

UNITED STATES OF AMERICA  
BEFORE THE FEDERAL TRADE COMMISSION



In the Matter of )  
)  
)  
Polypore International, Inc. )  
a corporation )  
)  
)

Docket No. 9327

PUBLIC

RESPONDENT'S PROPOSED FINDINGS OF FACT  
AND CONCLUSIONS OF LAW

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## I. EXHIBIT AND WITNESS INDICES

### A. Exhibit Index

1. See Exhibit A hereto.

### B. Witness Index

2. See Exhibit B hereto.

## II. PROCEDURAL BACKGROUND

### A. Transaction Background

3. On February 29, 2008, a subsidiary of Polypore International, Inc. (“Polypore”)  
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} (PX0162, *in camera*) Polypore acquired Microporous for approximately \$72.5 million, \$29 million in cash and \$47 million in assumed debt. (RX01572 at ¶4; PX0800 at 002, *in camera*) Due to the small value of the transaction, the parties were not required to make a premerger notification filing under the Hart-Scott-Rodino Antitrust Act. (Toth, Tr. 1557, 1559; PX0800 at 2, *in camera*).

### B. Pre-Hearing Background

4. On March 7, 2008, the FTC initiated a non-public investigation into the Acquisition. During its investigation, the FTC issued Civil Investigative Demands to Polypore, its Daramic subsidiary and various third parties, and conducted many investigational hearings. The FTC then proceeded to issue a Part 3 Complaint in this matter on September 9, 2008, alleging that the Acquisition violated Section 5 of the Federal Trade Commission Act, as amended, 15 U.S.C. § 45 (“Section 5”) and Section 7 of the Clayton Act, as amended, 15 U.S.C. §18, and that Polypore monopolized or attempted to monopolize certain product markets in North America. (RX01572

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at 8-9). On October 15, 2008, Polypore filed its Answer and Defenses, which denied the FTC's allegations and set forth its affirmative defenses. (RX01589).

5. An initial Scheduling Order was entered in the case on October 22, 2008, setting forth a discovery cut-off date of February 13, 2009 and a trial date of April 14, 2009. (RX01591). Due to extensive third party discovery issues, the Scheduling Order was amended to extend these and other remaining deadlines by four weeks. (ALJ Order dated Feb. 4, 2009).

C. Hearing Summary

6. The hearing commenced in this case on May 12, 2009 and concluded on June 12, 2009. During the 22 days of actual trial proceedings, live testimony was received into the hearing record from the following 30 witnesses:

**Witnesses Related to Polypore/Daramic/Microporous**

- Robert Toth, CEO and President of Polypore
- Pierre Hauswald, General Manager and VP of Daramic
- Sterling Tucker Roe, VP of Worldwide Sales and Marketing of Daramic
- Harry Seibert, VP and Business Director of Daramic
- Tim Riney, VP of Finance of Daramic
- Christopher Thuet, Business Director Asia-Pacific of Daramic
- Hans-Peter Gaugl, Managing Director Austrian Facility for Daramic Austria GmbH (also former Manager of Austrian facility for Microporous)
- John Kevin Whear, VP of Technology of Daramic
- Larry Trevathan, VP Operations of Daramic (also former VP Operations of Microporous)
- Steven McDonald, Sales Manager, North America of Daramic (also former Director of Sales of Microporous)
- Michael Gilchrist, formerly CEO and President of Microporous
- George Brilmyer, formerly Director of Research & Development of Microporous

- Michael Graff, Managing Director of Warburg Pincus (also Chairman of the Board of Directors of Polypore)

**Witnesses Related to Battery Manufacturers**

- Richard Godber, CEO and President of Trojan Battery
- Donald Wallace, Executive VP of Sales and Marketing of U.S. Battery Mfg. Co.
- Nawaz Qureshi, VP of Engineering and Technology of U.S. Battery Mfg. Co.
- Larry Axt, VP of Global Procurement of EnerSys
- Larry Burkert, Senior Procurement Manager of EnerSys
- John Gagge, Jr., Sr. Director Engineering and Quality Assurance for EnerSys
- John Craig, Chairman, CEO and President of EnerSys
- Rodger Hall, Global VP of Procurement for Johnson Controls Battery
- Mitchell Bregman, Exide Technologies (former procurement council)
- Melvin Gillespie, Jr., VP of Global Procurement for Exide Technologies
- Norman Benjamin, President of Bulldog Battery Corporation
- Dale Leister, Director Procurement Strategy & Supplier Dev., East Penn Mfg.
- James Douglas, Executive VP of Douglas Battery Mfg. Co.
- Arthur Balcerzak, Director of Purchasing for Crown Battery (as consultant)
- Daniel Weerts, Vice President of Sales and Marketing of Entek Holding Company

**Expert Witnesses**

- John Simpson, FTC Economist (Complaint Counsel's expert witness)
- Henry J. Kahwaty, Ph.D., Director of LECG (Respondent's expert witness)

7. In addition, for certain witnesses who were unavailable to attend trial proceedings, testimony was received into the record through admission of certain deposition transcripts and investigational hearings, subject to any lodged objections. See JX3, JX8, JX9.

8. The hearing record in this case was closed by Order dated June 22, 2009. Concurrent reply briefs and replies to findings of fact are due to be filed by the FTC and Respondent on July 31, 2009. Closing arguments are scheduled for August 20, 2009.

### **III. THE BATTERY SEPARATOR INDUSTRY**

#### **A. Terminology**

9. The following provides a glossary of some of the recurring terms and separator product names referred to in the testimony, documents and deposition/investigational hearing transcripts:

10. **AGM** – initials which refer to “absorbptive glass mat” battery separators. The liquid in the battery is absorbed like a sponge into the glass mat part of the separator and there is no free liquid electrolyte. AGM batteries are sealed and do not need maintenance. (Godber, Tr. 147; Hauswald, Tr. 994-95; Qureshi, Tr. 2055-56).

11. **ACE-SIL®** – product name of a hard rubber battery separator developed by Microporous (and now sold by Daramic) that is made from rubber silicon. This pure rubber product is very stiff and typically used in very high end stationary applications such as telecommunications, back up power for nuclear plants, and military products. (Gilchrist, Tr. 300; Hauswald, Tr. 992; Roe, Tr. 1748; McDonald, Tr. 3786; RX01638 (physical product sample)).

12. **Aftermarket** – refers to the market for replacement batteries for products (in contrast to original equipment batteries). (Godber, Tr. 143-44; Gillespie, Tr. 2932).

13. **Antimony** – refers to an antimony alloy that is sometimes included in the composition of the positive plate of a battery used for deep-cycle applications in order to improve battery performance. Antimony can have a tendency to travel from the positive plate to the negative plate during usage, which could eventually lead to reduced battery performance. The addition of rubber to a battery separator can help reduce the rate of antimony transfer. (Godber, Tr. 138-40, 149-50; Whear, Tr. 4667-68, 4683-84; PX1791 at 001).

14. **Backweb Thickness** – a primary measurement of a battery separator that is the thickness of the substrate in space between membranes of a rib. Simply put, it is the thickness of the separator that is measured between the ribs. The backweb thickness serves to create a wall of insulation in the battery between plates. (Hauswald, Tr. 966-67, 979; Leister, Tr. 4044; Whear, Tr. 4685, 4688; PX0669, *in camera*).

15. **Battery Separators** – products of various composition that are porous insulators placed between positively and negatively charged plates in batteries to prevent electrical short circuits while allowing ionic current to flow through the separators. (Gilchrist, Tr. 314; Hauswald, Tr. 968-69; Benjamin, Tr. 3504; Whear, Tr. 4665-66).

16. **Black Scum** – refers to a dark-colored residue that can gather on the liquid surface inside a polyethylene or polyethylene-based flooded lead-acid battery during usage. The black scum can result from the interaction of various chemicals and the oil component of a separator through a process of oxidation. (Hauswald, Tr. 1096-98; Brilmyer, Tr. 1834-35; Whear, Tr. 4707-08).

17. **CellForce** – product name for a polyethylene battery separator developed by Microporous (and now sold by Daramic) for deep-cycle applications that includes ground up ACE-SIL® rubber product as an additive in the polyethylene matrix of the separator to improve performance. (Gilchrist, Tr. 337-38, 340; Hauswald, Tr. 672-73, 993; RX01640 (physical product sample)).

18. **Daramic HD** – product name of a Daramic polyethylene battery separator made with a liquid latex additive for deep-cycle applications. (Hauswald, Tr. 671-72; PX0949 at 004, *in camera*; PX0319 at 007).

19. **Darak** – product name of a non-PE Daramic battery separator made with cross-linked phenolic resin for more porosity. The separator is made only in Germany and is typically used in gel type batteries. (Hauswald, Tr. 989-90; Whear, Tr. 4681; PX0582 at 051).

20. **Deep-cycle** – refers to certain end use applications for batteries where the batteries are placed in products having a lower amperage draw over a longer duration of time. These batteries are repeatedly discharged deeply to a low state of charge prior to recharging. Example applications include golf carts, floor scrubbers, scissor lifts, utilities, and marine boat applications. (Godber, Tr. 137-38; Gillespie, Tr. 2931; Whear, Tr. 4682, 4694; PX0319 at 007-008).

21. **FLEX-SIL®** - product name of a premium battery separator product developed by Microporous (and now sold by Daramic) that is made of pure rubber (no polyethylene) for use in deep cycle applications such as golf carts, floor scrubbers and aerial lifts. FLEX-SIL® product is sold only in “leaf” cut-piece form. (Roe, Tr. 1737, 1749; Hauswald, Tr. 992-93, McDonald, Tr. 3787; RX01639 (physical product sample)).

22. **Flooded Lead-Acid Battery** – a battery that has liquid acid in it up to a level above the positive and negative lead plates. Due to repeated charging and discharging, especially in deep-cycle applications, liquid will have a tendency to evaporate and the battery will need to be watered at certain intervals (except in a sealed, no maintenance automotive battery). (Godber, Tr. 147; Brilmyer, Tr. 1841; Qureshi, Tr. 2053-54; Whear, Tr. 4682)

23. **Enveloping** – instead of having the battery separator material cut into separate smaller “leaf” pieces, the battery manufacturer will purchase the material in roll form and itself fold the separator material around the plates of the batteries and seal it on the side (thus “enveloping” the plate like it is in a pouch). (Roe, Tr. 1748-49; Qureshi, Tr. 2036; PX1791 at 002) This process also can be referred to by a battery manufacturer as “sleeving”. (Benjamin, Tr. 3508).

24. **Gel (Non-Flooded) Battery** – instead of having a liquid lead-acid like flooded batteries, these batteries (such as an AGM battery) have a gel silica that interacts with the positive and

negative plates of the battery to allow for ionic transfer. (Godber, Tr. 147; Gaugl, Tr. 4557; Whear, Tr. 4681).

25. **Industrial Separators** – refers to separators for all industrial applications for batteries, including industrial motive power or industrial stationary batteries. (Roe, Tr. 1815; Whear, Tr. 4682-83).

26. **Leaf Separator** – refers to battery separator material that has been cut into pieces (i.e., “leafs”), and many of these pieces will be stacked together in between plates and used in a single battery. (Roe, Tr. 1748-49; PX1791 at 2).

27. **Motive Power** – refers to an end use application of batteries for certain industrial products that move, such as forklifts and mine equipment. (Gilchrist, Tr. 306; Roe, Tr. 1197; Balcerzak, Tr. 4092; Whear, Tr. 4694).

28. **OE/OEM** – generally synonymous terms for original equipment or original equipment manufacturer. These types of batteries are installed as original equipment on a product (in contrast to batteries for the “aftermarket” which are replacement batteries). (Roe, Tr. 1762-63; Gillespie, Tr. 2932).

29. **Overall Thickness** – a primary measurement of a battery separator that measures the overall thickness of the product including the ribs (e.g., thickness of substrate and height of ribs together). Overall thickness serves to provide the space between electrodes and make a reservoir for the liquid. (Hauswald, Tr. 966-67, 979; Leister, Tr. 4044; Whear, Tr. 4688-89). (For demonstrative purposes see PX0669, *in camera*).

30. **PE Separators** – abbreviation for a polyethylene battery separator. Daramic’s polyethylene battery separators are formulated from ultra high molecular weight polyethylene, as well as other ingredients such as silica and oil. (Toth, Tr. 1501, 1549; PX0582 at 041, 043). Certain PE separators include additional additives as well. (PX0582 at 043-050; PX0949 at 003-

4, *in camera*). These products are sold under trade names/trademarks that include Daramic Standard, Daramic HP, Daramic V, Daramic HD, Daramic HPR, Daramic HP-S, Daramic HPO, Daramic Duralife, Daramic W and Daramic CL. (PX0582 at 043-050; PX0949 at 003-004, *in camera*).

31. **Profile** – profile refers to the specifications of a separator and includes the thickness of the backweb as well as the shape of the ribs, i.e., whether they are vertical, diagonal, or S-shaped, along with the height and density of the ribs. Daramic offers a choice of approximately 80 profiles with its battery separators (Whear, Tr.4675-76).

32. **Reserve Power** – an end use application for batteries where the batteries are used to provide back-up or reserve power to a system. (Gilchrist, Tr. 306; Axt. Tr. 2099; Douglas Tr. 4052-53).

33. **Ribs** – protrusions on the separator. The ribs, which vary in height, thickness or shape from separator to separator, help fix the physical spacing in the battery to make sure there is an appropriate amount of acid between the plates. The shapes and sizes of these ribs make up part of the “profile” of the separator. (Hauswald, Tr. 966-67; Whear, Tr. 4665-67, 4675-76; PX1791 at 002).

34. **SLI** – abbreviation refers to an end use application for batteries known as “starter, lighting, and ignition,” which is generally synonymous with an automotive-type application for batteries. Examples of SLI batteries include those placed in automobiles, trucks, buses, boats, snowmobiles, jet skis and recreational vehicles. (Brilmyer, Tr. 1831-32; Gillespie, Tr. 2390, *in camera*; Leister, Tr. 3976-77).

35. **Stationary** - refers to an end use application for a battery where the product is stationary, such as large back-up batteries for telecommunications, emergency lighting, UPS or other reserve power application. (Roe, Tr. 1736, 1816-17; Whear, Tr. 4692).



36. **Traction** – refers to an end use application for batteries in certain industrial products (e.g., electric forklifts). Term generally synonymous with “motive power” applications. “Motive power” is typically referred to in U.S., while “traction” is typically referred to globally. (Roe, Tr. 1250; Balcerzak, Tr. 4092).

37. **UPS** – refers to an end use application for batteries known as “uninterruptible power supply” or “uninterruptible power source” products. These are batteries for emergency power use in case of a power outage/stoppage. Examples include back-up stationary batteries for computer systems, telecommunications systems, and cell phone towers. UPS batteries are generally considered to be a type of reserve power batteries. (Gilchrist, Tr. 306; Roe, Tr. 1736-37; Brilmyer, Tr. 1832-33; Douglas Tr. 4052-53).

38. **VRLA** – abbreviation refers to valve-regulated lead-acid battery. VRLA is simply another name for an AGM battery. (Godber, Tr. 366; Douglas, Tr. 4052).

B. The Product and The Relevant Product Market

a. The Role of a Battery Separator

(a) Physical Characteristics

39. Lead acid batteries are made up of three primary components: a positive electrode, a negative electrode, and an electrolyte. (PX2110 at 010). The cells of a battery are made up of electrodes which are lead plates that are positively and negatively charged. (PX2110 at 010). The plates are stored in the electrolyte, which is a solution of sulphuric acid. (PX2110 at 010). The cell discharges electrons as the acid slowly changes the lead in the plates into lead sulphate. (PX2110 at 010). An electric current then flows if the terminals are connected through a conductor. (PX2110 at 010). When an electric current is being drawn from a battery it is being discharged. (PX2110 at 010).

40. A battery separator is a porous insulator placed between two plates of opposing polarity to prevent electrical short circuits while allowing ionic current to flow through the separator. (PX2110 at 010). From this standpoint, a battery separator is a passive element in a lead-acid battery. (Whear, Tr. 4666).

41. {

} (PX2110 at 010; Douglas, Tr. 4072, *in camera*; Craig, Tr. 2553 (3-4%)).

42. A battery separator serves two primary functions. (Whear, Tr. 4666).

43. First, it prevents the positive and negative electrodes from having contact. If the positive and negative electrodes come into physical contact with each other, the cell will short out with no voltage or energy. While a separator needs to prevent physical contact, it must allow ions or electrolytes to flow back and forth within the battery which is why separators are porous. This function is performed primarily by the microporous backweb of a battery separator. (Whear, Tr. 4666).

44. The second function of a battery separator is to provide physical spacing. The separator fixes a physical spacing between the electrodes. The function is performed primarily by the ribs of a battery separator. A battery separator may have taller and shorter ribs depending upon the desired amount of acid between the plates. (Whear, Tr. 4666; Hauswald, Tr. 966-69).

45. Separators are characterized by their backweb thickness and their overall thickness. Backweb thickness denotes the thickness of the substrate between the ribs. Overall thickness is the height of the ribs, including the substrate thickness. Both thicknesses are measured in the unit mils or thousandths of an inch. (Whear, Tr. 4688-89)(For illustrative purposes see RX00945 at 167, *in camera*).

46. Battery manufacturers who purchase separators target a certain overall and backweb thickness in the separators they purchase, but a certain degree of tolerance is accepted within the industry. The typical tolerance for the backweb thickness is plus or minus one and one-half mils. The typical tolerance for the overall thickness is plus or minus three mils (or plus or minus four mils if the separator has a glass mat laminate). (Whear, Tr. 4689-90).

47. Battery separators can be made out of glass, paper, polyvinyl chloride ("PVC"), rubber, polyethylene, cellulosic and polypropylene. (Whear, Tr. 4666; Hauswald, Tr. 960; PX2110 at 010).

48. The main variables in a battery separator are the backweb thickness, the shape and/or height of the ribs, whether or not a laminate is used (a glass mat for instance), and whether an additive is used. (Whear, Tr. 4667).

49. An additive can serve a variety of functions in a battery separator such as serving as a wetting agent, improving oxidation resistance, improving water loss, and/or suppressing antimony. (Whear, Tr. 4668).

50. The most common types of additive are ones intended to suppress antimony. These additives include rubber, lignin, and various other organic chemicals. (Whear, Tr. 4668).

51. Various additives which may be used in battery separators to suppress antimony poisoning are commercially available. (Whear, Tr. 4668).

52. For example, Daramic uses a rubber additive which is commercially available from BASF. (Whear, Tr. 4668).

53. Additionally, the company Ensci, Inc., which was founded by Thomas Clough, has produced and patented organic chemical additives, in conjunction with Trojan Battery, which could be used in battery separators to suppress antimony. (Whear, Tr. 4670-75; RX00674; RX00675; RX00676).

54. In 2005, Ensci, Inc. offered to sell these additives to Daramic for use in Daramic's battery separators, but Daramic declined as it was already using a different additive to suppress antimony. (Whear, Tr. 4675, 4771).

55. A battery separator "profile" refers to the thickness of the backweb along with the shape of the separator's ribs (whether they are vertical, diagonal, or S-shaped), the density of these ribs, and the height of these ribs. (Whear, Tr. 4675).

56. Daramic produces approximately 80 different separator profiles. (Whear, Tr. 4675-76).

57. Daramic works with its customers to develop separator profiles which are suitable for the customer's batteries. (Whear, Tr. 4677).

58. A separator profile can be further differentiated by its backweb thickness (the thickness between the ribs), its overall thickness, and the formula used. (Whear, Tr. 4685). Considering these variables, Daramic offers over 5000 different product offerings or SKU's. (Whear, Tr. 4685-86).

59. Some separator profiles have become standardized or widely accepted by customers. This is most common in separators that are used in SLI end-use applications. (Whear, Tr. 4686).

60. Non-standard profiles are designed through collaboration with individual customers whereby a separator profile is prototyped, tested, and verified, and then once approved a calender roll will be grooved for that particular profile. (Whear, Tr. 4686).

(b) End-Uses

61. Polyethylene based separators are manufactured for myriad end-uses, including starting, lighting, and ignition batteries, stationary batteries, batteries that provide backup power, batteries that provide emergency power, and batteries that are deeply discharged. (Whear, Tr. 4679).

62. Generally, a separator manufacturer does not know for certain which end-use application a particular separator will be used in. (Whear, Tr. 4687-88; Hauswald, Tr. 974-75, 978; Weerts, Tr. 4456, *in camera*).

63. This is true even if the manufacturer, such as Daramic, knows that a particular separator is going to a specific customer, as customers often withhold this level of detail when purchasing separators. (Whear, Tr. 4688; Hauswald, Tr. 978; Douglas, Tr. 4057-59).

64. The end use application of a battery separator can be generally, but not precisely, determined by looking at the physical dimensions of the separator. (Whear, Tr. 4690).

65. Battery separators used in SLI or automotive applications have overall thicknesses ranging from 7 mils to 75 mils, and backweb thicknesses ranging from 5 mils to 12 mils. (Whear, Tr. 4690-91, 4697; for illustrative purposes see RX01662).

