTIVE CONCEALMENT**

25 169. Defendants engaged in a successful combination or conspiracy to fix and raise
26 prices, which by its nature was inherently self-concealing. Defendants engaged in a secret
27 conspiracy that did not give rise to facts that would put Plaintiff or the Class on inquiry notice that
28 there was a conspiracy to fix the prices of Capacitors.

1 170. During the relevant period, Plaintiff had neither actual nor constructive knowledge
2 of the facts supporting its claim for relief despite diligence in trying to discover the pertinent facts.
3 Plaintiff and members of the Class did not discover, and could not have discovered through the
4 exercise of reasonable diligence, the existence of the conspiracy alleged herein until at least April
5 2, 2014, when investigations by the DOJ and other regulators became public. Although Plaintiff
6 exercised due diligence throughout the Class Period, Plaintiff did not and could not have
7 discovered Defendants' unlawful combination or conspiracy at any earlier date.

8 171. During the relevant period, Defendants made false public statements suggesting
9 that the market for Capacitors was competitive rather than subject to the conspiracy alleged herein.
10 For example, KEMET's Annual Report for the fiscal year ended March 31, 2013, filed on Form
11 10-K with the SEC states, "The market for capacitors is highly competitive. The capacitor
12 industry is characterized by, among other factors, a long-term trend toward lower prices, low
13 transportation costs, and few import barriers."

14 172. Similarly, Vishay's Annual Report for the fiscal year ended December 31, 2011,
15 filed on Form 10-K with the SEC states, "Our business is highly competitive worldwide with low
16 transportation costs and few import barriers." Vishay made similar statements in its annual reports
17 throughout the Class Period.

18 173. AVX's LinkedIn page publicly touts its competitive advantages: "AVX enjoys
19 significant competitive advantages including the benefit of having research, manufacturing, and
20 customer support facilities in 15 countries around the world. This assures customers of the most
21 efficient balance of delivery and production capability in response to their just-in-time inventory
22 requirements."

23 174. Defendants publicly blamed price increases on rising tantalum costs and limited
24 Tantalum Capacitor supply. In September 2010, Daniel Persico, then-KEMET Vice President of
25 Strategic Marketing and Business Development, blamed tight supply on Defendants' failure to
26 recognize that Tantalum Capacitor demand would rebound quickly from 2008-09 recession levels:
27 "[W]e are 18 months to two years ahead of where we expected the market to be from a demand
28 scenario. Therefore it has put a supply strain on capacitors." At the same time, Dave Valletta,

1 Vishay Senior Vice President for Worldwide Strategic Sales, blamed tight supply on Defendants’
 2 limited manufacturing capacity and scarcity of raw materials: “This time it is a little of both. The
 3 powder guys and the companies that mine the ore are trying to get the price up and basically
 4 keeping tantalum off the market until it does come back up.” At no time did Defendants advise
 5 their customers that the price increases and supply restrictions for Tantalum Capacitors were the
 6 result of their collusive conduct.

7 175. As a result of Defendants’ fraudulent concealment of their conspiracy, the running
 8 of any statute of limitations has been tolled with respect to any claims Plaintiff or the Class
 9 members have arising from the anticompetitive conduct alleged in this Complaint.

10 **VIII. CLAIM FOR VIOLATIONS OF 15 U.S.C. § 1**

11 176. Plaintiff incorporates by reference all of the above allegations as if fully set forth
 12 herein.

13 177. Beginning no later than January 1, 2005, the exact date being unknown to Plaintiff
 14 and exclusively within the knowledge of Defendants, Defendants and their co-conspirators entered
 15 into a continuing contract, combination, or conspiracy to unreasonably restrain trade and
 16 commerce in violation of Section 1 of the Sherman Act (15 U.S.C. § 1) by artificially reducing or
 17 eliminating competition in the United States.

18 178. In particular, Defendants combined and conspired to raise, fix, maintain, and/or
 19 stabilize the prices of Capacitors sold in the United States.

20 179. As a result of Defendants’ unlawful conduct, prices for Capacitors were raised,
 21 fixed, maintained, and stabilized in the United States.

22 180. The contract, combination, or conspiracy among Defendants consisted of a
 23 continuing agreement, understanding, and concerted action among Defendants and their co-
 24 conspirators.

25 181. For purposes of formulating and effectuating their contract, combination, or
 26 conspiracy, Defendants did those things they contracted, combined, or conspired to do, including:

27 **a. participating in meetings and conversations to discuss the prices and**
 28 **supply of Capacitors;**

- 1 b. **agreeing to manipulate prices and supply of Capacitors sold in the**
- 2 **United States in a manner that deprived Class members of free and open competition;**
- 3 c. **allocating the market for Capacitors; and**
- 4 d. **selling Capacitors to customers in the United States at non-competitive**
- 5 **prices; and**

6 182. As a result of Defendants' unlawful conduct, Plaintiff and the other members of the
7 Class were injured in their businesses and property in that they paid more for Capacitors than they
8 otherwise would have paid in the absence of Defendants' unlawful conduct.

9 **IX. PRAYER FOR RELIEF**

10 WHEREFORE, Plaintiff prays that the Court enter judgment on its behalf and on behalf of
11 the Class herein, adjudging and decreeing that:

12 1. This action may proceed as a class action, with Plaintiff as the designated Class
13 Representative and its counsel as Class Counsel;

14 2. Defendants have engaged in a contract, combination, or conspiracy in violation of
15 Section 1 of the Sherman Act (15 U.S.C. § 1), and Plaintiff and the Class have been injured in
16 their businesses and property as a result of Defendants' violations;

17 3. Plaintiff and members of the Class shall recover damages sustained by them, as
18 provided by the federal antitrust laws, and that a joint and several judgment in favor of Plaintiff
19 and the Class be entered against Defendants in an amount to be trebled in accordance with such
20 laws;

21 4. Defendants, their subsidiaries, affiliates, successors, transferees, assignees, and the
22 respective officers, directors, partners, agents, and employees thereof and all other persons acting
23 or claiming to act on their behalf be permanently enjoined and restrained from continuing and
24 maintaining the combination, conspiracy, or agreement alleged herein;

25 5. Plaintiff and members of the Class be awarded pre-judgment and post-judgment
26 interest, and that such interest be awarded at the highest legal rate from and after the date of
27 service of the initial Complaint in this action;

28 6. Plaintiff and members of the Class shall recover their costs of this suit, including

1 reasonable attorneys' fees as provided by law; and

2 7. Plaintiff and members of the Class receive such other or further relief as may be
3 just and proper.

4 **JURY TRIAL DEMANDED**

5 Pursuant to Federal Rule of Civil Procedure 38(b), Plaintiff demands a trial by jury of all
6 of the claims asserted in this Complaint so triable.

7
8 DATED: October 8, 2014

By: /s/ Bruce L. Simon
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