66. Battery separators used in deep-cycle applications have overall thicknesses ranging from 35 mils to 100 mils, and backweb thicknesses ranging from 8 mils to 15 mils. (Whear, Tr. 4691-92, 4697; for illustrative purposes see RX01662).

67. Battery separators used in stationary applications have overall thicknesses ranging from 11 mils to 200+ mils, and backweb thicknesses ranging from 11 mils to 32 mils. (Whear, Tr. 4692, 4698)(For illustrative purposes see RX01662).

68. Battery separators used in motive power applications have overall thicknesses ranging from 60 mils to 140 mils, and backweb thicknesses ranging from 13 mils to 25 mils. (Whear, Tr. 4694-95, 4698)(For illustrative purposes see RX01662).

69. A battery separator cannot be grouped into a product market based on its backweb thickness and overall thickness. (Whear, Tr. 4699).

70. There is overlap between the size of separators used in different end-use application such that battery separators of the same size or thickness can be used in multiple end-use applications.

(Whear, Tr. 4695, 4699; RX00677; *in camera*)(For illustrative purposes see Kahwaty Slide No. 44). For example, Daramic's AU profile has a 12 mil backweb thickness and a 39 mil overall thickness. This profile, which has yearly sales in excess of one million dollars, is used by a customer, Exide India, in a stationary application but is also used by a customer, Shin-Kobe, in an SLI application. (Whear, Tr. 4699-4700, 4767).

71. Daramic's flat-sheet profile is another example. This profile is sold to AT&T at an 11 mil backweb and overall thickness for use in a stationary application and is also sold to Concorde at a 10 mil backweb and overall thickness for use in a SLI application. (Whear, Tr. 4700).

72. {

} (PX1450, *in camera*). {

} (PX1450, *in camera*).

73. {

} (Seibert, Tr. 4188, *in camera*).

74. There is also a fair amount of end-use overlap in separators with a backweb thickness in the 11-12 mil range. (Hauswald, Tr. 984-985)(For illustrative purposes see RX01662). Within the 12 mil backweb range, for example, one would find separators used in automobiles (SLI), golf carts (deep cycle) and telecom batteries (stationary). (Hauswald, Tr. 984-985). (For illustrative purposes see Kahwaty Slides at No. 44). {

} (RX00677, *in camera*).

75. The ranges of backweb and overall thicknesses set forth above do not include the width tolerances permitted in the battery separator industry. (Whear, Tr. 4702). Including the width tolerances in these ranges would increase the overlap of separator sizes between different end-use applications. (Whear, Tr. 4702).

76. Many separator profiles are used in more than one of the FTC's relevant markets. Thus, polyethylene products with the same rib profile are sold for use in batteries found in different end-use applications. (Whear, Tr. 4699-4702) (For illustrative purposes see RX01662).

77. For example, {

} (Seibert, Tr. 4186-89, *in camera*; RX00631, *in camera*; RX00677, *in camera*; RX01119, *in camera*; RX01323, *in camera*; RX01604, *in camera*; RX01605, *in camera*; PX1450, *in camera*).

78. As a result, it is inaccurate to separate a polyethylene separator used for one end-use application from a polyethylene separator used in other end-use applications. (Whear, Tr. 4694). By way of example, there is no distinction in the functionality of a separator used in a so-called motive power battery and a separator used in any other type of deep cycling battery. The separators in each of these applications both serve the same function within the battery. Each battery is used to move something (a golf cart, a forklift, or a mining vehicle) and both are deeply discharged and then recharged. (Whear, Tr. 4694).

(c) Types of Separators

79. Polyethylene separators were patented in 1967 by W.R. Grace. (Whear, Tr. 4678-79).

80. The patent on the polyethylene separator expired in the mid-1980s, and thereafter, the information necessary to manufacture polyethylene separators was publicly available. (Whear, Tr. 4679; Toth, Tr. 1626). Consequently, there are no patent barriers which would prevent any individual or company from manufacturing a polyethylene separator. (Toth, Tr. 1626).

(d) Daramic Products

81. {

} (PX0949 at 003, *in camera*).

(i) Polyethylene Separators - "Daramic"

82. {

} (PX0949 at 003, *in camera*).

83. {

} (PX0950 at 042, *in camera*).

84. {

} (PX0949 at 003, *in camera*). (For illustrative purposes see

RX01636, RX01633).

85. {

} (PX0949-

003, *in camera*).

86. {



} (PX0582 at 42; PX0949 at 003, *in*

*camera*).

87. {

} (PX0949 at 003, *in camera*). Daramic HP is formulated from ultra-high molecular weight polyethylene, amorphous silica and specially formulated oil. (PX0582 at 44). This product offers excellent puncture and oxidation resistance for increased life in flooded lead-acid battery applications. (PX0582 at 44). Daramic HP is used in most end-use applications, including stationary and automotive batteries, and can be produced in a wide range of thicknesses. (Hauswald, Tr. 987-88). Daramic HP is available with or without glass mat. (PX0582 at 43).

88. {

} (PX0949 at 003, *in camera*). Daramic Standard is formulated from ultra-high molecular weight polyethylene, silica and oil. (PX0582 at 43). This product offers good puncture and oxidation resistance for general use in flooded lead-acid battery applications. (PX0582 at 43). Daramic Standard is available with or without glass mat. (PX0582 at 43).

89. {

} (PX0949 at 003, *in camera*). Daramic CL is used in products in a multitude of end-use applications including traction and stationary battery applications. (Hauswald, Tr. 988; PX0582 at 50). Daramic CL is available with or without a glass mat. (PX0582 at 45).

90. {

} (PX0949 at 003, *in camera*). Daramic V is formulated from ultra-high molecular

weight polyethylene, amorphous silica, oil and an additive which decreases the water loss caused by antimony deposition. (PX0582 at 45). This product is available with or without a glass mat. (PX0582 at 45).

91. {

} (PX0949 at 003, *in camera*).

92. {

}

(PX0949 at 003, *in camera*). Daramic HP is designed to reduce puncture problems caused by sharp edges on metal grids. {

} (PX0949 at 003, *in camera*).

This product is available with or without a glass mat. (PX0582-45).

93. {

}

(PX0949-004, *in camera*). Daramic HPO is designed to be used in warm weather climates.

(PX0582 at 48). {

} (PX0949 at 004, *in camera*). This product is available with or without a

glass mat. (PX0582 at 48).

94. {

} (PX0949 at 004, *in camera*). This product is available with or without a glass mat. (PX0582 at 49).

95. {

} (PX0949 at 004, *in camera*; Hauswald, Tr. 989).

Daramic HD is formulated from ultra-high molecular weight polyethylene and is designed to minimize antimony poisoning in lead-acid batteries. (PX0582 at 46). Daramic HD is available with or without a glass mat. (PX0582 at 46).

96. {

} (PX0949 at 004, *in camera*).

97. All of the polyethylene based separators (including Daramic Standard, Daramic HP, Daramic CL, Daramic V, Daramic HP-S, Daramic HPR, Daramic HPO, Daramic Duralife, Daramic HD, Daramic W, and CellForce) perform the function of keeping the positive and negative electrodes from touching and to provide physical spacing for the electrode. Each specific product has been slightly modified to perform different functions for the end use applications where the separator is used, such as lower electrical resistance or water loss. (Whear, Tr. 4682).

98. Interchanging one PE-based battery separator product for another PE-based battery separator product would not impact the functionality of a battery, but may impact the battery's overall performance. (Whear, Tr. 4683).

(ii) DARAK Separators

99. { }

(PX0949 at 004, *in camera*; Hauswald, Tr. 989-90). DARAK separators are formulated from a modified phenolic resin and include an integrated polyester mat for reinforcement. (PX0582 at 51).

100. {

} (PX0949 at 004, *in*

*camera*). (For illustrative purposes see RX01637).

101. The DARAK product is manufactured only in Daramic's Norderstedt, Germany plant. However, on an annual basis, only one-fifth of the DARAK separators produced by Daramic are sold to customers in North America. (Hauswald, Tr. 990-91).

102. DARAK is a unique separator in that it can achieve levels of porosity up to 75 percent, while polyethylene separators typically have only a 60 percent porosity level. (Hauswald, Tr. 989-90).

103. However, seventy-five percent of the DARAK separators produced by Daramic are used in gel batteries, not flooded lead-acid batteries. (Hauswald, Tr. 990).

104. A DARAK separator can be used in both a flooded lead-acid battery and a valve regulated lead-acid battery (also known as a gel or recombination battery). (Whear, Tr. 4681).

(iii) Polyvinyl Chloride ("PVC") Separators

105. {

} (PX0949 at 004, *in*

*camera*).

(e) Microporous Products

106. {

} (PX0949 at 004, *in camera*; Hauswald, Tr. 991). (For illustrative purposes see RX01638, RX01639, and RX01640).

107. Post-acquisition, Daramic continues to manufacture and sell ACE-SIL®, FLEX-SIL® and CellForce. (PX0582 at 042; Whear, Tr. 4681).

108. {

} (Hauswald, Tr. 897-899, *in camera*; Toth, Tr. 1422-23, 1504, 1551-52, 1554-55; Graff, Tr. 4857-58; Graff, Tr. 4861, 4877, *in camera*; RX01097, *in camera*). Customers of Daramic had inquired repeatedly of Daramic representatives as to when Daramic would have a rubber separator. (Hauswald, Tr. 1059).

(i) ACE-SIL®

109. ACE-SIL® is a product which has been in production since 1935. (Gilchrist, Tr. 313-14; RX01452 at 005). { } (Whear, Tr. 4681; PX0949 at 004, *in camera*). ACE-SIL® does not contain any polyethylene. (Hauswald, Tr. 992)(For illustrative purposes see RX01638).

110. {

} (Gilchrist, Tr. 385; PX0949 at 012, *in camera*). Because of its brittleness, ACE-SIL® cannot be sleeved or enveloped. (Gilchrist, Tr. 316-17).

111. {

} (Whear, Tr. 4681; PX0949 at 004, *in camera*). ACE-SIL® is the

only battery separator utilized in 20 to 25 year warranty reserve power applications. (PX0131 at 044).

112. ACE-SIL® is typically sold in cut pieces with a glass mat finish attached. (Hauswald, Tr. 992).

113. Because ACE-SIL® is composed primarily of hard rubber, it can be manufactured with a large overall thickness, while still maintaining its porosity. For this reason, ACE-SIL® is used when a thick separator is required. (Hauswald, Tr. 1006).

114. ACE-SIL® is manufactured only by Daramic, and only at Daramic's Piney Flats manufacturing facility. (Hauswald, Tr. 1006; Gilchrist, Tr. 339).

115. Microporous had no competition for its ACE-SIL® product. (PX0920 at 006, *in camera*; Gilchrist, Tr. 552-53). Piney flats is the only plant in the world making an ACE-SIL® product (Toth, Tr. 1554-55, 1556-57).

116. Because no competitor makes ACE-SIL® and no other product is used as a substitute for it, the Court finds that ACE-SIL® is a product market by itself.

(ii) FLEX-SIL®

117. {  
} (PX0949 at 004, *in camera*)(For illustrative purposes see RX01639).

118. {  
} (PX0949 at 004, *in camera*).

119. FLEX-SIL® is manufactured only by Daramic, and only at Daramic's Piney Flats manufacturing facility. (Hauswald, Tr. 1012). (Toth, Tr. 1554-55, 1556-57).

120. {  
} (PX0949 at 012, *in camera*). In fact, FLEX-SIL® is the industry gold-

standard separator in motive, deep-cycle battery applications. (Whear, Tr. 4683; PX0433 at 001 ("FLEX-SIL® is no doubt the separator of choice in today's market for golf cart battery application."); Gilchrist, Tr. 535 ; Godber, Tr. 271). Prior to the acquisition, Microporous, based on the buying patterns of customers, operated on the basis that FLEX-SIL® was the industry standard for deep-cycle applications. (Gilchrist, Tr. 535-536).

121. As a rubber-based separator FLEX-SIL® is unique in that no other battery separator product can offer the same degree of antimony suppression as FLEX-SIL®. (Whear, Tr. 4684-85). Trojan, Microporous' largest customer, considers FLEX-SIL® to be unique. (Godber, Tr. 277; RX00772, *in camera*; RX01338). U.S. Battery uses FLEX-SIL® in its premium battery line, offering a one year warranty. (Wallace, Tr. 1966-67). Over 90% of U.S. Battery separator purchases have been FLEX-SIL®. (Qureshi Tr. 2064-65). Both Trojan and U.S. Battery advertise the FLEX-SIL® separator on their websites, not Daramic HD. (Godber, Tr. 245-46, 277; (Wallace, Tr. 1963-65) (For illustrative purposes see RX01643).

122. Polyethylene is a completely inert material - it has no effect on inhibiting that antimony transfer process. (Gilchrist, Tr. 365). Rubber-based products, such as FLEX-SIL®, inhibit antimony transfer quite well. (Gilchrist, Tr. 365). For this reason, when it comes to preventing antimony transfer, batteries made with a polyethylene based separator are ultimately inferior in performance to batteries made with a rubber-based separator. (Gilchrist, Tr. 365). FLEX-SIL® test results exceed those of Daramic HD. (RX01089; Godber Tr. 172, 271; RX01093 at 2 ("Nawaz said the batteries had failed and that we didn't have anything to worry about as far as Daramic was concerned"); RX00835; RX01334; RX01329).

123. FLEX-SIL® also has very different functional capabilities than PE separators in that FLEX-SIL® cannot be enveloped. (Gilchrist, Tr. 373).





129. {

}

(PX0925 at 004, *in camera*).

130. {

} (PX0925 at 004, *in camera*). {

} (PX0925 at 004, *in camera*).

131. {

} (PX0925 at 005, *in camera*).

132. {

} (PX0925 at 006,

*in camera*).

133. {

} (PX0925 at 005, *in camera*). {

} (PX0925 at 004,

*in camera*).

(ii) PVC

134. {

} (PX0916 at

003, *in camera*). {

} (PX0916 at 003, *in*

*camera*).

135. {

} (PX0916 at 004, *in camera*).

EnerSys has purchased PVC separators for use in its industrial batteries. (Axt. Tr., 2101).

136. {

} (PX0916 at 004,

*in camera*).

137. {

} (PX0916 at 005, *in camera*).

138. {

} (PX0916 at 005, *in camera*).

139. {

} (PX0916 at 006, *in camera*; RX01614 at 011). {

} (PX0916 at 024, *in camera*; Gillespie Tr., 2931-32,

3042, *in camera*).

(g) The Manufacturing Process

- (i) PE Separators (manufactured by Daramic) and PE Separators with a Rubber Additive (manufactured by Daramic and Microporous)

140. {

}

(PX0949 at 007, *in camera*). These basic ingredients are used by all polyethylene battery separator manufacturers. (Hauswald, Tr. 998).

141. The basic polyethylene manufacturing process has three stages: 1) Mixing/Extrusion, 2) Extraction, and 3) Finishing. (RX01304 at 001-006; Hauswald, Tr. 996-997; RX01641, demonstrative). This basic manufacturing process is used not only by Daramic, but by all

polyethylene battery separator manufacturers. (Hauswald, Tr. 998; Gilchrist, Tr. 593). The technology needed to construct a polyethylene manufacturing line is public knowledge. (Gilchrist, Tr. 564-66; Gaugl, Tr. 4547; Hauswald, Tr. 998).

142. During the mixing/extrusion stage, the polyethylene and the silica are linked together and oil is added to the formula mix. (Hauswald, Tr. 997). Also, during this stage, the separator's backweb thickness and ribs are created. (Hauswald, Tr. 997; RX01304 at 001). More specifically, {

} (PX0949 at 007, *in camera*).

143. The second stage, extraction, is needed to add porosity to the separator. This is achieved by removing excess oil through the use of a solvent. (Hauswald, Tr. 997; RX01304 at 001). In this stage, {

} (PX0949 at 007, *in camera*).

144. Finally, during the final finishing stage, the separator material is processed into cut pieces or into roll form. (Hauswald, Tr. 997-98; RX01304 at 001; RX01641 film for illustration).

145. {

} (PX0949 at 008, *in*

*camera*).

146. {

} (PX0949 at 008, *in camera*).

147. {

} (PX0949 at 007, *in camera*).

148. {

}

(Hauswald, Tr. 1012-1023; RX01309, *in camera*; PX0949 at 007, *in camera*). (For illustrative purposes see RX01641).

149. The manufacturing process Daramic uses to produce polyethylene separators is the same manufacturing process used to produce CellForce and Daramic HD. In the production of CellForce and Daramic HD, an extra rubber additive is added to the component mix during the manufacturing process. (Hauswald, Tr. 1012-13).

150. Essentially, Daramic HD and CellForce are both made on a standard PE line, but in making Daramic HD, latex is added, and in making CellForce, ACE-SIL® dust is added. (Hauswald, Tr. 1013; Gilchrist, Tr. 312).

151. On any PE line, including PE lines where a rubber additive is used, after the product mix passes through the extruder, but before the product mix enters the calender roll, the product can be used in any end-use application. Said another way, the composition of the product is the same regardless of end-use application. (Hauswald, Tr. 1015-16; Gilchrist, Tr. 562; Whear, Tr. 4679; Weerts, Tr. 4493-94; *in camera*).

152. Separators are manufactured for different end uses based on the separator's thickness and rib-pattern. In the manufacturing process, as the product passes through the calender roll it receives a defined thickness and rib pattern. (Hauswald, Tr. 1016). The spacing between the top and bottom calender rolls determines the backweb thickness of a battery separator. The

grooves of a calender roll determine the height of the ribs and the overall thickness of a battery separator. (Hauswald, Tr. 1017-1019).

153. Importantly, until a polyethylene separator (or a polyethylene separator with a rubber additive) passes through the manufacturing line's calender roll, all PE separators are identical. It is the calender roll, by adding a rib pattern to the polyethylene material and creating the thickness of the material, that differentiates PE separators from one another. (Hauswald, Tr. 1012-19).

154. By changing the calender roll, the same PE manufacturing line can produce separators for different end-use applications, such as SLI or industrial. (Hauswald, Tr. 1019-20; Gilchrist, Tr. 558-60; RX01123; RX01124, *in camera* ("Both lines can run automotive or industrial")).

155. As a result, one manufacturing facility can easily switch from producing one separator product to another. (Hauswald, Tr. 1012-19).

156. A calender roll can be substituted into the manufacturing line in place of another calender roll in approximately twenty minutes. (Hauswald, Tr. 1019). (For illustrative purposes see RX01641). Moreover, {

} (Weerts, Tr. 4493-4494, *in camera*).

157. {

} (Hauswald,

Tr. 1024; Gilchrist, Tr. 559, Weerts, Tr. 4488-4489, *in camera*; Gaugl, Tr. 4553; RX00146 at 002-003, *in camera*).

158. It takes a calender roll vendor anywhere from 2 days to 5 weeks to make and sell a new calender roll. (Gilchrist, Tr. 569).

159. Moreover, all of the equipment necessary for the construction of a polyethylene line - including extruders, extractors, ovens, dryers, and calender stacks - can be purchased "off-the-

shelf" from various third-party vendors. (Hauswald, Tr. 1025-29; RX01300; RX01219; RX01220; RX01221; RX01222; RX01223; RX01224; RX01046, *in camera*; RX01030; RX01031; RX01040, *in camera*). For example, all of the equipment necessary for the polyethylene lines in the Feistritz, Austria facility was procured from third-party vendors. (Hauswald, Tr. 1102-04; RX01046, *in camera*). {

}

(Weerts, Tr. 4498-99, *in camera*)

(ii) Rubber Separators

160. {

} (PX0949 at 008, *in camera*; RX01310 at 001; Hauswald,

Tr. 999-1006). (For illustrative purposes see RX01641).

161. FLEX-SIL® battery separators are produced from a blend of natural rubber, precipitated silica, and water. After mixing these ingredients, the material is extruded in sheet form to a calender stack that forms a customer specific rib design. The rib design is created as the product passes through the calender roll. The calendered sheet is then cured or cross linked by irradiation from an electron beam accelerator system. The sheet is then dried to remove most of

the water introduced during the initial mixing process. This water removal forms the basis for the porous structure required for the battery separator to function properly in a battery. (Hauswald, Tr. 1006-1012; RX01311 at 001; PX0949 at 008, *in camera*)(For illustrative purposes see RX01641).

162. FLEX-SIL® battery separators are produced using the same ingredients and through the same manufacturing process as ACE-SIL® battery separators, with the exception that sulfur is not used in the process, but instead an electron beam is used to cross-link the FLEX-SIL® product (Hauswald, Tr. 1006, 1008-09).

(iii) Phenolic Resin Separators (manufactured by Daramic)

163. {

} (PX0949 at

009, *in camera*).

(iv) Polyvinyl Chloride Separators (manufactured by Daramic)

164. {

} (PX0949 at 010, *in camera*).

(h) The Production Lines

165. {

} (PX0950 at 038, *in camera*).

166. {

} (PX0950 at 039, *in camera*; Gaugl,

Tr. 4545).

167. {



} (PX0950 at 039, *in camera*; Hauswald, Tr. 961-

962; Gaugl, Tr. 4566).

168. {

} (PX0950 at 039, *in camera*).

169. {

} (PX0950 at 040, *in camera*; Gaugl, Tr. 4545).

170. {

} (PX0950 at 040, *in camera*).

171. {

} (PX0950 at 040, *in*

*camera*).

172. {

} (PX0950 at 041, *in camera*).

173. {

} (PX0950 at 041, *in camera*).

174. {

} (PX0950 at 041, *in camera*).

175. {

} (PX0950 at 041-042, *in camera*).

176. {

} (PX0950 at 038-039, *in camera*; RX01026, *in camera*).

177. There are no patents, intellectual property, or other technological barriers to installing this equipment and building a PE battery separator production line. (PX0950 at 42, *in camera*; Toth, Tr. 1626, Gaugl, Tr. 4547).

178. The same production lines can be used to manufacture different types of polyethylene separators, including those with or without a rubber additive. (Hauswald, Tr. 1012-13; Gaugl, Tr. 4551; PX0949 at 011, *in camera*).

179. The same production line can manufacture polyethylene-based separators for automotive and industrial applications. (Hauswald, Tr. 1019-20; Gilchrist, Tr. 558-60; Gaugl, Tr. 4552-53; PX0949-011, *in camera*).

180. {

} (Weerts, Tr. 4493-4494; Hauswald, Tr. 1019; Gaugl, Tr.

4551; PX0949 at 011, *in camera*).

181. {

} (PX0949 at 012, *in camera*; Hauswald, Tr. 993-94, 1000,

1006, 1008, 1012, 1020-21).

182. {

} (PX0949 at 012, *in camera*).

183. {

} (PX0949 at 012, *in camera*).

184. {

} (PX0949 at 012, *in camera*).

185. {

} (PX0949 at 012, *in camera*).

C. The Relevant Geographic Market of the Industry

a. Battery Separator Manufacturers Operate in a Global Market

186. {

} (Hauswald, Tr. 858-59, *in camera*; PX0522 at 11-18, *in camera*; RX01073, *in camera*; RX01409, *in camera*; RX00620, *in camera*; RX01001, *in camera*; RX01002; RX01004, *in camera*; RX01074, *in camera*; RX01075, *in camera*; RX01084, *in camera*; RX01085, *in camera*; RX01086, *in camera*; RX01087; RX01088; RX01179, *in camera*; RX01409, *in camera*).

187. {

} (RX00677, *in camera*; RX01084, *in camera*). Daramic has sales teams and technical service teams located all over the world. (Seibert, Tr. 4143-44).

188. {

(RX0119, *in camera*; RX01407, *in camera*). {

} (RX01076, *in camera*; RX01077, *in camera*) {

} (Thuet, Tr. at 4351, *in camera*; RX01076, *in camera*; RX01077, *in camera*; RX01080 at 40, 43, 46, *in camera*); RX01178, *in camera*; RX01179, *in camera*; RX01180, *in camera*. {

} (Thuet, Tr. at 4351, *in camera*).

189. {

} (Seibert, Tr. 4152-53, *in camera*; RX01073, *in camera*; RX01409, *in camera*; RX01074; RX01085, *in camera*; RX01086, *in camera*;

RX01087, *in camera*). {

} (Seibert, Tr. 4152-54, *in camera*). {

} (Seibert, Tr. 4153, *in camera*).

190. {

} (Seibert, Tr. 4175-76, *in camera*; RX01065 at 7; RX01069; RX01070, *in camera*; RX01071; RX01022, *in camera*; RX01339 at 7; RX01349, *in camera*). In fact, the competition from Asian manufacturers is increasing all over the world, not solely in Asia. (Thuet, Tr. 4339).

191. Prior to the acquisition, Microporous considered its CellForce separator to be a "world leader product." (Gilchrist, Tr. 339). Additionally, Microporous sold and shipped separators from its facility in Piney Flats, Tennessee to customers around the world, including locations in the U.S., Mexico, South America, Europe, Asia and Africa. (McDonald, Tr. 3790-91; Gilchrist, Tr. 540-41).

192. Before being acquired, Microporous exported a large portion of its separators from North America. (McDonald, Tr. 3790-91). In fact, prior to the acquisition, Microporous exported 60% to 70% of its CellForce product. (Gaugl, Tr. 4555) {

} (Thuet, Tr. at 4352, *in camera*) {

} (Thuet Tr. at 4353, *in camera*). {

} (Hall, Tr. 2846-47, 2880, *in camera*). {

} (Hall, Tr. 2894, *in camera*). {

} Thuet, Tr. 4434; RX00677, *in camera*).

193. {

} (Weerts, Tr. 4467-68, *in camera*).

{

} (Weerts, Tr. 4467-68, *in camera*).

194. {

} (Weerts, Tr. 4465-67, *in camera*; RX01530 at 003, *in camera*; RX01512). {

}

(Weerts, Tr. 4465-67, *in camera*). {

} (Weerts, Tr. 4465-66, *in camera*; RX00117, *in camera*). {

} (Weerts, Tr. 4466-

67, *in camera*; RX00119, *in camera*; RX00120, *in camera*; RX00121, *in camera*; RX00122, *in camera*). {

}

(RX00259, *in camera*; RX00260, *in camera*).

195. In 2008, {

} its North American

facility. (PX1833 *in camera*). In 2007, {

} (PX1833, *in camera*).

196. {

} (Weerts, Tr. 4464-65, *in camera*). {

} (Weerts, Tr.

4464-65, *in camera*).

197. {

} (Weerts, Tr. 4469, *in camera*).

198. {

}

(Weerts, Tr. 4469, *in camera*). {

} (Weerts, Tr. 4472, *in*

*camera*). {

} (Weerts, Tr. 4474-75, *in camera*).

199. Due to the excess capacity, Asian separator manufacturers are exporting products to other parts of the world. (Thuet, Tr. 4339-40). For example, Daramic is exporting separators to Europe, the Middle East and South America. (Thuet, Tr. 4339). NSG, Anpei and Epoch are also exporting to Europe and South America. (Thuet, Tr. 4339-40; RX00050, *in camera*). {

} (Seibert, Tr.

4165, *in camera*).

200. Asian separator companies have grown substantially in the past years and are competitive with Daramic. (Seibert, Tr. at 4149; Thuet, Tr. at 4330; RX00032, *in camera*). Anpei, Separindo, Baotou, Sebang, Epoch are all PE separator companies in Asia competing with Daramic for business including in South America. (Hauswald, Tr. 862-63, *in camera*, 866-867, *in camera*; Hauswald, Tr. 1030, 1034, 1036-37, 1107-11; Seibert, Tr. 4159-66, 4176-77, *in camera*; Thuet, Tr. 4331-4333, 4335-36, 4339-40; RX01342; PX0184; RX00551 at 3-4, *in camera*; RX01447, *in camera*; RX01448, *in camera*; RX01064; RX01067; RX01125; RX01447, *in camera*; RX01558, *in camera*; RX01085, *in camera*; RX01409, *in camera*; RX00586, *in camera*; RX01600, *in camera*; RX00587-04, *in camera*; RX00555, *in camera*; RX00553, *in camera*; RX00550, *in camera*). Daramic considered the quality of Anpei, BFR and Baotou's



product sufficient that it made an offer to purchase each of those companies. (Hauswald, Tr. 1109).

201. Asian separator manufacturers have also sought to sell PE separators to customers located in North America.

a. East Penn obtained a quote for the sale of PE separators from Anpei. (Leister, Tr. 3992). East Penn also obtained PE samples from Anpei. (Leister, Tr. 3992; RX00079).

b. {  
} (Hall, Tr. 2862, *in camera*; RX00037-03). {  
}, *in camera*; RX00043-03,05, *in camera*; RX00048-02 {  
}, *in camera*; RX00066-07, *in camera*;  
RX00074-06, *in camera*.)

c. {  
} (Burkert, Tr. at 2360-61, *in camera*; RX00023; RX00193;  
RX00198; RX00199, *in camera*; RX00203, *in camera*; RX00204; RX00225;  
RX00237; RX00239, *in camera*).

d. {  
} (Burkert, Tr. at 2450, *in camera*; RX00223).

e. {  
} (RX00303, *in camera*, RX00304; RX00305;  
RX00306; RX00307).

202. {  
} (RX00095, *in camera*).

b. Battery Manufacturers Also Conduct Their Business in a Global Market

203. JCI is the largest manufacturer of automotive batteries in the world, and it procures separators on a global basis. (Hall, Tr. 2662-64). Rodger Hall of JCI is the Global Vice President for Procurement. (Hall, Tr. 2662). In that position, he is responsible for global procurement of all materials purchased by JCI, including PE separators. (Hall, Tr. 2663-64). In addition, Mr. Hall is in charge of JCI's "global separator strategies." (Hall, Tr. 2664).

204. JCI has numerous plants located throughout the world, including the U.S., Mexico, Brazil, Europe and Asia. (Hall, Tr. 2794-95). {

} (Hall, Tr. 2865, *in camera*; PX1505, *in camera*) {

} (RX00036, *in camera*; RX00039,

*in camera*; RX00075, *in camera*; RX00065, *in camera*; RX00057, *in camera*; RX00070-03, *in camera*).

205. {

}

(RX00072, *in camera*).

206. {

} (Hall, Tr. 2715-16;

PX0907 (Kung, Dep. at 59); RX00053, *in camera*; RX00032, *in camera*). As part of its joint venture agreement with BFR, JCI contemplated BFR supplying it with separator on a global supply basis. (RX01602). (*See also* RX00051 (“Strategic vision for expanding BFR market outside of China/Asia”); RX00054 at 02 {

}, *in camera*; RX00055, (“We can work together to make BFR a world class separator supplier to JCI and other battery manufacturers”); Hall Tr. 2860).

207. {

} (RX00065 at 011-13, *in*

*camera*).

208. EnerSys is the largest manufacturer of industrial batteries in the world, and it procures separators on a global basis. (Axt, Tr. 2228; RX00236; RX01203, *in camera*). Larry Axt of EnerSys is responsible for "global procurement" of all raw materials and finished goods, as well as indirect material and capital equipment. (Axt, Tr. 2097-98). Furthermore, Larry Burkert of EnerSys is in charge of "global procurement" of separators. (Burkert, Tr. 2369).

209. EnerSys has more than 20 plants worldwide. (Axt, Tr. 2226). EnerSys manufactures batteries in Mexico, China and Europe which are shipped to and sold in the U.S. (Axt, Tr. 2228-29). Because of its size and numerous facilities throughout the world, EnerSys manages its business strategy on a global basis. (Axt, Tr. 2239). EnerSys maintains global strategies for its policies and procedures concerning quality assurance. (Gagge, Tr. 2542).

210. Exide ranks as the first or second largest battery manufacturer in the world, depending on the specific area. (Gillespie, Tr. 2930). Exide is a "global participant in the global marketplace." (Gillespie, Tr. 3093).

211. Douglas Gillespie of Exide is the Vice President of Global Procurement, and he is responsible for the procurement of materials around the world. (Gillespie, Tr. 2926, 2928). {

} (Bregman, Tr. 2898-99, *in camera*).

212. {

} (Bregman, Tr. 2898-99, *in camera*; RX00144, *in camera*; RX00300,

RX00301, *in camera*; RX00302; RX00303, *in camera*; RX00304; RX00305; RX00306, *in camera*). {

} (Gillespie, Tr. 3026,

*in camera*). {

} (Gillespie, Tr. 3060, *in camera*).

213. Exide conducted a global search for automotive battery separator manufacturers. (Gillespie, Tr. 2962-63; RX00144, *in camera*; RX00300, RX00301, *in camera*; RX00302; RX00303, *in camera*; RX00304; RX00305; RX00306, *in camera*; RX00362). In conducting the search, Exide visited various separator manufacturers around the world, hired a third party to identify separator manufacturers in the Asia-Pacific region, and sent a Request for Proposal

("RFP") to "the top separator manufacturers around the globe." (Gillespie, Tr. 2962-63). Through the RFP, Exide provided its global PE separator requirements to numerous separator manufacturers. (Gillespie, Tr. 2965, 2967; RX00144, *in camera*; RX00145, *in camera*; RX00339 at 17, *in camera*; RX00338). {  
} (RX00147, *in camera*).

214. Exide is working to standardize the specifications for its separators used around the world. (Gillespie, Tr. 3093).

215. East Penn is a lead acid battery and wire and cable manufacturing company headquartered in Lyon Station, Pennsylvania. (Leister, Tr. at 3968). East Penn has manufacturing facilities located in Lyon Station, and Corydon, Iowa with annual sales of approximately \$1.25 billion. (Leister, Tr. at 3968). East Penn also has a battery manufacturing facility in Asia, with three automotive plants, one motive power plant, and one stationary plant. (Leister, Tr. at 3969).

216. East Penn sells its batteries manufactured out of its Lyon Station facility outside of North America. (Leister, Tr. 3969-70).

217. East Penn purchases its PE separators for its global operations from Daramic and Entek, approximately 70% and 30%, respectively. (Leister, Tr. at 3984). East Penn has obtained a quote and samples from Anpei. (Leister, Tr. at 3992).

218. Trojan is the largest manufacturer of golf cart batteries in the world. (Godber, Tr. 274). It has two manufacturing plants, one located in California and the other in Georgia. (Godber, Tr. 253). {

} (Godber, Tr. 252-53, *in camera*).

219. Trojan sells approximately 60% of its batteries to the after-market. (Godber, Tr. 144). Of those after-market sales, 35-38% of Trojan's sales are domestic, while 62-65% of its sales are international. (Godber, Tr. 144).

220. Trojan acquires AGM battery separators from China and uses those separators primarily in its marine line. (Godber, Tr. 148). Trojan's product sales and purchases of component parts indicate that it is involved in activity throughout the global marketplace.

221. Trojan competes for customers with US Battery, Exide, Crown Battery, East Penn Battery, Surette, a Canadian company, Johnson Controls, Global and YUASA. (Godber, Tr. 145). Global and YUASA are Asian battery manufacturers. (Godber, Tr. 145; Thuet, Tr. 4336-37.)

222. U.S. Battery holds itself out to the world as the leading manufacturer of deep-cycle batteries. (Wallace, Tr. 1955). U.S. Battery sells and ships batteries to more than 60 countries around the world from its plants in Corona, California and Augusta, Georgia. (Wallace, Tr. 1957-58).

223. Based on the findings above, the Court finds that battery separator manufacturers and battery manufacturers operate in a global market and, therefore, the valid and proper relevant market is worldwide.

#### **IV. The Parties**

##### **A. Polypore/Daramic**

##### **a. Before the Acquisition**

224. Polypore International, Inc. ("Polypore") is a global filtration company that specializes in the manufacturing of microporous membranes for use in separation and filtration processes. (PX2160 at 006).

225. Polypore is a Delaware corporation with headquarters in Charlotte, North Carolina. (PX2160 at 006). Polypore operates a global business and has a presence in North America, Asia, Western Europe, and South America. (PX2160 at 055).

226. Polypore is a publicly traded company which was previously owned by Warburg Pincus, a private equity firm. (Hauswald, Tr. 965; PX2160 at 060). Polypore went public in the summer of 2007. (Toth, Tr. 1424). {

} (Toth, Tr. 1599, *in*

*camera*). In fact, Michael Graff, a partner and managing director of Warburg Pincus, has served as the Chairman of Polypore's Board of Directors since Warburg acquired Polypore in May 2004. (Graff, Tr. 4849-50).

227. Polypore consists of four separate business divisions: 1) Liqui-Cel, 2) Membrana, 3) Celgard, and 4) Daramic. (Toth, Tr. 1498-99; PX0194; RX00635). Liqui-Cel manufactures specialty filtration products for liquid degasification and water purification. (RX00635 at 007). Membrana produces microporous membranes for medical applications such as hemodialysis, blood oxygenation and plasma separation. (Toth, Tr. 1498-99; RX00635 at 006). Celgard manufactures battery separators for high-performance lithium-ion batteries. (Toth, Tr. 1498-99; RX00635 at 008). Daramic, which is part of Polypore's energy storage segment, produces microporous separators for the flooded lead-acid battery industry. (Toth, Tr. 1385; Hauswald, Tr. 965-66; RX00635 at 009).

228. Polypore has been led by its President and CEO, Robert Toth, since July 2005. (Toth, Tr. 1385). Toth has an extensive business background and a thorough understanding of the business at each of Polypore's four divisions. (Toth, Tr. 1500). He obtained a bachelor's degree in industrial science from Purdue University and a master's degree in engineering from Washington University in St. Louis. (Toth, Tr. 1490). Toth began his career at Monsanto Company and its

spin-off company, Solutia. For 20 years, he held a variety of senior level positions at Monsanto and Solutia before accepting the CEO position at CP Kelco. (Toth, Tr. 1492-1495). When CP Kelco was acquired by a large strategic buyer, Toth was approached by Warburg and accepted the position of President and CEO of Polypore. (Toth, Tr. 1496).

229. Polypore employs approximately 1,900 employees worldwide. (PX2160 at 016).

230. Daramic, one of the four Polypore divisions, is a global manufacturer of lead-acid battery separators for a variety of applications. (Hauswald, Tr. 965-66). Daramic currently employs approximately 934 people worldwide, and 349 of those employees are located in the United States. (PX2160 at 16.)

231. W.R. Grace, Daramic's predecessor, began manufacturing PE separators in 1954. (Hauswald, Tr. 957-59). In 1994, W.R. Grace sold the separator manufacturing arm of its business to Intertech Group, a private equity firm, and the new separator company became known as Daramic. (Hauswald, Tr. 963; Roe, Tr. 1669). Intertech sold Daramic to Warburg Pincus, a private equity firm, in 2004, and Daramic became a subsidiary of Polypore at that time. (Hauswald, Tr. 965; Roe, Tr. 1669).

232. Although headquartered in Charlotte, North Carolina, Daramic serves customers all over the world. (Seibert, Tr. 4145-46). As part of Daramic's global strategy, it has manufacturing facilities located around the world. (Hauswald, Tr. 711-12). Having multiple worldwide facilities, however, is not a requirement for success in the battery separator industry. (Seibert, Tr. 4149).

233. Prior to the acquisition of Microporous, Daramic had two manufacturing facilities in the United States and five manufacturing facilities abroad. (RX00814 at 003, *in camera*; Hauswald, Tr. 990). In the United States, Daramic's manufacturing facilities were located in Owensboro, Kentucky and Corydon, Indiana. (RX00814 at 010, *in camera*). The PE line operating at the

facility in Owensboro is the same PE line which was originally installed in 1969. (Hauswald, Tr. 960-61). One of the first PE separator lines in the original line and is still running today. (Hauswald, Tr. 960-61). Prior to the acquisition, Daramic's five foreign manufacturing facilities were located in Selestat, France, Norderstadt, Germany, Potenza, Italy, Prachinburi, Thailand, and Tianjin, China. (RX00814 at 003, *in camera*; Hauswald, Tr. 990).

234. Prior to the acquisition, {

} (RX00814 at 003, *in camera*). {

} (Hauswald, Tr. 918, *in camera*; RX00814 at 003, *in camera*).

b. Daramic Management

235. Daramic is led by Pierre Hauswald, Harry Seibert, Tucker Roe, and Tim Riney. (PX0971-006). Pierre Hauswald serves as the Vice President and General Manager of Daramic. (Hauswald, Tr. 629). He has over 27 years of experience in the lead-acid battery separator industry and a deep understanding of the separator manufacturing process. (Hauswald, Tr. 630, 666). After receiving a bachelor's degree in chemical engineering, Hauswald started working for Daramic in 1981 as a quality assurance manager working on the installation of a line in Selestat, France. (Hauswald, Tr. , 630, 666, 958). Hauswald was promoted to the position of production manager and then site manager of Selestat during the 1990s. (Hauswald, Tr. 962). In 1996, Hauswald was promoted to Director of Worldwide Manufacturing and relocated to Owensboro, Kentucky. (Hauswald, Tr. 964). He then moved back to Selestat as the Vice President of Manufacturing before assuming the position of General Manager of Daramic in 2004.



(Hauswald, Tr. 630, 964). Thereafter, he moved to Daramic's headquarters in Charlotte, North Carolina. (Hauswald, Tr. 630).

236. Harry Seibert serves as the Vice President and Business Director for Daramic. (Seibert, Tr. 4140). Seibert obtained a bachelor's degree in mechanical engineering from the University of Toledo and an M.B.A. from Xavier University. (Seibert, Tr. 4142-43). Before beginning work with Daramic, Seibert was employed for 13 years by Michelman followed by four and a half years at Avery Denison Corporation. (Seibert, Tr. 4141-42). Seibert began working for Daramic in August 2006 as Director of Marketing and New Business Development. (Seibert, Tr. 4141). A year later, he moved into a position with Polypore as Director of Enterprise Growth before transferring back to Daramic in 2008 to assume his current role of Vice President and Business Director. (Seibert, Tr. 4141). In his current position, Seibert is responsible for sales and marketing, technical service, product management, and technical service. (Seibert, Tr. 4143).

237. Tucker Roe serves as Daramic's Vice President of Sales and Marketing for the Americas, Europe, Middle East, and Africa. (Roe, Tr. 1669-70). Roe obtained a bachelor's degree from Bowling Green State University in 1976 and an M.B.A. from the University of Dayton in 1981 before beginning work for General Motor's Delco Products division in Kettering, Ohio. (Roe, Tr. 1666-67). Roe left General Motors in 1984 to take a job as a purchasing manager for C&D Battery. (Roe, Tr. 1669). In 1998, Roe left C&D and joined W.R. Grace (now Daramic) as an account manager. (Roe, Tr. 1668). Roe was promoted to the position of Sales Manager in 1990 and then to General Sales Manager/Director of Sales and Marketing for the Americas in 1993. (Roe, Tr. 1668). After Daramic was sold to Warburg, Roe assumed the title of Vice President of Sales and Marketing for Daramic's worldwide operations. (Roe, Tr. 1669). In his current position, Roe supervises sales teams, customer service teams and technical service departments in both Europe and the U.S. (Roe, Tr. 1669-70). In this role, Roe frequently calls upon

customers, negotiates supply agreements and future pricing, and supervises other sales managers in their dealings with customers. (Roe, Tr. 1671).

238. Tim Riney serves as the Vice President of Finance for Daramic. (Riney, Tr. 4907). Riney obtained a bachelor's degree from Breshner College and an M.B.A. from Murray State University. (Riney, Tr. 4907). Riney received his Certified Public Accountant certification in 1998 and Certified Management Accountant certification in 2005. (Riney, Tr. 4907-08). After working for a public accounting firm for two years and Commonwealth Aluminum Company for a brief period, Riney began working with Daramic in 1998 as a Cost and Financial Accounting Manager. (Riney, Tr. 4908-09). In 2002, Riney was promoted to the position of Plant Controller for both the Owensboro and Corydon plants. (Riney, Tr. 4910). In 2005, Riney was promoted to the position of Director of Finance for the Americas and officially assumed the role of Vice President of Finance in 2007. (Riney, Tr. 4911). As Vice President of Finance, Riney is responsible for all of Daramic's financial reporting, overseeing all financial and accounting employees, handling the budgeting process, and managing all financial aspects of Daramic's plants on a global basis. (Riney, Tr. 4911-12).

c. Sales

239. Daramic's worldwide separator sales – including Darak - in 2007 were approximately { } (RX01119, *in camera*). The total sales of Daramic's PE separators in 2007 for automotive applications was { } (RX01119, *in camera*; RX01418, *in camera*). In 2007, sales of HD were { } (RX01119, *in camera*; RX01418, *in camera*). Daramic's sales of PE separators for industrial applications during the same time period totaled { }, and sales of PE separators for specialty applications were { } (RX01119, *in camera*; RX01418, *in camera*). { } (RX01119, *in camera*);.

d. Contracts and Pricing

240. Daramic faces intense global competition as it sells lead-acid battery separators to the highly concentrated battery industry. (Seibert, Tr. 4149; Seibert, Tr. 4172, *in camera*). {

} (Seibert, Tr. 4172, *in camera*; RX01084, *in camera*). {

} (Seibert, Tr. 4174, *in camera*; RX01084, *in camera*).

241. Daramic, like other suppliers in the industry, prefers to enter into long term supply agreements with its customers. (Hauswald, Tr. 1038; Roe, Tr. 1729). Approximately 60% of Daramic's customers are currently under long-term supply agreements (i.e., contracts of three years or more) with Daramic. (Roe, Tr. 1728).

242. {

} (Hauswald, Tr. 1038; Roe, Tr. 1729; RX01497, *in camera*; RX01498, *in camera*). Long-term supply agreements provide consistency and cost optimization, savings which are passed on to customers. (Hauswald, Tr. 1038). Because it is expensive and wasteful to start and stop lines, long-term contracts help Daramic plan its production schedule in such a manner as to reduce waste and costs. (Hauswald, Tr. 1038). As Roe testified, "by having long-term contracts, we can establish a baseline of business so that we can better plan out capacities by region to be sure we can support the base-load business as we go forward." (Roe, Tr. 1729).

{

} (Hauswald, Tr. 1038-39; RX01062, *in camera*). To realize these reduced raw material costs, which are also passed along to customers, Daramic must plan the approximate amount of its raw material requirements in advance. (Hauswald, Tr. 1039).

243. Long-term contracts also provide benefits to customers. (Hauswald, Tr. 1044; Roe, Tr. 1728-29). Long-term supply agreements create customer relationships which provide for reliability of supply, continuous product development and technology improvement programs. (Hauswald, Tr. 1044; Roe, Tr. 1729). Continuity and reliability of supply are especially important in the battery separator market where capacity has historically been constrained. (Roe, Tr. 1729).

244. {

} (Riney, Tr. 4956, *in camera*). {

}

(Riney, Tr. 4956, *in camera*). {

} (Riney, Tr. 4956, *in camera*). {

} (Riney, Tr. 4956, *in*

*camera*).

245. {

} (Riney, Tr. 4958-59, *in camera*). Pricing in Asia is lower than in North

America. (Thuet, Tr. 4434); {

} (Riney, Tr.

4959, *in camera*). {

} (Riney, Tr. 4958-59, *in camera*). *See*

RX01401, *in camera*.

246. {

} (Riney, Tr. 4942, *in*

*camera*; RX00960, *in camera*; RX00994, *in camera*; RX00993, *in camera*; RX01519, *in*

*camera*; RX00983, *in camera*; RX00976, *in camera*; RX00988, *in camera*). {  
} (Riney,

Tr. 4943, *in camera*). {

(Riney, Tr. 4943, *in camera*).

247. {

} (Riney, Tr. 4936-37, *in camera*;

Seibert, Tr. 4189, *in camera*). {

} (Riney, Tr. 4936-37, *in camera*). {

}

(Riney, Tr. 4937, *in camera*; Seibert, Tr. 4189-90, *in camera*).

248. {

} (Riney, Tr. 4937, *in*

*camera*). {

} (Riney, Tr. 4938-39, *in camera*). {

} (Riney, Tr. 4939, *in camera*).

{

} (Riney, Tr. 4940, *in camera*).

{

} (Riney, Tr. 4941, *in camera*).

249. {

} (Riney, Tr. 4941-42, *in camera*). {

*camera*). {

} (Riney, Tr. 4952, *in*

} (Riney, Tr. 4942, *in camera*).

250. {

} (Riney, Tr. 4943-44, *in camera*). {

*camera*). {

} (Riney, Tr. 4944, *in*

*in camera*).

} (Riney, Tr. 4954,

251. {

} (Riney, Tr. 4945, *in camera*;

RX00927 at 14-16; *in camera*). {

} (Riney, Tr. 4945, *in camera*; RX00927 at 14-16; *in camera*). {

} (Riney, Tr. 4945, *in camera*;

RX00927 at 14-16, *in camera*).

252. {

} (Riney, Tr. 4946, *in camera*). {

} (Riney, Tr. 4946, *in*

*camera*). {

} (Riney, Tr. 4946-47, *in camera*; RX00019). {

} (Riney, Tr. 4948,

*in camera*). {

} (Riney, Tr. 4948, *in camera*).

253. {

} (Riney, Tr. 4945, *in camera*). As a result, Daramic is

being “squeezed from both ends” as it faces escalating raw material and energy costs and eroding

margins. (Toth, Tr. 1502, 1573, 1559; Riney, Tr. 4931, *in camera*). {

} (Riney, Tr. 4933, *in camera*). {

} (Riney, Tr. 4934, *in*

*camera*). For example, {

} (Riney,

Tr. 4934, *in camera*). {

} (Riney, Tr. 4935, *in camera*). {

} (Riney, Tr. 4935, *in camera*).

254. {

} (Riney, Tr. 4932-33, *in camera*). {

}

(Riney, Tr. 4933, *in camera*). {

} (Riney, Tr. 4932, 4935, *in camera*). {

} (Riney, Tr. 4932, 4936, *in camera*). {

} (Riney, Tr. 4936, *in camera*).

255. While Daramic has implemented several initiatives to eliminate costs without increasing prices, passing along rising costs increases through price increases is often necessary. (Toth, Tr. 1576-77). {

} (Riney, Tr. 4928, *in camera*). {

} (Riney, Tr. 4931, *in camera*).

256. {

} (Riney, Tr. 4949, *in camera*; Seibert, Tr. 4193, *in camera*; RX00927 at 5-13, *in camera*). {

} (Riney, Tr. 4949, *in camera*; RX00927 at 5-13, *in camera*). {

} (Riney, Tr. 4951, *in camera*). {

} (Riney, Tr. 4950, *in camera*).

257. {

} (Seibert, 4191-92, *in camera*; RX00542, *in camera*; RX00927 at 14-16, *in camera*).

{



} (Seibert, Tr. 4194-

95, *in camera*).

e. Growth in Asia

258. Since 2000, Daramic has recognized Asia as a key area for growth and expansion. (Toth, Tr. 1434-35; Hauswald, Tr. 878-79, *in camera*). {

} (Hauswald, Tr. 872, *in camera*). {

} (Hauswald, Tr. 872-73, 875, *in camera*; RX00706 at 5, *in camera*; RX01314, *in camera*). This line was developed and operational in 15 months and through implementation of continuous improvement practices, this same size PE line currently produces 25 million square meters of product. (Hauswald, Tr. 1112).

259. {

} (Hauswald, Tr. 871-73, *in camera*). {

}

(Hauswald, Tr. 873, *in camera*). This project was referred to internally as RAMA II, and it involved moving existing lines from Austria to Thailand. (Hauswald, Tr. 871-73, *in camera, in camera*; Thuet, Tr. 4322; RX00699, *in camera*). {

} (Hauswald, Tr. 873, *in camera*;

RX00706 at 5, *in camera*; RX01314, *in camera*). RAMA III, the third phase of installation in Prachinburi, involved the construction of a new 30 million square meter line. (Hauswald, Tr. 875, *in camera*; Thuet, Tr. 4323). {

} (Hauswald, Tr. 880, 883, 940, *in camera*; RX01038, *in camera*;

RX01050, *in camera*; RX00553 at 8, *in camera*; RX00555 at 7, *in camera*). Following this

latest expansion, the total production capacity at the Prachinburi facility is approximately 80 million square meters. (Thuet, Tr. 4323).

260. Recognizing the growth opportunities in Asia, Daramic entered into a joint venture agreement with Nippon Sheet Glass (“NSG”) in Tianjin, China. (Hauswald, Tr. 1107-08). Daramic has a 60% interest in the venture, and NSG has a 40% interest. (Toth, Tr. 1396; Thuet, Tr. 4324). At the time Daramic entered into the joint venture agreement in February 2007, NSG was only producing 500,000 square meters of product on a 10 million square meter line. (Hauswald, Tr. 1108; Thuet, Tr. 4323). Today, the facility is running at full capacity. (Thuet, Tr. 4328). Daramic expects to increase the capacity of the line in Tianjin through the implementation of continuous improvement practices. (Thuet, Tr. 4326).

f. The Acquisition of Microporous

261. On February 29, 2008, Polypore {  
} (PX0059 at 001, *in camera*; RX01227, *in camera*).

262. {  
} (RX00814 at 010, *in camera*). {  
} (Hauswald,  
Tr. 821, *in camera*). {  
} (RX00814 at 010, *in camera*). {  
}

(RX00814 at 010, *in camera*). In addition, Daramic struggled for years to obtain more business with deep cycle customers, first with Daramic DC, then Daramic HD, with little success. (Hauswald, Tr. 656-57, 744, 1196; Wear, Tr. 4777). The acquisition of Microporous allowed Polypore the chance to diversify its product line, gain access to Microporous’ rubber technology,

and enter the niche rubber market. (Hauswald, Tr. 652; Hauswald, Tr. 896, *in camera*, 1057, 1060-61; Roe, Tr. 1735; RX01630; RX01097 at 3; *in camera*; PX0433 (“The addition of FLEX-SIL® and ACE-SIL® would broaden our portfolio of products into two niche markets we do not supply today.”).

263. Daramic believed that the addition of Microporous’ rubber technology would complement existing research and development programs, leading to new product development and existing product enhancements. (Hauswald, Tr. 1059-60; Roe, Tr. 1735). {

} (Hauswald, Tr. 1176, *in camera*). {

} (Hauswald, Tr. 1176-77, *in camera*).

264. {

} (Seibert, Tr. 4161, *in camera*). {

} (Seibert, Tr. 4161, *in camera*).

265. The discussion with Microporous about a possible acquisition actually began as early as 2005 when Microporous’ former owners approached Warburg Pincus about acquiring the company. (PX0748; Trevathan, Tr. 3591-92) Intrigued by Microporous’ niche position and foothold in the production of rubber separators, Warburg Pincus expressed a sincere interest in a possible acquisition of the company. (Trevathan, Tr. 3591-92). At the time, however, Warburg could not financially undertake the proposed acquisition. (Toth, Tr. 1503).

266. Daramic and Polypore leadership continued to discuss the benefits and value of a potential acquisition of Microporous after Warburg was approached in 2005. (Toth, Tr. 1504-

05). During these discussions, Toth emphasized to his management team that defensive acquisitions are never profitable, and that the only acquisitions that should be considered are those that add value to the company's existing business units. (Toth, Tr. 1504-05). Toth especially emphasized many of these basic principles with Hauswald, who offers tremendous insight in manufacturing and operations but is weaker with regard to financial matter. (Toth, Tr. 1506).

267. Daramic interest in acquiring Microporous was rekindled during the course of settlement discussions between the parties in August 2007 related to a pending arbitration proceeding. (Roe, Tr. 1758; Graff, Tr. 4854-55). The arbitration involved a contractual dispute between Daramic and Microporous concerning equipment and technology for a PE line which was purchased by Microporous from Jungfer in 2001. (Roe, Tr. 1758; PX2237). Roe, Hauswald, and Daramic's in-house legal counsel attended on behalf of Daramic, and Trevathan, Gilchrist, and Microporous' outside legal counsel attended on behalf of Microporous. (Roe, Tr. 1758). A variety of settlement options were discussed at the meeting, including: (1) Daramic selling its industrial business to Microporous; (2) Daramic acquiring Microporous; and, (3) Microporous acquiring Daramic. (Trevathan, Tr. 3615). During the course of settlement discussions, Daramic never conditioned the sale of its industrial business, or any other settlement options, on the promise by Microporous to stay out of the SLI business. (Roe, Tr. 1759).

268. {

} (Gilchrist, Tr. 470, *in camera*; Toth, Tr. 1552-56). As discussions continued, Daramic became excited about the great potential for capitalizing on the synergies between the two companies. (Toth, Tr. 1564). {

} (RX01097, *in camera*; Hauswald, Tr. 897, *in camera*). While Daramic was

interested in acquiring the rubber technology, they did not want to pay more than asset value for the remainder of Microporous' business, which would merely provide additional capacity for Daramic. (PX0978; Toth, Tr. 1551-52, 1564-65).

269. {

} (RX00814 at 003, *in camera*; Hauswald, Tr. 906-07, *in camera*). {

} (Hauswald, Tr. 907, *in camera*). The addition of Microporous' facilities in Piney Flats, Tennessee and Fiestritz, Austria would help to immediately alleviate the mounting capacity concerns at Daramic. (Toth, Tr. 1564-65).

270. {

} (Graff, Tr. 4862-63, *in camera*). {

} (Graff, Tr. 4862-63, *in camera*). In fact, {

}

(Graff, Tr. 4863, *in camera*). {

} (Graff, Tr. 4862-63, *in*

*camera*). {

} (Graff, Tr. 4862-63, *in camera*).

271. {

} (Toth, Tr. 1587-89, *in camera*; RX00546, *in camera*; RX00724). {

} (Toth, Tr. 1587, *in camera*). {

} (Toth, Tr. 1589, *in camera*). {

} (Toth, Tr. 1589-90, *in camera*).

272. {

} (PX0059 at 001, *in camera*; RX01227, *in camera*).

At all times, Daramic's rationale for acquiring Microporous was to obtain the benefits of the rubber technology and access to the deep cycle segment. (Toth, Tr. 1554-55, 1564; Toth, Tr. 1587, *in camera*).

g. Synergies Following the Acquisition

273. After the Acquisition, Daramic improved Microporous' existing plants, processes, and equipment. (Hauswald, Tr. 1061). At the Piney Flats facility, Daramic created a task force of engineers from Daramic's Owensboro facility to decrease costs and improve yields on Microporous' existing lines. (Hauswald, Tr. 1062-63; RX00628). Prior to the Acquisition, the CellForce line had a yield of approximately 76%. (Hauswald, Tr. 1062). This yield was improved to approximately 90% through the efforts of the Daramic task force. (Hauswald, Tr. 1062). In order to achieve higher efficiency, the team of engineers applied Daramic's best practices to the lines in Piney Flats, which improved safety and environmental standards, reduced costs and improved quality. (Hauswald, Tr. 1063). For example, Daramic changed the oil used in the manufacturing process in Piney Flats to a higher grade to improve the quality of

the product. (Hauswald, Tr. 1064). Daramic also improved the solvent recovery system in order to reduce solvent consumption by approximately 25%, which reduced costs and waste. (Hauswald, Tr. 1065).

274. Daramic personnel also worked to improve costs and efficiency at the Fiestritz facility. For example, the solvent recovery system was improved like it had been in Piney Flats. (Hauswald, Tr. 1066). Daramic engineers also increased the capacity of the lines by fixing glitches in the winding and finishing areas. (Hauswald, Tr. 1065-66). These improvements allowed Daramic to fill the second line with pure SLI product. (Hauswald, Tr. 1065-66). Additionally, Daramic found ways to reduce the smell of sulfur originating from the product process and plaguing the surrounding Austrian community. (Hauswald, Tr. 1065).

275. At both former Microporous facilities, Daramic found ways to reduce and recycle scrap material. (Hauswald, Tr. 1067). Instead of simply throwing the scrap away, as Microporous had done, Daramic now regrinds and reuses the material to create new product. (Hauswald, Tr. 1067). This practice not only reduces waste, but also results in cost savings for both plants. (Hauswald, Tr. 1067).

276. {

} (Hauswald, Tr. 904, *in camera*;

RX1603, *in camera*). {

} (Hauswald, Tr. 904, *in camera*; Riney, Tr.

5020, *in camera*; RX01427, *in camera*; RX01428, *in camera*). {

} (Hauswald, Tr. 904, *in camera*; RX01431, *in camera*; RX01432, *in camera*; RX01433, *in camera*; RX01473, *in camera*).

h. Daramic's Difficulties In the Current Market

277. The current lead-acid battery separator market is a "tough business." (Toth, Tr. 1568).

{

} (Toth, Tr. 1568; RX00927

at 5-16, *in camera*). As a result, Daramic has been experiencing continuous declines in its margins (PX3016 at 010; Toth, Tr. 1649).

i. Daramic is Experiencing Declining Margins and Rising Costs

278. {

} (Riney, Tr. 4924-4929, *in camera*). {

} (Riney, Tr. 4927-4928, *in camera*). {

} (Riney, Tr. 4924, *in camera*). {

} (Riney, Tr. 4928, *in camera*).

279. {

} (Riney, Tr. 4924, *in camera*). {

} (Riney, Tr. 4924, *in camera*).

{



} (Riney, Tr. 4929, *in camera*).

280. {

} (Riney, Tr. 4926, *in*

*camera*).{

} (Riney, Tr. 4930, *in camera*). {

} (Riney, Tr. 4926-

27, *in camera*).

281. {

} (Riney, Tr. 4930, *in camera*). {

} (Riney, Tr. 4930-31, *in camera*). {

} (Riney, Tr. 4931, *in camera*).

282. {

} (Riney, Tr. 4931, *in camera*). {

} (Riney, Tr. 4931, *in camera*).

283. One reason for the decline in gross profits has been the increased cost of raw materials and escalating energy costs. (PX2160 at 034; Toth, Tr. 1390-1391). Raw materials make up about a third of Polypore's cost of sales. (PX3016 at 038).

284. {

} (Riney, Tr. 4933, *in camera*). {

}

(Riney, Tr. 4934, *in camera*). {

} (Riney, Tr. 4934, *in camera*). {

} (Riney, Tr.

4934-35, *in camera*). {

}

(Riney, Tr. 4934-35, *in camera*).

285. {

}

(Riney, Tr. 4932, *in camera*). Polypore as a whole has attempted to offset Daramic's declining margins by restructuring and reducing discretionary spending. (PX3016 at 010-11; Toth, Tr. 1649). These efforts were partially offset by the FTC expenses and the considerable administrative expenses that were inherited from the acquisitions. (PX3016 at 019). {

} (Riney, Tr. 4932, *in camera*).

{

} (Riney, Tr. 4932, *in*

*camera*).

286. {

} (Riney, Tr.

4933, *in camera*). {

} (Riney, Tr. 4933, *in camera*).

287. {

} (Riney, Tr. 4954, *in camera*). {

} (Riney, Tr. 4954-4955, *in camera*).

288. Based on the foregoing, the Court finds that Daramic has experienced declining margins and increasing costs since at least 2005.

j. Daramic Operates In a Stagnant Industry

289. { } (Riney, Tr. 4931, *in camera*).

The PE technology used by Daramic has been in existence for many years. (Toth, Tr. 1568).

Daramic is currently using a line that was built in 1969, and the patents protecting much of its intellectual property expired in the 1980s. (Toth, Tr. 1569).

290. Because of the lack of leverage with both suppliers and customers, as well as the proliferation of competition in the marketplace, Daramic has sustained more than \$100 million in restructuring expenses over the last four years. (Toth, Tr. 1569).

291. Polypore's energy storage segment, which includes Daramic, has been declining in gross profit in the current economic climate. (Toth, Tr. 1390-1391). Between 2007 and fiscal year 2008, the energy storage segment has declined 3.7%. (PX2160 at 034; Toth, Tr. 1390-1391).

292. In recent times, the lead-acid battery separator business has remained "soft." (PX3016 at 007; Toth, Tr. 1649).

293. As of May 7, 2009, Polypore's energy storage sales were down 29% over the same period in 2008. (PX3016 at 010). This loss was mainly concentrated in the lead-acid business, as Polypore's lithium business (Celgard) has been performing relatively well. (Toth, Tr. 1649). Specifically, first quarter 2009 sales in the lead-acid battery separator business declined 30% over the prior year due to the weak economy, the declining dollar, the loss of JCI's business, and the lowering of customer inventory. (PX3016 at 011).

294. Based on the findings above, the Court finds that the flooded lead-acid battery separator industry is a mature, stagnant growth industry. The Court further finds that Daramic's sales and profits are declining in the current market.

k. Burden of Acquiring Microporous

295. Another reason for the decline in gross profits for the energy storage segment of Polypore was Daramic's acquisition of Microporous, which had lower gross profit margins than Daramic. (PX2160 at 34; Toth, Tr. 1390-1391).

296. {

} (Riney, Tr. 4960, *in camera*). {

} (Riney, Tr. 4960, *in camera*). {

} (Riney, Tr. 4960, *in*

*camera*).

297. {

} (Riney, Tr. 4961, *in camera*). {

} (Riney, Tr. 4961, *in camera*).

298. {

} (Riney, Tr. 4961, *in*

*camera*; RX00697 at 9, *in camera*). {

} (Riney, Tr. 4961, *in camera*).

299. {

} (Riney, Tr.

4961, *in camera*). {

} (Riney, Tr. 4961, *in camera*).

300. {

} (Riney, Tr. 4962, *in*

*camera*). {

} (Riney, Tr. 4962, *in camera*).

301. {

} (Riney, Tr. 4962, *in camera*).

{

} (Riney, Tr. 4962-4963, *in camera*). {

} (Riney, Tr. 4969, *in camera*).

302. {

} (Riney, Tr. 4970, *in camera*). {

} (Riney, Tr. 4970, *in camera*). {

} (Riney, Tr. 4970, *in camera*).

{

} (Riney, Tr. 4971,

*in camera*).

303. {

} (Riney,

Tr. 4973, *in camera*). {

} (Riney, Tr. 4973, *in camera*). {

} (Riney, Tr. 4973, *in camera*).

304. Based on the foregoing findings, the Court finds that the acquisition of Microporous has caused additional declines in Daramic's profits and margins, despite efforts by Daramic to achieve synergies and reduce costs.

305. The Court further finds that Microporous provided inaccurate information to Daramic about its 2008 projected sales and EBITDA figures prior to the acquisition. Because Microporous' own internal budgeted sales and EBITDA figures were lower than the projections provided to Daramic, it is clear that Microporous provided false information to Daramic.

1. Loss of Important Customers

306. { } (Hauswald, Tr. 909, *in camera*). JCI represented 15-16% of Daramic's total sales. (Hauswald, Tr. 1118). As of December 31, 2008, Daramic lost all of its battery separator business with JCI. (Toth, Tr. 1535). This constitutes a loss of \$55 million in annual revenue. (Toth, Tr. 1535; RX00998, *in camera*).

307. { } (Riney, Tr. 4973, *in camera*).

308. As a result of the loss of JCI's business, Daramic was forced to shut down its Potenza, Italy plant, which was a main supplier to JCI. (Toth, Tr. 1535; Hauswald, Tr. 908, *in camera*; RX00997). While it was operating, the Potenza plant had a capacity of {

} (Hauswald, Tr. 922, *in camera*). The closing of that plant resulted in the termination of more than 125 employees. (Toth, Tr. 1535). Due to the loss of JCI's business, Daramic was also forced to restructure its Owensboro plant and shut down some of the production lines located there. (Toth, Tr. 1535). Owensboro's production capacity has been reduced from 105 million square meters to 65 million square meters. (Hauswald, Tr. 923).

309. Additionally, due to the world-wide economic downturn, there has been a decline in the volume of separators that existing customers are ordering. (PX3016 at 024). While Daramic is

hopeful about the future, there has been no noticeable improvement in ordering patterns. (Toth, Tr. 1653). Moreover, replacement sales have been flat to slightly down. (PX3016 at 034).

310. Daramic's ten year contract with Exide is set to expire at the end of 2009. (Hauswald, Tr. 1117). Daramic does not have a new contract in place with Exide and does not know whether it will continue to supply separators to Exide after the contract expires. (Hauswald, Tr. 1117; Roe, Tr. 1719-20). Daramic has been attempting to negotiate a new agreement with Exide since early 2007. (Roe, Tr. 1713).

311. Based on the foregoing, the Court finds that the loss of JCI's business has had a significant negative impact on Daramic's business. The loss of this business has caused Daramic's margins to decline.

m. Effect of the Strike

312. The Owensboro strike lasted 55 days during the fall of 2008. (Hauswald, Tr. 1071). At that time, Daramic HD was only being produced at the Owensboro facility. (Hauswald, Tr, p. 1072). The labor stoppage had a major negative impact on all of Daramic's production, and specifically on Daramic HD. (Hauswald, Tr. 1072-1073). Product had to be shipped from other global locations in order to satisfy the demand, and Daramic had to reorganize its supply chain. (RX001167; Hauswald, Tr. 1075-1076). The expenses incurred during the strike have contributed to Daramic's recent decline in gross profit. (Toth, Tr. 1393).

n. Daramic's Future

313. If margins continue to decline and costs continue to increase, Daramic will be forced to shed additional overhead costs and find other ways to reduce the costs of production. (Riney, Tr. 4974). Because there are limited cost factors which Daramic can control, Daramic may be forced to move its production lines to lower-labor-cost locations. (Riney, Tr. 4974). Daramic

will also have to consider further workforce consolidation due to the poor condition of the battery separator industry. (Toth, Tr. 1635).

B. Microporous Products, L.P.

a. Background

314. Microporous was a “niche” player in the battery separator industry until it was acquired by Polypore on February 29, 2008. (RX00741 at 003; RX01452 at 005). Microporous developed and manufactured rubber and rubber-based battery separators for the lead-acid battery industry. (RX00741 at 003).

315. Originally founded in 1898 as the American Hard Rubber Corporation, Microporous developed and patented the ACE-SIL® rubber separator in 1935 and later developed the FLEX-SIL® rubber separator in 1980. (Gilchrist, Tr. 313-14; RX01452 at 005).

316. Up until the time of the Acquisition, Microporous’ Piney Flats plant was the only plant in the world where rubber separators are manufactured. (PX2231 (Heglie, Dep. 96)). The Piney Flats plant remains the only such plant today. (Toth, Tr. 1423).

317. Not until 1999 did Microporous expand its product line beyond traditional pure rubber technology by introducing the CellForce product, a polyethylene (“PE”) separator with a rubber additive. (RX01452 at 005).

318. At the time of the acquisition, Microporous sold no pure PE separators. (Gilchrist, Tr. 557).

b. Ownership History

319. As a “niche” company having been bought and sold several times over the years by private equity firms, Microporous was familiar with acquisitions. (RX01452 at 005; RX00741 at 003).



320. At one time, Trojan Battery had an ownership interest in Microporous. (McDonald, Tr. 3784).

321. In 1997, several friends of, and investors in, the private equity firm, Kelso & Company (“Kelso”), banded together to purchase Microporous. (McDonald, Tr. 3784; Trevathan, Tr. 3574; PX2300 (Heglie, IHT 20)).

322. After approximately 9 years of ownership, the Kelso investors decided to sell Microporous because a significant capital investment was needed to sustain any hopes of expansion, and the Kelso investors were not interested in personally funding an expansion. (Trevathan, Tr. 3589-90). The Kelso investors first contacted Warburg Pincus (“Warburg”), the private equity owners of Polypore, but at that time Warburg was unable to finance the proposed acquisition. (Trevathan, Tr. 3591-92; PX0908 (Amos, Dep. 139), *in camera*). The Kelso investors also approached JCI, but the multi-billion dollar battery company chose not to pursue the proposed investment. (Trevathan, Tr. 3592).

323. Ultimately, the Kelso investors hired the Harris Williams & Company as an agent and investment banker to sell the company. (RX00741 at 001). Harris Williams marketed the company as a successful “niche” player in the battery separator business: “[t]he company has succeeded in leveraging its superior product technology to establish leading positions in a number of niche market segments within the lead-acid battery industry where the electrochemical properties of rubber have technological and operating performance advantages.” (RX00741 at 005). Additionally, the report states that “Microporous has established leading market share positions in segments of the lead-acid battery separator industry where rubber separators have proven technological operating performance advantages over competing battery separator technologies. (RX00741 at 016).

324. On November 6, 2006, International Growth Partners (“IGP”) acquired Microporous. (RX00741; Trevathan, Tr. 3757, 3592-93; McDonald, Tr. 3785). Eric Heglie, Jeff Webb, Jerry Jukiewicz, Matt Antaya, and Mike Beaumont were the principles at IGP in charge of the purchase of Microporous. (PX2300 (Heglie, IHT 15)).

325. IGP purchased Microporous because of its unique rubber product technology, “niche” position within the lead-acid battery separator industry, 100% supply position for OE golf cart manufacturers, and the possibility of some growth opportunities. (RX00741 at 005). Microporous was an attractive investment to IGP because of its “differentiated products” and opportunity for growth of these products. (PX2300 (Heglie, IHT 125-126)).

326. Less than two years later, on February 29, 2008, {  
} (Gilchrist, Tr. 476-77, *in camera*; RX01227 at 009, *in camera*; RX01572, RX00916 at 004, *in camera*).

c. Microporous Management

327. At the time of the Acquisition, Microporous principal management included Mike Gilchrist, CEO, Larry Trevathan, VP of Operations, Matt Wilhjelm, CFO, and Steve McDonald, Director of Sales. (RX00741 at 074; Gilchrist, Tr. 418) Gilchrist, Trevathan, and Wilhjelm regularly participated in Board of Directors meetings in their respective roles. (PX2300 (Heglie, IHT, 43)).

328. Mike Gilchrist was the President and CEO of Microporous. (Gilchrist, Tr. 297). While Gilchrist served as CEO from 1998 until the Acquisition, Gilchrist’s performance was under strict scrutiny by both the Kelso investors and IGP. (Gilchrist, Tr. 297; RX00244 at 003; PX2300 (Heglie IHT 59-60); Trevathan, Tr. 3569). Gilchrist worked in a product strategy role at Daramic for several months before becoming the CEO for Altraverda Limited in Wales. (Gilchrist, Tr. 297, 531-532).

329. Larry Trevathan served as the Vice President of Operations for Microporous. (Trevathan, Tr. 3569). He was hired by the Microporous Board under the direction of the Kelso investors in November of 2004. (Trevathan, Tr. 3568). At the time he was hired, Trevathan was “made aware that part of the reason why this position was open and the search was in place was there was an opportunity to move into the – and backfill the president’s position eventually and replace Mike Gilchrist.” (Trevathan, Tr. 3569). Trevathan currently serves as the Vice President of Operations for Daramic. (Trevathan, Tr. 3566).

330. Matt Wiljhelm served as CFO for Microporous. (Gilchrist, Tr. 418).

331. Steve McDonald served as the Director of Sales for Microporous from 2002 to the Acquisition. (McDonald, Tr. 3781). Prior to becoming Director of Sales, McDonald had served as a sales representative for Microporous since August of 1997. (McDonald, Tr. 3780). Microporous’ salesmen, Roger Berger and Cobb Rogers, reported directly to McDonald. (McDonald, Tr. 3782). McDonald currently serves at Daramic as a Sales Manager, North America. (McDonald, Tr. 3783).

d. Manufacturing Plants

332. Prior to the Acquisition, Microporous supplied separators from its only manufacturing facility in Piney Flats, Tennessee. (Godber, Tr. 276-78; PX1788 at 004; Gaugl, Tr. 4601; McDonald, Tr. 3791). This manufacturing facility first became operational in 1974. (PX1788 at 004).

333. The facility actually consists of two plants. (Gilchrist, Tr. 311). The first plant (the “rubber plant”) houses the ACE-SIL® and FLEX-SIL® lines. (Gilchrist, Tr. 311; Hauswald, Tr. 999-1000).

334. The second plant (the “PE plant”) houses a PE line on which CellForce is made. (Gilchrist, Tr. 311; Hauswald, Tr. 999-1000). The PE plant became operational in 2001.

(McDonald, Tr. 3790). It houses a single PE line purchased from Jungfer in 2000 for \$5.4 million. (Gilchrist, Tr. 549-50; Gaugl, Tr. 4533-34). Jungfer was an Austrian company that manufactured separators as well as sold turn-key PE lines for purchase by other separator manufacturers. (Gaugl, Tr. 4531). The PE line at Piney Flats was installed under the direction of Hans-Peter Gaugl in 2000. (Gilchrist, Tr. 320; Gaugl, Tr. 4533-34)

335. The rubber plant and PE plant in Piney Flats are distinct plants producing unique products – the production lines are not interchangeable and the products are not economic substitutes. (Gilchrist, Tr. 349). While it would be possible for personnel at the PE plant to operate another PE plant, it would be impossible for the people who run the PE line to run the ACE-SIL® or FLEX-SIL® lines at the rubber plant. (Gilchrist, Tr. 349).

336. The PE line is capable of producing both CellForce and a pure PE product (e.g., SLI), but Microporous' only significant sales from the line were of the CellForce product. (McDonald, Tr. 3903; Gilchrist, Tr. 300-01, 312; Gaugl, Tr. 4551) Microporous had not been successful in producing a pure PE product. One commercial run of pure PE was produced for Johnson Controls in late-2003 into early-2004 for an SLI end use, but Johnson Controls ultimately did not purchase these separators. (McDonald, Tr. 3792-95; RX00077). The product was then tested and approved by both Douglas Battery and Voltmaster. (McDonald, Tr. 3795-96). Consequently, Microporous made a one time sale of the product to Voltmaster with no intention of making any future sales at that time. (McDonald, Tr. 3796-98; PX0921 (McDonald IHT 34-37), *in camera*).

337. In February of 2008, Microporous was in the process of building a second manufacturing facility in Feistritz, Austria. (Gilchrist, Tr. 334). The facility in Feistritz currently has two PE lines capable of producing both CellForce and pure PE product. (Gilchrist, Tr. 312, 558-59; Trevathan, Tr. 3714; Gaugl, Tr. 4551). Both lines were installed under the direction of Gaugl.

(Gaugl, Tr. 4536-37). As of the time of the acquisition, the plant in Feistriz, Austria was not yet operational. (Gilchrist, Tr. 334-35). Daramic first produced separators on one of those lines in March of 2008. (Gaugl, Tr. 4601). {

} (Hauswald, Tr. 923-24, *in camera*).

e. Sales

338. Before its Acquisition by Polypore, all of Microporous sales were of rubber or rubber-based separators. (Gilchrist, Tr. 557). In 2007, {

} (RX01120, *in camera*). {

(McDonald, Tr. 3857, *in camera*; RX01120, *in camera*). {

} (McDonald, Tr. 3857, *in camera*; RX01120, *in camera*).

339. {

(RX01120, *in camera*). {

} (McDonald, Tr. 3857, *in camera*; RX01120, *in camera*).

{

} (RX01120, *in camera*).

340. Historical worldwide sales of {

} (RX01120, *in camera*; McDonald, Tr.3855-57, *in camera*).

341. { } (RX01120, *in camera*; McDonald, Tr. 3854-57, *in camera*). In fact, in 2008, {

} (RX01120, *in camera*; McDonald, Tr. 3854-57, *in camera*).

342. Microporous shipped products from its facility in Piney Flats, Tennessee to Mexico, South America, Europe, Asia, and Africa prior to the acquisition. (McDonald, Tr. 3790-91; Gilchrist, Tr. 540-41). In fact, approximately 60 to 75 percent of the volume produced on the PE line at Piney Flats was shipped to Europe prior to the Acquisition. (Gilchrist, Tr. 540; Trevathan, Tr. 3774; Gaugl, Tr. 4555).

343. Based on the above findings concerning its sales, the Court finds that any competition Microporous generated in PE separators in North America was insignificant.

f. Pricing

344. Prior to 2004, Microporous had not increased prices for approximately 10-years despite escalating energy and raw material costs. (Trevathan, Tr. 3576-77). Consequently, Microporous experienced a steady decline in margins throughout this period. (Trevathan, Tr. 3577).

345. Starting in July of 2004, Microporous announced a series of price increases to cover escalating costs. (McDonald, Tr. 3803-05; McDonald, Tr. 3850, *in camera*; RX01272, *in camera*). Microporous never supplied cost documentation to any customer to justify those increases. (McDonald, Tr. 3805). Microporous announced the following price increases from 2004 until 2006:

a. In July of 2004, Microporous announced a price increase of 6.5% on FLEX-SIL® and ACE-SIL® products to all customers. (RX00859; McDonald, Tr. 3803). This increase became effective on August 30, 2004. (McDonald, Tr. 3803-04).

b. In August of 2005, Microporous announced a 15% increase on the ACE-SIL® product. (RX00861; McDonald Tr. 3804). This increase became effective on October 17, 2005. (RX00861; McDonald, Tr. 3804).

c. In January of 2006, Microporous announced a price increase of 6.5% for FLEX-SIL® and 5.5% for CellForce. (RX00860; McDonald, Tr. 3804-05). This price increase became effective on March 6, 2006. (RX00860; McDonald, Tr. 3805).

d. In August of 2007, Microporous not only raised prices but also announced a rubber surcharge component for future pricing. (RX00084; McDonald, Tr. 3805-06). In its price increase letter to customers, Microporous announced a 12% increase for FLEX-SIL® and 4% increase for CellForce effective October 15, 2007. (RX00084; McDonald, Tr. 3806-07). The rubber surcharge was to become effective on January 1, 2008. (RX00084; McDonald, Tr. 3807). The rubber surcharge sought to offset the volatile nature of the price of rubber at the time. (McDonald, Tr. 3806).

346. Despite these attempts to recover costs through price increases and surcharges, Microporous was not always successful. (McDonald, Tr. 3907-08; Gilchrist, Tr. 376, 378-379). Customers, particularly Trojan, approached each announced price increase as a negotiation. (Gilchrist, Tr. 377-379, 515-517). Some customers refused to pay any increase at all. (Gilchrist, Tr. 572, 377-79; McDonald, Tr. 3807-10).

347. EnerSys, Exide, and Trojan each resisted the price increase and rubber surcharge announced in August 2007. (McDonald, Tr. 3807-16; RX00856, RX01034; RX00228, *in camera*; RX00084; RX00210; RX00653; RX00560).

348. EnerSys refused to accept the price increase or the rubber surcharge. (McDonald, Tr. 3807). Microporous attempted to negotiate with EnerSys, but EnerSys was not receptive to these attempts. (McDonald, Tr. 3852-53; RX00028, *in camera*; RX00228, *in camera*; RX00210) {

} (McDonald, Tr. 3852-53, *in camera*). {

} (McDonald, Tr. 3852, *in camera*). {

} (McDonald, Tr. 3853, *in*

*camera*). When Microporous again approached EnerSys about the surcharge in a December 13, 2007 email, Larry Axt responded on behalf of EnerSys stating, "I am not accepting this rubber escalator regarding CellForce. Do not push EnerSys further or else your volume will be in jeopardy." (RX00210 at 001; McDonald, Tr. 3807-08).

349. Exide was unhappy with the price increase and a negotiation between the parties resulted. (McDonald, Tr. 3808). Microporous agreed to a delay for the increase until December and split it up into two time frames. (RX00653; McDonald, Tr. 3808-09). The first part of the increase became effective December 1, 2007, and was 4% for FLEX-SIL® and 10% for ACE-SIL®. (RX00653; McDonald, Tr. 3809). The second part of the increase became effective April 1, 2008, and was 1.5% for FLEX-SIL® and 2% for ACE-SIL®. (RX00653; McDonald, Tr. 3809). Despite this agreement, around February of 2008, Exide started to short pay invoices by the amount of the increase. (McDonald, Tr. 3810).

350. Trojan also bucked the increase despite its long-standing relationship with Microporous. (RX00856; Godber, Tr. 201; Gilchrist, Tr. 515-16, *in camera*; McDonald, Tr. 3812-3816).

When Microporous first announced the increase, Trojan responded:

Roger – I know that you claim that you are just the messenger here but you can send a message to the board that this one will not fly, and will permanently change our relationship going forward. This is a 100% slap in Trojan's face. There is absolutely no justification for this increase, and we know it. This is the most broad, lame price increase letter I have ever read.

(RX00560 at 001).



351. When Microporous tried to explain the increase, Rick Godber, Trojan's CEO, responded "This is bullshit – probably an outgrowth of our meetings and greedy new owners." (RX00856).

352. While Trojan never tested other products as substitutions for Microporous, they continued to refuse the increase. (RX00558 at 001). After much resistance, a negotiation ensued and Trojan and Microporous agreed to delay the price increase to December 2007 and then split the price increase between December 2007 and December 2008. (PX1664 at 001; McDonald, Tr. 3812-3816). This increase was only effective through 2008, not through 2009 as well. (McDonald, Tr. 3816).

353. Based on the foregoing findings, the Court finds that EnerSys, Exide and Trojan had significant power derived from their size and purchasing power and that they used such size and power to reject or reduce bona fide Microporous price increases and to constrain prices.

g. Development Projects

(a) Project Einstein

354. {

}

(McDonald, Tr. 3862, *in camera*). Microporous also discovered that this technology was not suited for PE separators because of the additives and was better suited for AGM separators. (Whear, Tr. 4735-37). {

} (McDonald, Tr. 3862, *in camera*). In fact, George Brilmyer, Director of Research and Development, was never ever asked by Complaint Counsel about Project Einstein during his testimony at the hearing. (*See* Brilmyer, Tr. 1825-1927).

(b) Project LENO

355. {  
} (McDonald, Tr. 3863, *in camera*). LENO stood for  
“low ER, no oil.” (Brilmyer, Tr. 1836).

356. Project Leno, the Darak replacement project, was specifically directed at gel products.  
(Brilmyer, Tr. 1856).

357. Microporous developed this concept after being approached by EnerSys, which was  
looking to find a substitute for DARAK. (McDonald, Tr. 3863, *in camera*; Brilmyer, Tr. 1839).  
This project started at Microporous in November or December of 2006. (Brilmyer, Tr. 1836).

358. {  
} (McDonald, Tr. 3863, *in camera*).

359. The evidence is clear that testing of those samples continued after the acquisition under  
the direction of Daramic. (Brilmyer, Tr.1901; Whear, Tr. 4735).

360. {  
} (McDonald, Tr. 3863, *in camera*). {  
  
} (McDonald, Tr. 3864, *in camera*). {  
  
} }  
(McDonald, Tr. 3864, *in camera*).

361. { } (Hauswald, Tr. 1099; Burkert Tr.  
2407-08, *in camera*; RX01293, *in camera*; RX01296, *in camera*; Whear, Tr. 4736).  
(c) White PE

362. { }  
(Brilmyer, Tr. at 1837; Whear, Tr. 4729; PX0663-0024, *in camera*; RX01299, *in camera*). {

} (McDonald, Tr. 3865, *in*

*camera*).

363. { } (McDonald, Tr.

3866, *in camera*). { } (McDonald,

Tr. 3866, *in camera*). {

} (McDonald, Tr. 3866, *in camera*).

{

} (McDonald, Tr. 3866-67, *in camera*). {

} (McDonald, Tr.

3867, *in camera*). {

} (McDonald, Tr.

3868-69, *in camera*; RX01297, *in camera*) and samples were delivered to EnerSys. (RX01028; RX01299, *in camera*).

364. {

}

(McDonald, Tr. 3869, *in camera*).

365. The White PE project is ongoing today. (Hauswald, Tr. 1099; Burkert Tr. 2407-08, *in camera*; RX01293, *in camera*; RX01296, *in camera*; Whear, Tr. 4736).

(d) CellForce in SLI

366. Prior to the Acquisition, Microporous had partnered with JCI to do some testing on CellForce for use in a unique and specialized SLI application called a “start-stop” battery. (PX2300 (Heglie, IHT 123); Gaugl, Tr. 4558). {

}

(Whear, Tr. 4748-49, *in camera*). But it became clear as the project was underway that it “wasn’t a high priority for JCI, and that we weren’t working with the most important people at JCI. And in our [IGP’s] opinion is they were viewing it as a speculative project, so they were dedicating minimal time and resources to it.” (PX2300 (Heglie, IHT 130)). Neither JCI nor any other battery manufacturer ever approved CellForce for these specialized start-stop SLI applications. (Gaugl, Tr. 4558).

367. Results from the testing varied and Microporous “was getting some positive results out of the tests, and then at different points, they weren’t as positive.” (PX2300 (Heglie, IHT 125)).

{ } (Whear, Tr. 4750, *in camera*).

{ } (Whear, Tr. 4750, *in camera*). Currently, {

{ } (Whear, Tr. 4750, *in camera*). Currently, {

} (Whear, Tr. 4753, *in camera*).

368. Based on the foregoing findings, the Court finds that no change has occurred with regard to development as the result of Polypore’s acquisition of Microporous.

h. The Expansion

369. Discussions of expansion began around 2005. During this period the FLEX-SIL® line was running at nearly full capacity and the CellForce line began to approach full capacity. (Trevathan, Tr. 3579; PX0920 (Gilchrist, IHT 10-11), *in camera*).

370. In late 2005, EnerSys approached Microporous about a possible long-term contract for supplying CellForce separators for motive applications out of Europe. (Trevathan, Tr. 3598).

{ } (RX00206, *in camera*).

{

} (RX00207 at 010, *in camera*). {

} (RX00207 at 010, *in camera*).

371. Despite the fact that capital would be required to execute the expansion required to fulfill this contract with EnerSys, Microporous did not obtain approval from its Board before entering into the Amendment. (PX2300 (Heglie, IHT 138-39, 164)). Board members were unhappy with Management, but they supported the contract because EnerSys was a very important customer. (PX2300 (Heglie, IHT 138-39, 164)).

372. In early 2006, JCI also approached Microporous about the possibility of a seven-year supply agreement to supply approximately 22 million square meters of PE-separators for SLI applications. (McDonald, Tr. 3827; Trevathan, Tr. 3587, 3596). An MOU was signed in March of 2006. (McDonald, Tr. 3827). At this time, Microporous approached JCI about making an investment in Microporous, but JCI refused. (McDonald, Tr. 3827).

373. The above discussions about adding one additional line in Tennessee became discussions of a three line expansion in Europe to supply EnerSys and JCI. (Trevathan, Tr. 3599). By 2006, at the request of JCI, the plan shifted to a three line expansion with one line in the U.S. and two in Europe. (Trevathan, Tr. 3601). There were also discussions of placing the third line in Austria. (Gaugl, Tr. 4561-4562).

374. In early December 2006, shortly after the acquisition of Microporous by IGP, management was given the authorization to begin purchasing equipment for three additional PE lines. (Trevathan, Tr. 3600).

375. Around December 1, 2006, Larry Trevathan began to order the larger equipment requiring longer lead times, such as the extruder, the dryer, and the calender system for all three lines. (Trevathan, Tr. 3600; Gaugl, Tr. 4561). Other than ordering this equipment with long lead

times, no other steps were taken to install the third line either in the United States or Austria. (Gaugl, Tr. 4563-64).

376. Plans of expansion began to slow in early 2007 as negotiations with JCI became shaky. (Trevathan, Tr. 3601-02). Shortly after the February board meeting, the Microporous Board instructed Larry Trevathan to discontinue or slow down the orders wherever possible for the third line planned for the U.S. (Trevathan, Tr. 3602-04, 3764; PX2300 (Heglie, IHT 185); PX0905 (Gaugl, Dep. 94)).

377. {

} (Gilchrist, Tr. 503-04, *in*

*camera*). The Microporous Board was also concerned about unattractive pricing under the contract proposed by JCI. (PX2300 (Heglie, IHT 151); PX2301 (Heglie, Dep. 132); RX00730). “JCI demanded lower prices than [Microporous] could produce and generate an acceptable profit.” (PX2300 (Heglie, IHT 151)). Shortly after negotiations grew stagnant, JCI notified Microporous that they would not continue to negotiate a long-term supply agreement with Microporous and would pursue other supply options. (Trevathan, Tr. 3608-09; Gilchrist, Tr. 504, *in camera*; RX00047).

378. In March 2007, Microporous established a European entity Microporous Products GmbH and began taking strides to build a facility in Feistritz, Austria. (Trevathan, Tr. 3571-72).

379. Prior to the termination of negotiations with JCI, Exide approached Microporous regarding possible scenarios for an expansion opportunity if Microporous could supply separators at a reasonable price. (PX2300 (Heglie, IHT 152)). Exide approached Microporous about supplying approximately 22 million square meters of volume of SLI and industrial-type product. (McDonald, Tr. 3832, 3840; Trevathan, Tr. 3609-10).

380. From the beginning, discussions with Exide were tainted due to Exide's troubled financial past<sup>2</sup> and questions about its future viability. (Trevathan, Tr. 3610) Microporous required "very strong assurances" from Exide prior to undertaking an expansion so as to avoid "not having them either as a viable company to do business with or not following through on their agreement." (Trevathan, Tr. 3610).

381. Exide was "notorious" for open payments, and even in the midst of discussion of expansion, there were issues regarding receivables from Exide requiring Microporous to take out AR insurance to limit its financial exposure to Exide. (Gilchrist, Tr. 525, *in camera*; Trevathan, Tr. 3611; RX01034 at 001).

382. After meetings in the late-spring and summer of 2007, Microporous sent an MOU and contract draft to Exide. (Trevathan, Tr. 3611). By its own terms, the MOU expired on August 31, 2007. Exide did not sign and return the non-binding MOU to Microporous until late September of 2007, long after it had expired by its own terms on August 31, 2007. (PX0056; Gilchrist, Tr. 474-76, *in camera*; RX00399). Exide never returned or commented on the contract draft sent by Microporous. (McDonald, Tr. 3835; Trevathan, Tr. 3612, 3626, 3724). Through the fall 2007, no progress was made on an agreement with Exide. (McDonald, Tr. 3834). Exide's behavior was consistent with its past conduct. {

} (Gilchrist Tr. at 487-90; *in camera*; RX01331;

RX00748).

383. Because negotiations ceased with JCI, and an Exide commitment had not materialized, Microporous began looking for customers in both the U.S. and Europe in the fall 2007. (McDonald, Tr. 3830). Microporous had brief discussions with East Penn regarding SLI

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<sup>2</sup> In 2002, Exide filed Chapter 11 Bankruptcy. (RX01285).

separators in the U.S., which Microporous had not produced commercially. (Trevathan, Tr. 3623; PX2300 (Heglie, IHT 186-87)). Discussions never went beyond preliminary stages and no MOUs, letters of interest, or contract drafts were exchanged. (Trevathan, Tr. 3623; Gilchrist, Tr. 503, *in camera*). Microporous had no discussion with Douglas Battery in 2007 or 2008. (Douglas, Tr. 4063).

384. Microporous solicited battery manufacturers throughout Europe to supply both SLI-type separators or separators for motive applications. (McDonald, Tr. 3830). These customers included: TAB Battery, Midac, Moll Battery, Fiamm, Inci Aku, Mutlu, Aktex, WESTA, ISTA, and Banner Batterie. (PX0126 at 002-04). Microporous was unable to secure a single MOU, commitment or supply agreement with any of these customers. (McDonald, Tr. 3831; Gilchrist, Tr. 539).

385. Because of its failure to secure any further business, Microporous never resumed consideration of the third line in either the U.S. or Austria (Trevathan, Tr. 3613-14).

(a) The Microporous Board's Pullback

386. At Microporous' Board's October 2007 meeting, significant Board concerns were discussed, including:

- a. Entek's European expansion and the impact that that would have on the Feistritz plan.
- b. The viability and health of the Microporous business. Microporous at that time was tracking below budget and was not meeting financial expectations set during the budgeting process.
- c. Microporous was experiencing significant increases in costs of raw materials which was contributing to a deterioration of the margins which were not being offset by price increases or reduction of costs on other parts of Microporous' operations.
- d. The necessity of reducing overhead including the possibility of cutting jobs.
- e. Whether there should be a pullback on Microporous' so-called expansion plans.



(Trevathan, Tr. 3623-24, 3628-30).

387. In fact, because of these circumstances, the Board had become very concerned about the expansion and made its position against further expansion clear in a memorandum titled Board Mandate dated November 14, 2007 (“the Mandate”), to Mike Gilchrist. (RX00401 at 001; PX2300 (Heglie, IHT 194-95)). The Mandate detailed the specific strategic direction for Microporous with specific instructions to Gilchrist as to what he could do, what he should be doing and what he could not do (RX00401 at 001):

388. The Board set out specific long-term strategic goals emphasizing Microporous’ role as a “specialist player” in the battery separator industry (RX00401 at 001-002) encouraging Management to “grow upon Microporous’ position as a *specialist* separator player, using FLEX-SIL® and CellForce as the foundation of growth.” (RX00401 at 001 (emphasis in original)).

The Board further clarified:

We continue to believe more long-term value will be created by focusing on growing through products that are materially differentiated from competing products. Clearly Microporous’ understanding and knowledge of rubber-based technologies, as well as the proven electrochemical benefits of rubber, are core strengths that create meaningful differentiation from competition, and should continue to be leveraged as much as possible.

(RX00401 at 001).

389. The Board directed Microporous to leverage its existing strengths, not just become another player in the crowded PE market. (RX00401 at 001).

390. Even more explicitly, the Board demanded that Management “avoid competition with larger, entrenched competitors with products that are not differentiated; this is particularly important when such strategies require large capital commitments. (RX00401 at 002).

391. The Board was explicit that:

Other than filling the 2<sup>nd</sup> line in Austria, the Board does not endorse a pure PE growth strategy competing head-to-head with larger competitors (i.e., Daramic, Entek). Some exceptions may be made to this (particularly in instances where PE

is a bridge to a longer-term CellForce/differentiated product solution and where economically attractive long-term contracts are available), but these and any other exceptions must be approved by the Board on a case by case basis.”

(RX00401 at 002 (emphasis added)).

392. The Board also set forth several “near-term” mandates related to the Austrian expansion.

(RX00401 at 002).

Management must “fill out Line 1 with CellForce and Line 2 with PE in 2008 in volumes and pricing levels that generate attractive profits for the company. The longer term objective in Austria should be to convert Line 2 to CellForce or other specialty separator products.”

Management must “prove out the financial viability of Lines 1 and 2 in Austria before further capital will be committed to the business in either Europe or the United States.” (RX00401 at 002). (Emphasis added).

393. The Board made clear that “Microporous cannot enter into sales contracts that bind the company to capital commitments without Board approval.” (RX00401 at 002). Gilchrist understood the concerns raised by the Board and the need to fillout the Austria lines. (Gilchrist Tr. 494-95, 498-99).

394. The Microporous Board was particularly concerned about further investments in the two lines to be built at Feistritz because of the company’s financial performance relative to projections, the doubt regarding management’s abilities to successfully execute the expansion plan, and particularly with respect to management’s ability to fill the new lines. (Trevathan, Tr. 3630-31).

395. Of further concern was the fact that Microporous had only a “partial commitment” from EnerSys for one of the two Feistritz lines, and with respect to the Feistritz SLI line, Feistritz had no commitment or signed contract for that line. (Trevathan, Tr. 3631).

396. As Complaint Counsel’s compliant witness, Mike Gilchrist, tried to minimize the Mandate, characterizing it as a “draft.” Gilchrist’s testimony and Complaint Counsel’s position on the Mandate are not credible for the following reasons:

a. The clear language of the Mandate itself. (RX00401; RX00752, *in camera*; RX001174; Gilchrist, Tr. 435, *in camera*; RX00248)

b. Trevathan's testimony about the Mandate and the emails he and Gilchrist exchanged about it. (RX00283-01-02; RX00402; Gilchrist, Tr. 435, *in camera*; RX00248; RX00284).

397. These same points were restated in even more detail by the Board in reporting to the owners at IGP. In fact, many of these same points were restated in a subsequent document titled "Notes on Key Areas of Focus: IGP – Microporous Interaction" and dated December 3, 2007 ("December 3<sup>rd</sup> Memorandum"). (RX00248 at 001). While this memorandum was not circulated to Microporous management, it confirms and reiterates directives in the Mandate. (RX00248 at 001). For example:

a. Microporous Management was chastised for creating a "combative" relationship with the Board through "many mini-bomblets in communication", "digging up old bones", "lengthy emails that distract management and all recipients", and "a sense that many operating problems are the Board's to resolve." (RX00248 at 001).

b. The Board "cannot and will not tolerate the buildout of a management 'camp' vs. a Board 'camp' mentality (e.g. formal, 5-page, written response from 'management' on the Microporous Strategy Mandates memorandum)." (RX00248 at 001; *see also* RX00752, *in camera*).

c. The Board reiterated its commitment to the positions in the Mandate: [the] "Board (rightfully) expects positive and constructive implementation of decisions mutually taken and under-written, without constant resistance/feedback/interference." (RX00248 at 001).

398. As demonstrated by the Mandate and the December 3<sup>rd</sup> Memorandum, the Microporous Board had become increasingly concerned about the viability of the expansion plans and Microporous' continuing financial viability. (RX00248 at 001-002; RX00401 at 001-002; Trevathan, Tr. 3628).

399. Contrary to Gilchrist's belief that Microporous was in "good financial shape," the evidence indicates otherwise. (Gilchrist, Tr. 403; RX00248 at 001-002). While Management seemed content with growth in revenues only, IGP was "predominantly focused on cash flow growth" which takes into account those expenses associated with revenue. (PX2300 (Heglie IHT, 62)). Inconsistently with the Board, Gilchrist, particularly, seemed to want "to grow for the sake of growth, and was not as focused on profitability as we [IGP] were." (PX2301 (Heglie, Dep. 149)).

400. Microporous' revenues were below where IGP had projected upon acquiring the company in 2006 and also below Management's internal forecasts. (Trevathan, Tr. 3628-29, PX2300, (Heglie, IHT 72-73)). For example, during 2007, sales were below budget and not generating a return on capital for many of its products as expected by IG (RX00248 at 002; Trevathan, Tr. 3628-29). As sales declined in 2007 raw material costs continued to escalate contributing to the deterioration of margins. (Trevathan, Tr. 3629). Additionally, the Board questioned the financial viability of the Austrian expansion as the costs of the expansion soared substantially over budget without any long-term supply commitments in place. (RX00248 at 002).

401. The Microporous Board had also lost confidence in Management, particularly Mike Gilchrist. (RX00244; RX00401; RX00248, PX2300 (Heglie, IHT 58); PX2301 (Heglie, Dep. 161)). As Eric Heglie stated in his Investigation Hearing, "I think we generally discovered through our ownership that we had philosophical differences with Mike Gilchrist and the management team." (PX2300 (Heglie, IHT 59)). These philosophical differences arose because IGP's "view was a lot more driven by financial results and return on investment for different growth areas that we were contemplating. And I think there became a general view that

management wasn't as focused on the return on investment and on the numbers or at least the risks associated with those numbers." (PX2300 (Heglie IHT, 60)).

402. IGP Board members had multiple discussions with Gilchrist "disagreeing with his general assessment of the competitive landscape of the market." (PX2301 (Heglie, Dep. p. 91)). IGP's Board members questioned the credibility of Gilchrist because they "would hear one thing one day, and a different thing the next day." (PX2301 (Heglie, Dep. 164)). "Mike [Gilchrist] frequently blew comments out of proportion" (PX2300 (Heglie, IHT 84)).

403. Yet, as Complaint Counsel's compliant witness, {

} (Gilchrist, Tr. 435, *in camera*). Most important, Gilchrist did not follow the Board's instructions and mandates. (RX00244 at 001; PX2301 (Heglie, Dep. 143)).

404. Mike Beaumont, an active Board member, wrote in an memorandum to Eric Heglie and Jeff Webb on October 19, 2007, "MG [Mike Gilchrist] does not (or will not) internalize the mandate from his shareholders." (RX00244 at 001; PX2301 (Heglie, Dep. 143)). Beaumont also stated that Mike Gilchrist does not seem to be "financially savvy" and that perhaps "we should put out feelers for a new CEO." (RX00244 at 003).

405. Instead of replacing Gilchrist, IGP sold the company to Daramic in part because of "philosophical differences with management." (PX2301 (Heglie, Dep. 123-24)).

406. The Board also questioned a pure-PE growth strategy and felt that it was "just not practical to grow in every market." (PX2300 (Heglie, IHT 62)). Board members from IGP were generally hesitant about producing pure PE separators since pricing is very competitive and margins are typically thin. (PX2300 (Heglie, IHT 196)). The Board saw the possibility of supplying CellForce or other differentiated products for SLI end uses only as a possible long-term goal for Microporous and that a successful outcome on the investment could be achieved

without this type of expansion. (PX2300 (Heglie, IHT 161-62, 196-98); PX2301 (Heglie, Dep. 70)).

407. As Entek's expansion plans in Europe became evident, which would have resulted in significant excess capacity throughout Europe, concerns mounted about the Austrian expansion for Management and the Board. (Trevathan, Tr. 3624).

408. Most importantly, no supply contracts were in place, and Exide was the only potential customer beyond EnerSys which might commit any significant volume to justify the expansion. Yet the Board questioned the viability of Exide as a customer and negotiations went nowhere. (PX2301 (Heglie, Dep. 133); Trevathan, Tr. 3610).

409. Based on the above findings, the clear language of the Mandate, the Court finds that Gilchrist's testimony about the Mandate is not credible, that the Mandate was the specific instruction of the Microporous Board of Directors to management, and that the Microporous Board of Directors had determined that the policy and strategic elimination of Microporous was as set forth in the Mandate. Accordingly, the Court further finds that any expansion beyond Feistritz was unlikely, particularly by expansion in North America.

410. Thus, Trevathan, Gilchrist and Wilhjeim continued their "smokescreen." (RX00402).

411. As a result of the discussions at the Board level and ongoing, Gilchrist and Trevathan began to communicate among themselves about what they later referred to as "our ruse" and "smokescreen." (RX00283 and RX00402). Trevathan and Gilchrist had decided that Microporous needed to have "parallel stories" on parallel paths to tell Microporous employees, Microporous suppliers and Daramic, with whom Microporous had not revealed any change in plans. (Trevathan, Tr. 3621, 3637).

412. Further, Gilchrist and Trevathan believed that management had to "demonstrate clear, favorable change and remove . . . doubt" to persuade the Microporous Board to continue to

support management's expansion plan. (Trevathan, Tr. 3630-3632 and RX00283 at 001). Trevathan and Gilchrist knew that Microporous management had to address Microporous' financial performance, remove the doubt in the Board's mind about management's ability to successfully execute the expansion plan and remove the doubt as to how the arbitration with Daramic would proceed. (Trevathan, Tr. 3630-3631).

i. The Ruse – Management's Own Agenda

413. Despite concerns growing over the expansion, Microporous management tried to pursue a supply agreement with Exide. (RX00401; Gilchrist, Tr. 446, *in camera*). Some management members had a financial interest in Microporous: they "owned a good chunk of the company and they also owned options in the company which had certain exercise prices. (PX2300 (Heglie, IHT 114)). If the company was sold to Daramic, Microporous would not reap the financial rewards of those options. (PX2300 (Heglie, IHT 114)). Microporous management, therefore, was hesitant about the looming merger with Daramic, and if sold to Daramic, wanted to maximize the value of the company. (PX2300 (Heglie, IHT 114-15); Gilchrist, Tr. 471, *in camera*). The Court finds that these factors lead management to discuss and continue the "ruse" about Microporous' ability to complete the expansion.

414. As part of their ruse, Microporous Management became intent on securing a renewal of the expired MOU with Exide. (McDonald, Tr. 3841-42; PX1052; Gilchrist, Tr. 448, *in camera*). Microporous was concerned that Daramic would see through Microporous' "smoke screen," and in a November 27, 2007 email, Trevathan stated "the greatest flaw we have right now in our ruse is that the Exide MOU has expired and we have no evidence of progress on a contract." (RX00402 at 001). {

} (Gilchrist, Tr. 471-72, 476, *in*

*camera*).

415. On February 14, 2008, only weeks before the sale of Microporous to Daramic and the date the most sensitive information was to be made available to Polypore, Exide finally signed a renewal letter for the MOU. (Gilchrist, Tr. 448, 476, *in camera*; RX00403; RX01200 at 001). Aside from signing the non-binding renewal later, which only extended the MOU 45 days. (RX00403). Exide signed the MOU after Microporous told Exide that it would accept “an updated MOU by February 14th,” “or redline of the original contract,” and a commitment contract ready at the meeting on the 27th” in lieu of a price increase. (RX01033). Exide made no other commitments to Microporous, and delegated negotiations to newcomer, Alberto Perez. (McDonald, Tr. 3836-38, 3845-46; Trevathan, Tr. 3640).

416. Microporous Management became increasingly and appropriately wary of Exide. (RX00285; Gilchrist, Tr. 515. *in camera*). In a February 15, 2008, email (RX00285 at 001), questioning Perez’s truthfulness and Exide’s sincerity, and in response to Perez’s promise of returning the MOU extension and red-line contract draft, McDonald wrote, “that and a \$1.50 will buy you a cup of coffee.” (RX00285 at 001). As shown by Exide’s internal communications, the MOU was only signed to delay a price increase. (RX00010).

417. Microporous and Exide had two insignificant meetings during early 2008. (McDonald, Tr. 3835-3840, 3844). The first was a brief technical meeting in Paris, France, in January 2008. Steve McDonald, Roger Berger, Rick Wimberly, and George Brilmyer attended the meeting on behalf of Microporous. (McDonald, Tr. 3840). Despite the significant expense and time commitment to attend the meeting, Exide did not even allow Microporous to finish its prepared presentation. (McDonald, Tr. 3839). This meeting constituted little more than a technical



overview for Exide personnel in Europe and a meet and greet for Alberto Perez. (McDonald, Tr. 3837-38). Microporous was disappointed by the meeting. (McDonald, Tr. 3839).

418. A second meeting took place at Exide's facilities in Alpharetta, Georgia on February 27, 2008, to discuss the intent of Exide going forward. (McDonald, Tr. 3844, Trevathan, Tr. 3844). Mike Gilchrist, Larry Trevathan, Steve McDonald, and Roger Berger attended the meeting on behalf of Microporous. (Trevathan, Tr. 3639). Only Alberto Perez attended on behalf of Exide despite expectations that Douglas Gillespie and Pradeep Menon, two key decision makers, would attend. (McDonald, Tr. 3844-45; Trevathan, Tr. 3640). When Perez met the group from Microporous, he told them that he had actually forgotten all about the meeting and needed to find a room to meet in. (McDonald, Tr. 3846). The parties met in an unheated, back room, and the meeting lasted less than an hour. (Trevathan, Tr. 3640). The parties had little discussion about a future relationship between Microporous and Exide and no contract drafts were exchanged or discussed. (Trevathan, Tr. 3640; McDonald, Tr. 3846-47).

419. Following the meeting, attendees from Microporous had little confidence in Exide's commitment to Microporous. (McDonald, Tr. 3847). Steve McDonald questioned Exide's sincerity stating, "I had quite a few conversations with Exide, and it seemed like we never got anything accomplished." (McDonald, Tr. 3847). He also questioned whether Exide was actually committed to Microporous or whether a supply agreement would ever be reached between Exide and Microporous. (McDonald, Tr. 3847). Thus, the Court finds, based on the foregoing findings of fact, that it is unlikely that Microporous would have secured a long-term supply agreement with Exide. (RX00283 at 001; Trevathan, Tr. 3760). Accordingly, the Court further finds that Microporous was not in a position to fill out the new lines at Feistritz with production or fill in any capacity at Piney Flats.

420. On February 29, 2008, Daramic acquired Microporous two days after the meeting with Exide. (Trevathan, Tr. 3640-3641).

j. Microporous Products Today

421. As the findings below confirm, if Microporous remained a stand alone company today, there are questions as to whether it would be financially viable.

422. Even prior to this economic downturn, the Microporous' financial viability was in question. (RX00401; RX00244; RX00248). {

} (Riney, Tr.

4961-62, *in camera*). In 2008, the average contribution margin for the ACE-SIL® product was {

} (Riney, Tr. 4961-62, *in camera*). The average contribution margin for the

FLEX-SIL® product was { } (Riney, Tr. 4962, *in camera*). This compares to an

average contribution margin of {

} (Riney, Tr. 4963, *in camera*).

423. Additionally, since the fall of 2008, the economy in United States and the economies throughout the rest of the world have been crippled by a severe economic recession. (Gaugl, Tr.

4569; Riney, Tr. 4969-70, *in camera*; Thuet, Tr. 4328 ).

424. Even before the economic downturn, {

} (Riney, Tr. 4961, *in camera*). Actual sales in 2008 were {

} (Riney, Tr. 4961, *in camera*). The actual EBITDA for

Microporous products was {

} (Riney, Tr. 4961, *in camera*).

425. {

} (Riney, Tr. 4962-63, *in camera*). Presently, the PE line at Piney Flats is operating at 38 percent of its available capacity. (Trevathan, Tr. 3647; Riney, Tr. 4963, *in camera*). The majority of production is still CellForce, and a small portion of the production is of Daramic's HD product. (Trevathan, Tr. 3647). The Feistritz plant is currently operating at 76 percent of its available capacity today. (Riney, Tr. 4962, *in camera*; Gaugl, Tr. 4569).

{

} (Riney, Tr. 4962, *in camera*). The remainder of capacity is for SLI products transferred to Feistritz from Daramic's Potenza facility and its other customers. (Riney, Tr. 4963, *in camera*; Gaugl, Tr. 4572-73).

426. {

} (Riney, Tr. 4963, 4968-69, *in camera*). Forecasts for 2009 reveal that if Piney Flats were a stand-alone facility its net income would be {

} (Riney, Tr. 4969, *in camera*). Forecasts for 2009 also reveal that if Feistritz were a stand-alone facility its net income would be { } (Riney, Tr. 4969, *in camera*).

427. Due to the capital expended to further the expansions thus far, Microporous was capital constrained compared to most businesses under IGP's ownership (PX2300 (Heglie, IHT 72)). As a result, IGP was concerned about the future financial viability of the company. (Trevathan, Tr. 3628-29; PX2300 (Heglie, IHT 72-73); RX00248). As of December 31, 2007, Microporous had outstanding debt of approximately \$46 million, which included debt for the prior Piney Flats expansion and the 2007 Feistritz expansion. (PX0078 at 21; Gilchrist, Tr. 549).

428. Microporous' shaky financial viability would also be impacted by the substantial excess capacity both in Europe and in North America. (Weerts, Tr. 4459, *in camera*; Gaugl, Tr. 4569).

For example, today { }  
(Weerts, Tr. 4459, *in camera*). Daramic, as well, has experienced a drop in orders of almost 40% in Europe. (Gaugl, Tr. 4569).

429. Based on the foregoing findings regarding Microporous, particularly those concerning its management, financial and capital issues, the Court finds that Microporous was in such precarious condition (financial and otherwise) that it was not of competitive significance.

k. Efficiencies

430. Despite these troubling economic times, { }  
{ (Riney, Tr. 4971-73, *in camera*). {

{ (Riney, Tr. 4971-73, *in camera*).

431. { }  
{ (Riney, Tr. 4972, *in camera*).

432. { }  
{ (Riney, Tr. 4972-73, *in camera*). {  
{ (Riney, Tr. 4972, *in camera*). {

{ (Riney, Tr.

4973, *in camera*). And finally, { }  
{ (Riney, Tr. 4973, *in camera*).

433. After the Acquisition, Daramic sought to improve Microporous' existing plants, processes, and equipment. (Hauswald, Tr. 1061). At the Piney Flats facility, Daramic created a task force of engineers from Daramic's Owensboro facility to decrease costs and improve yields

on Microporous' existing lines. (Hauswald, Tr. 1062-63). Prior to the Acquisition, the CellForce line had a yield of approximately 76% which was improved to approximately 90% through the efforts of the Daramic task force. (Hauswald, Tr. 1062). In order to achieve higher efficiency, this team of engineers implemented Daramic's best practices to the lines at Piney Flats which improved safety and environmental standards, as well as reduced costs and improved quality. (Hauswald, Tr. 1063). For example, Daramic changed the oil used in the manufacturing process at Piney Flats to a higher grade to improve the quality of the product. (Hauswald, Tr. 1064). Daramic also improved the solvent recovery system in order to reduce solvent consumption by approximately 25% which reduced costs and waste. (Hauswald, Tr. 1065).

434. At the Fiestritz facility, Daramic personnel worked to improve costs and efficiency through steps such as changing the solvent as done in Piney Flats. (Hauswald, Tr. 1066). Daramic engineers also improved the capacity of the lines which had glitches in the winding and finishing areas allowing Daramic to fill the second line with pure SLI-type product. (Hauswald, Tr. 1065-66). Additionally, Daramic found ways to reduce the smell of sulfur originating from the product process and plaguing the surrounding Austrian community. (Hauswald, Tr. 1065).

435. At both former Microporous facilities, Daramic found ways to reduce and recycle scrap materials. (Hauswald, Tr. 1067). Instead of simply tossing this leftover material, Daramic now regrinds and reuses the material to create new product. (Hauswald, Tr. 1067). This not only reduces waste, but also results in cost savings for both plants. (Hauswald, Tr. 1067).

436. {

} (Hauswald, Tr. 904, *in camera*). First, {

} (Hauswald, Tr. 904, *in*

*camera*). This resulted in {

} (Hauswald, Tr.

904, *in camera*);. {

} (Hauswald, Tr. 904, *in camera*).

437. Based on the foregoing findings of fact, the Court further finds that the acquisition of Microporous by Polypore has resulted in numerous effective efficiencies of the Piney Flats plant that are based on Daramic's knowledge and skill.

## V. The Customers

### A. The "Power" Buyers

#### a. Johnson Controls Inc.

##### (a) JCI's Size and Power

438. Johnson Controls (JCI) is the largest battery manufacturing company in the world, mainly focusing on the production of SLI batteries. (Hall, Tr. 2662-2663; RX00034 at 012). JCI produced more than 120 million lead acid batteries in 2008 with over \$38 billion in sales. (Hall, Tr. 2793; RX00034 at 004; RX01187 at 003). JCI produces these batteries in approximately 60 wholly owned or majority-owned manufacturing plants in 20 countries worldwide. (RX01187 at 004). JCI has 36% of the global market share in the lead-acid automotive battery market. (RX00034 at 013).

439. JCI manufactures a small amount of golf cart batteries, which account for only 2 to 3 percent of its production. (Hall, Tr. 2665). {

}

(Hauswald, Tr. 943, *in camera*).

440. JCI is headquartered in Milwaukee with plant locations worldwide, including North America, Europe, and China. (PX0965 at 11, *in camera*; Hauswald, Tr. 1086; Hall, Tr. 2665; PX0614). JCI leverages its worldwide business in its relationships with its suppliers. (RX00034 at 008).

441. In 2008, Johnson Controls had over \$5.8 billion in sales in their Power Solutions group, which sells batteries. (RX00034 at 012; Hall, Tr. 2793-2794).

442. JCI is a company that expands through acquisitions. (RX00040 at 07, *in camera*; Hauswald, Tr. 1086).

443. JCI has joint venture or ownership relationships with Enertec (Mexico and Brazil), Amara Raja (India), Varta (Europe), BFR (Asia), and Entek (worldwide). RX00041 at 005, *in camera*; RX00042, *in camera*; RX01187 at 014; Weerts, Tr. 4479-4480, *in camera*; Hall, Tr. 2819, *in camera*). {

}

(Hall, Tr. 2817, *in camera*).

(b) JCI's Relationship with Daramic

444. Beginning in 2000, Daramic had a six year supply agreement with JCI Americas. (Hauswald, Tr. 754). This agreement contained a minimum purchase amount. (Hauswald, Tr. 756).

445. In 2003 JCI was supplied by both Daramic and Entek. (Hall, Tr. 2666). Around this time JCI began negotiations with both companies for better pricing opportunities because of the growth in market share that JCI had experienced. (Hall, Tr. 2666). {

} (RX00040 at 05-08, *in camera*).

446. In addition to leveraging their global share to gain better prices from their existing suppliers, JCI was trying to "develop new entrants for competition", including an European based company called Alpha<sup>3</sup>. (RX00041, *in camera*; RX00066 at 002-003, *in camera*; RX00070 at 05-06, *in camera*; Hall, Tr. 2670). {

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<sup>3</sup> {Alpha, a start-up company, projected that it would take them 12 months to be capable of supply to JCI.} (Hall, Tr. 2809, *in camera*).

} (RX00041, *in camera*; RX00045 at 002, *in camera*, Hall Tr. 2809, *in camera*).

447. JCI and Daramic began negotiating a global supply contract in 2002 and continued to negotiate into 2004. (Hall, Tr. 2668, 2670-2674; Roe, Tr. 1241). The negotiations between JCI and Daramic spanned a 14 month period. (Roe, Tr. 1241). The contract negotiations began when Daramic initiated discussions to try to improve their relationship with JCI. (Hall, Tr. 2782). Daramic indicated their desire, in writing, to acquire more of JCI's North American business as early as January 2003. (RX01188; Hall, Tr. 2785-2787).

448. Beginning in December of 2002 contract drafts were exchanged back and forth between Daramic and JCI. (Roe, Tr. 1673, *in camera*; RX01190, RX01192, RX01193, RX01194, RX01195). Additionally there were meetings between the legal teams of both JCI and Daramic in order to work on the terms and conditions of the contract drafts. (Roe, Tr. 1673).

449. Though Daramic believed that the agreement was essentially complete at the end of 2003, Daramic granted JCI an extension into the first week of 2004 in order to finalize the agreement. (Roe, Tr. 1241-1242). Daramic believed that they were offering JCI a competitive price based on the information given by JCI as to the other prices they had been offered. (Roe, Tr. 1242).

450. To finalize the agreement, Daramic offered a rebate of one and a half cents per square meter for minimum volumes met in order to earn a contract with JCI. (Roe, Tr. 1244).

451. At the beginning of January 2004, JCI abruptly halted contract negotiations and demanded that JCI and Daramic continue to operate under the existing contract covering the Americas and restart from scratch the negotiation for a separate European contract. (Roe, Tr. 1679). Daramic understood this complete change in the course of the negotiations to signify that Daramic was no longer being viewed as a strategic partner by JCI. (Roe, Tr. 1679). When



Daramic inquired what it should make of those prior negotiations, JCI curtly instructed Daramic to view them as a “learning experience.” (Roe, Tr. 1679).

452. Following those fourteen months of negotiations and near agreement, Daramic was prepared to honor their existing agreement with JCI for the North and South American regions and to supply JCI on a spot price basis for the European region, because no agreement had been reached. (Roe, Tr. 1246-1247).

453. JCI’s European operations had been supplied by Daramic without a contract prior to 2004. (Hall, Tr. 2780; Roe, Tr. 1247). During the time prior to the signing of the 2004 supply agreement between JCI and Daramic, Daramic continued to honor the terms and conditions of an agreement with Varta, a company in Europe that JCI had acquired. (Roe, Tr. 1680).

454. After Daramic notified JCI that it would continue to supply Europe on a spot price basis Daramic was contacted by Rodger Hall, JCI’s global vice president. (Roe, Tr. 1685; Hall, Tr. 2662).

455. While there is dispute as to what was said, Hall informed Daramic that JCI would sign the agreement that the two sides had been negotiating for the previous fourteen months. (Roe, Tr. 1682-1683). After that, Daramic added the proposed rebate to JCI to the agreement. (Roe, Tr. 1683).

456. JCI then made additional changes to the agreement before signing. (Roe, Tr. 1683-1684). These additions were agreed to by Daramic and were included in an amendment to the contract. (Roe, Tr. 1684; RX01197).

457. A later amendment was requested by JCI to include a consignment program for Europe . (Roe, Tr. 1684). This was agreed to by Daramic and included as an amendment to the contract. (Roe, Tr. 1684).

458. The contract negotiations that began in 2002 resulted in a five-year supply agreement between Daramic and JCI effective on January 1, 2004, and ending December 31, 2008. (RX00988; PX2052, *in camera*; Roe, Tr. 1673-1684).

459. From January 1, 2004 to December 31, 2008, {

} (RX00988, *in camera*; Hall, Tr. 2748, *in camera*). During this period JCI also purchased PE separators from Entek. (Hall, Tr. 2690). Throughout the course of JCI's contract with Daramic, JCI purchased between 110 and 120 million square meters annually from Entek. (Hall, Tr. 2690). JCI purchased on average 50 million square meters annually from Daramic during the period of 2004 through the end of 2007. (Hall, Tr. 2690).

460. { } (Hauswald, Tr. 909, *in camera*). {

} (Hauswald, Tr. 909, *in camera*). JCI constituted approximately 15 to 16 percent of Daramic's sales. (Hauswald, Tr. 1118).

461. Notwithstanding that its contractual relationship with JCI was ending, during the Owensboro strike in September 2008, Daramic had a phone conference with JCI every day to discuss the supply chain. (Hauswald, Tr. 1078). During the strike, JCI received separator material from Daramic's Prachinburi, Thailand facility. (RX01013). JCI had not been supplied by this facility before and was able to qualify the material in a matter of hours. (Hauswald, Tr. 1082-1083).

(c) The Proposed Renewal of the Relationship

462. {

} (RX00043 at 02, *in camera*).

463. Starting in December of 2006, Daramic and JCI entered into contract negotiations for a contract extension to the existing 2004 Daramic/JCI Supply Agreement. (Roe, Tr. 1685). One of the first meetings where an extension was discussed took place in November of 2006 at JCI's headquarters in Milwaukee during a visit by Hauswald and Roe. (Roe, Tr. 1686). The next meeting occurred at Daramic's headquarters in December of 2006. (Roe, Tr. 1686). Hauswald and Roe returned to JCI's Milwaukee office in February 2007 for what they believed to be the finalization of the contract extension. (Roe, Tr. 1686). A conference call at the end of February 2007 set up a March meeting in Milwaukee to have final negotiations on some unresolved minor points. (Roe, Tr. 1686).

464. JCI, however, cancelled the March 2007 meeting that was to take place in Milwaukee between JCI and Daramic and moved the meeting to a later date. (Roe, Tr. 1687). Daramic was told by JCI that this was to allow JCI to investigate a new opportunity. (Roe, Tr. 1687-1688).

465. On May 1, 2007, Bob Toth, Polypore's CEO, met with JCI's worldwide battery group president. (Roe, Tr. 1688; Toth, Tr. 1528). JCI informed Daramic that they had entered into a joint venture agreement with a battery manufacturer in China called BFR. (Roe, Tr. 1688). JCI informed Daramic that contract negotiations would resume in the summer 2007. (Roe, Tr. 1688).

466. Following the May 1, 2007, visit to JCI, Daramic continued to follow up with JCI regarding contract negotiations, but was not told of JCI's June 4, 2007, agreement with Entek until 2008. (Roe, Tr. 1688; Toth, Tr. 1528-1534.)

467. During this timeframe, {  
} (Weerts, Tr. 4471, *in camera*, RX00130, *in camera*).

468. Toth met with Mr. Molinaroli, of JCI again in October 2007, where Molinaro again indicated that a supply relationship with Daramic was still a possibility. (Toth, Tr. 1530).

469. Daramic continued to negotiate a contract with JCI through the rest of 2007 and into 2008. (Toth, Tr. 1532). Representatives from Daramic had periodic contact with representatives from JCI and Daramic believed that they were in negotiations for a supply agreement with JCI until late 2008. (Toth, Tr. 1533).

470. After a phone call in March 2008, Daramic was under the impression that JCI wanted to negotiate two separate contracts, one for SLI and one for deep cycle. (Roe, Tr. 1689). Daramic believed that this would mean that all contract negotiations would then have to start over. (Roe, Tr. 1689). Daramic agreed to continue negotiations under these new constraints imposed by JCI. (Roe, Tr. 1691).

471. During this time, Daramic did not know that JCI had been negotiating a global supply agreement with Entek or that, in fact, JCI had signed such an agreement with Entek on June 4, 2007. (Roe, Tr. 1690; Toth, Tr. 1534-35, *in camera*; Hall, Tr. 2747-49, *in camera*; RX00038, *in camera*).

472. After believing that they were in the process of negotiating a contract with JCI during the period of 2007 through summer 2008, Daramic was finally presented with a "phase-out plan" by JCI in August 2008. (Toth, Tr. 1533-1534; Roe, Tr. 1694-1695). While some possibility continues to be discussed regarding supply by Daramic, in approximately October 2008, JCI finally confirmed it would not be doing any business with Daramic after December 31, 2008, the last day of the 2004 JCI/Daramic Supply Agreement. (Toth, Tr. 1534-1535).

473. Throughout 2007 and into 2008, JCI kept Daramic in the dark about JCI's intent and actual separator supply decision.

(d) JCI's Relationship with Entek

474. On April 30, 2007, { }  
(RX00073, *in camera*). { }

} (RX00073 at 002-008, *in camera*).

475. {

} (RX00072, *in camera*; Hall, Tr. 2747, *in camera*). {

} (Hall, Tr. 2747, *in camera*).

476. {

} (RX00073, *in camera*; Hall, Tr. 2826-2828, *in camera*).

477. {

} (Hall, Tr.

2827, *in camera*, Weerts, Tr. 4458, *in camera*). {

} (RX00065 at

07, *in camera*; Hall, Tr. 2828, *in camera*). {

}

(Hall, Tr. 2829, *in camera*).

478. {

} (Hall, Tr. 2747, *in camera*). {

} (Weerts, Tr. 4521, *in camera*).

479. {

} (Hall, Tr. 2763-2764, *in camera*, 2823-

2824, *in camera*).

480. {

}. (Hall, Tr. 2749, *in camera*).

{

} (Hall, Tr.

2749, *in camera*, 2825 *in camera*). {

} (Weerts,

Tr. 4479-4480, *in camera*; Hall, Tr. 2819-20, *in camera*).

481. {

} (Hall, Tr. 2748, *in camera*).

{

} (Weerts, Tr. 4477, *in camera*).

482. The loss of JCI's business constituted a drop of \$55 million in revenue and \$20 million in contribution for Daramic. (Toth, Tr. 1535). The loss of the JCI business also required a significant amount of restructuring for Daramic. (Toth, Tr. 1535).

483. The Owensboro plant had to be restructured and lines had to be shut down after Daramic lost JCI's business to Entek. (Toth, Tr. 1535; Hauswald, Tr. 961). This has resulted in more than 60 workers being let go from that facility. (Toth, Tr. 1535-1536).

484. The loss of JCI's business also required the complete shut down of Daramic's Potenza, Italy, facility. (RX00184, *in camera*, Toth, Tr. 1535). This put more than 125 people out of work. (Toth, Tr. 1535).

485. {

} (PX0787, *in camera*; RX00066 at 05, *in camera*; RX00070 at 002, *in camera*).

(e) JCI's Relationship with Microporous

486. During the 2003-2004 time period, Microporous supplied SLI samples to JCI for testing. (Hall, Tr. 2695-2696). These samples did not qualify for use at JCI. (Hall, Tr. 2696; Gilchrist, Tr. 466, *in camera*). Additionally, JCI had general concerns about the quality of the Microporous product. (RX00071 at 03).

487. Microporous again solicited JCI in 2005 to supply some of JCI's separator needs, but no agreement was reached. (Hall, Tr. 2694-2695).

488. {

} (RX00046, *in camera*). {

} (RX00046 at 002, *in*

*camera*). { }

(RX00046 at 004, *in camera*). The agreement did not result in a supply agreement. (Hall, Tr. 2694-2695).

489. {

} (Gilchrist, Tr. 504, *in camera*). IGP did not agree and

JCI informed Microporous that the discussions were terminated in June 2007 and those discussions were never resumed. (RX00047; Gilchrist, Tr. 504, *in camera*).

490. Microporous never had a contract with JCI for the use of CellForce in automotive batteries. (Gilchrist, Tr. 562). Microporous was not selling CellForce to JCI at the time of the acquisition by Daramic. (Gilchrist, Tr. 562).

(f) JCI's Joint Ventures and Efforts at Vertical Integration

491. {

(Kung, Tr. 93, *in camera*)

} (RX00050 at 04, *in camera*). JCI entered into a three-way joint venture agreement with Rising and Fengfan in February 2007. (Hall, Tr. 2715-2716; RX00053, *in camera*; RX00052, *in camera*). JCI has a { } (RX00032, *in camera*).

492. JCI has { } (Hall, Tr. 2825, *in camera*; RX00037-02, *in camera*).

493. { }

(RX00050 at 11, *in camera*). JCI envisions expanding BFR's supply market outside of Asia and thus drafted their supply agreement with BFR with global language<sup>4</sup>. (RX00051; RX00055; Hall, Tr. 2860, *in camera*). { } (Hall, Tr. 2854, *in camera*).

At the signing of the agreement, it was JCI's intention to "make [BFR] a world class separator supplier to JCI and other battery manufacturers." (RX00055).

494. BFR competes with both Entek and Daramic, as well as other smaller separator manufacturers. (Hauswald, Tr. 1034).

495. {

} (Hall, Tr. 2765, *in camera*;

---

<sup>4</sup> For example, the contract refers to the need for "global insurance." (RX00051; RX00055).



RX00032, *in camera*). {

} (RX00037 at 002, *in camera*). {

} (RX00032,

*in camera*; Hall, Tr. 2766, *in camera*). {

} (RX00032, *in camera*). {

} (RX00032, *in camera*; Hall, Tr. 2770, *in*

*camera*; RX00032, *in camera*).

496. In order to secure the agreement, JCI was offered as much of the new line capacity as they wanted. (RX00037 at 002).

497. {

} (RX00032, *in camera*;

Hall, Tr. 2769, *in camera*). {

} (RX00032, *in*

*camera*). {

} (Hall, Tr. 2844, *in camera*). {

} (Hall, Tr. 2844-2845, *in camera*).

498. Additionally, BFR itself believes that it will become more and more price competitive as time moves on. (RX00056).

499. {

} (RX00048, *in camera*; RX00049; RX00076, *in camera*; Hall, Tr.

2853-2854, *in camera*).

500. {

} (Hall, Tr. 2838-2839, *in camera*).

501. {  
} (RX00062, *in camera*). As a result, {

} (RX00061, *in camera*).

502. { } (Hall,  
Tr. 2820-2821, *in camera*).

(g) Today

503. {  
} (Hall, Tr. 2834, *in camera*). Moreover, as evidenced by the above findings of fact  
pertaining to JCI, Entek and BFR, the Court further finds:

504. {  
} (Weerts, Tr. 4458-4459, *in camera*, 4496, *in  
camera*).

505. As the result of {  
} (Hall, Tr. 2765, *in camera*;  
RX00032, *in camera*).

506. { } (Weerts, Tr. 4478, *in  
camera*; RX00133, *in camera*).

507. {  
} (RX00072, *in camera*; Weerts, Tr. 4479-4480, *in  
camera*; RX00053, *in camera*; RX00052, *in camera*; RX00032).

508. The JCI Entek agreement and relationship and the BFR joint venture are likely to  
constrain prices for battery separators.

509. Based on the foregoing findings, the Court finds that the acquisition of Microporous by Polypore had no adverse effect on JCI because JCI, a large sophisticated buyer, had previously decided on its own course of action with respect to separator supply, and using that buying power, JCI implemented its own course of action regarding separator supply. As a result of JCI's actions, substantial battery separator manufacturing capacity became more available throughout the world, and particularly in North America.

510. As noted above, while the events of 2004 concerning the execution of the supply agreement between JCI and Daramic are disputed, whatever occurred is immaterial in this matter, except that those events underscore that a large sophisticated buyer can effectively implement its own course of action to secure its battery separator supply.

b. Exide Technologies, Inc.

(a) Background

511. Exide Technologies, Inc., is a global battery manufacturer with facilities in North America, Europe and Asia. (Gillespie, Tr. 2957, 3093).

512. Exide {  
    } and its {

    } (Gillespie, Tr. 2930, *in camera*; Gillespie, Tr. 3052, *in camera*).

513. Exide's business is segmented into "Industrial" and "Transportation" units. The transportation unit includes automotive, truck, motorcycles, recreational vehicles, golf cart, and boats, and industrial is subdivided into motive and network batteries. (RX01186 at 006-7; Gillespie, Tr. 2930).

514. The separators used by Exide have different base materials, including PE, AGM, rubber and PVC, but otherwise have the same function. Primarily, Exide uses PE separators in its products. (Gillespie, Tr. 2931-32).

515. There is no difference in formulation between industrial and transportation PE battery separators used by Exide except for dimensions like width, height and ribs. (RX00308). {

} (Gillespie, Tr. 3118, *in camera*).

516. Exide sold almost \$3.7 billion worth of batteries in fiscal 2008 and buys approximately \$70 million of battery separators per year. (RX01186 at 27, 57; Gillespie, Tr. 2929).

517. Exide manages 15,000 suppliers globally for various products including separators. (Gillespie Tr. 2995).

(b) Exide Battery Separator Buying History

(i) Daramic Purchase of the Corydon Plant

518. Although Exide was a party to certain supply agreements for battery separators prior to 1998 (see below), it also owned and ran its own vertically integrated facility in Corydon Indiana. (RX00899).

519. Seeking a cash infusion, in or about December 1998, Exide offered to sell to Daramic the Corydon facility in which Exide, at that time, made its own PE battery separators for the manufacture of its batteries. (RX00899).

520. On or about April 7, 1999, Exide rejected Daramic's initial offer to purchase the Corydon facility and informed Daramic that it had engaged another company to arrange for "the sale of the plant accompanied by a multi-year contract for the supply of separator material equal to the plant's current capacity." (PX0724, emphasis added).

521. By June 1999, Exide had received and was considering three offers for purchase of the plant – all of which included a cash purchase price, pricing per thousand lineal feet of separators from the plant and a proposed term for the accompanying supply agreement for the purchase by Exide of the separators for the plant. (PX0726).

522. The companies bidding on Corydon in June 1999 were Microporous, Daramic and Entek. (PX0726 at 002).

523. Microporous offered Exide \$25 - \$29 million in cash and requested a 5 year agreement with prices for separators ranging from \$32-\$33. (PX0726 at 002-3).

524. Daramic submitted a matrix of purchase prices for a supply agreement from which Exide was able to choose the best option for it, based on its cash needs. (PX0726; PX0731; PX0908 at 21, *in camera*). The lowest price for separators offered was \$32 (equal to that offered by Microporous) and the amount of cash offered in that version of the matrix was \$25.6 million with a 10 year supply agreement. (PX0726; PX0731).

525. Entek offered \$1.5 million in cash, separators at a price of \$31.75 and a 7 year agreement. (PX0726).

526. On or about August 4, 1999, Exide accepted Daramic's offer at the \$32 price level with a cash purchase price of \$25.6 million and assumption of lease obligations of \$21 million. Exide was "delighted" to have reached the agreement at that time. (PX0727 at 002). The agreement reached by Exide and Daramic was of great benefit to Exide in that it provided significant cash with an agreement to buy separators at a reasonable and, at that time, competitive market price. (PX0726; PX0727).

527. None of the current executives at Exide, including each of the two individuals who testified in Complaint Counsel's case, were part of the negotiation or decision making related to the agreement reached between Exide and Daramic in 1999, or the multiple subsequent

amendments, all of which include provisions which benefit Exide. (Gillespie Tr. 3065, 3070; PX0835 at 002, *in camera*). {

} (PX0835, *in camera*).

(ii) Daramic's Prior Supply Agreement

528. {

} (RX00977, *in camera*).

529. {

} (RX01517, *in camera*).

530. Pursuant to {

} (RX00976, *in camera*, PX0728, *in camera*).

531. {

} (RX00976, *in camera*). {

} (PX0728, *in camera*).

532. On or about September 29, 2000, {

} (RX01517, *in camera*).

533. In or about April 2001, {

} (RX01517, *in camera*).

534. At the time of the Amendment, { }  
(RX01517, *in camera*). Daramic agreed in the Amendment to {

} (RX01517, *in camera*).

535. As part of the Amendment in 2001, the parties also agreed to enter into a Golf Cart Supply Agreement (“GCSA”) whereby Exide was incentivized to purchase golf cart separators from Daramic. (Gillespie, Tr. 2937-38). {

} (RX01517 at 005, *in camera*). {

} (RX01517, *in camera*).

536. {

} (RX00968 at 002, *in camera*).

537. {

} (RX01517, *in camera*).

These are benefits to Exide under this contract and are possible by virtue of the long term nature of the agreement. (RX01517, *in camera*; RX01285).

538. The Court finds that {

} (Gillespie, Tr. 2999, *in camera*). {

} (PX2052 at 005, *in camera*).

Further, {

} (RX00342 at 033, *in camera*).

539. The Amendment contained significant terms which brought substantial financial benefit to Exide at a time when it was financially troubled. (RX01517, *in camera*; RX01285).

540. Exide filed for bankruptcy in early 2002, (RX01285), and emerged from bankruptcy in May 2004. (PX0990 at 010).

541. On or about July 11, 2002, {

} (RX01281, *in camera*). On emerging

from bankruptcy, Exide assumed the terms of the various contracts with Daramic.

542. In March 2005, {

} (RX00979, *in camera*).

543. Despite the millions of dollars of revisions and concessions made by Daramic to Exide following the execution of the original asset purchase agreement in 1999, which included by its



terms a 10-year supply agreement, Exide routinely and repeatedly breached the terms of its agreements with Daramic by, among other things exceeding, often by millions of dollars, the capital limit approved by the bankruptcy court. (RX01282, RX01283, RX01284, RX01285).

544. Further, despite the significant incentives to purchase golf cart separators from Daramic starting in 2001, Exide did not approve Daramic golf cart separators for use in Exide golf cart batteries until approximately October 2006, and did not purchase a single golf cart separator from Daramic – and therefore did not obtain the value of the credits and concessions on the price of those separators – until 2006. (RX00314; Gillespie, Tr. 2937-38; RX0119, *in camera*).

545. Specifically, the contracts require {

} per year. (RX00976, *in camera*, RX00968, *in camera*, RX01517, *in camera*). If

Exide fails to {

} (RX00968, *in camera*; RX01517, *in camera*).

546. In 2008, the purchase of HD separators (instead of FLEX-SIL®) generated a credit of about { } for Exide. This means that the HD separators {

} percent less expensive than the price it paid for FLEX-SIL® during that time. (RX01119, *in camera*; RX00945, *in camera*).

547. Despite this enormous incentive, { } not purchase any meaningful quantities of HD until 2006 – five years after the incentive was introduced. (RX01119, *in camera*).

548. Mr. Gillespie admitted that using HD saves Exide “a lot of money” and, in an analysis of pricing between HD and FLEX-SIL®, HD was “considerably” lower in cost. (Gillespie, Tr. 2944, 2947, 2996). Furthermore, he admitted that HD is not qualified for OEM use – meaning that no matter what the price, HD cannot be used in those types of batteries. (Gillespie, Tr. 3091; RX01094).

549. Despite the fact that HD is “considerably” lower in cost, and saves Exide “a lot of money” Exide, in 2007, 2008 and through the hearing, still purchased twice as much FLEX-SIL® as it did HD. (Gillespie, Tr. 3092). {

}

(RX00677, *in camera*; PX0949, *in camera*) This difference is considerably more than a SSNIP 5-10% price difference between FLEX-SIL® and HD.

550. FLEX-SIL® and HD are not economic substitutes for each other under these circumstances. Moreover, the above findings raise questions of credibility concerning Exide’s intent in this proceeding, and Gillespie’s testimony concerning the effect of HD as a price constraint on FLEX-SIL®.

551. {

} (PX0835, *in camera*). {

} (PX0835, *in camera*).

552. Altogether, {

} (PX0835, *in camera*).

553. {

} (PX0835, *in camera*; Gillespie, Tr. 3102, *in camera*). The contracts and amendments to the contracts that Daramic has agreed to with Exide have contained significant financial and competitive benefit to Exide. (RX01517, *in camera*; RX01285).

554. Exide itself admits that Daramic has done things along the way to help Exide. (Gillespie, Tr. 3100). For instance, Mr. Gillespie testified that Exide was “treated very well” during the October 2006 force majeure event (which was clearly real to Exide), and that “it wasn’t easy” during that time for Daramic, but that it worked with Exide to ensure it received supplies. (PX1048; Gillespie, Tr. 2985, 3095).

555. Mr. Gillespie concedes, in fact, that {

} (Gillespie, Tr. 3112, *in camera*).

556. {

} (Gillespie, Tr. 3073, 3101-3103, *in camera*; RX00537, *in*

*camera*).

557. In each case, {

} (RX00019, *in*

*camera*; Gillespie, 3101-3104, *in camera*; RX00927 at 005-16, *in camera*). {

} (RX00019, *in camera*; Gillespie,

Tr. 3101-3104, *in camera*).

558. Further, in the first five years of the agreement, from 1999-2004, and in addition to the benefits set out above which were part of the multiple amendments, Daramic did not pass on any raw material costs to Exide, despite the contractual provisions that would have allowed such increases. (Gillespie, Tr. 3070).

559. Exide has used the fact that it is one of the largest battery manufacturers in the world as negotiating leverage with suppliers, including Daramic. (Gillespie, Tr. 3070-71). Even with written supply agreement with fixed pricing, Exide still uses anything “not clearly stated in the contract interpretation as leverage points” against Daramic. This includes technology, volumes and future business. (Gillespie, Tr. 3071). These actions show the power and leverage Exide has vis a vis even its contractual suppliers. (Gillespie, Tr. 3070-71).

560. {

} (Gillespie, Tr. 3120-21, *in camera*; PX1097, *in camera*; RX00652; RX00263, *in camera*; RX00661, *in camera*).

561. {

} (PX1097 at 002, *in camera*). At that time, Exide was short paying its invoices to Microporous and Mr. Gilchrist authorized Microporous to withhold shipments to Exide if they did not pay the invoices with the price increases included. (RX00661, *in camera*; RX01034).

562. The only option provided to Exide for avoiding the Microporous price increases prior to the Acquisition was to provide to Microporous “An updated MOU by Feb 14!! . . . A redline of the original contract proposal by Feb 14th . . . A commitment (contract) ready at the meeting on the 27 granting Microporous a minimum of 3,000,000 square meters of industrial motive power business in Europe to start no later than April 1, 2008.” (RX01033). Without those items, Matt

Wiljhelm, Microporous CFO, told Exide that those actions “will risk jeopardizing future shipments.” (RX01033). {

} (Gilchrist, Tr. 481-82, *in camera*)

(c) Microporous

563. Exide and Microporous had an over 60-year relationship with respect to the sale of rubber based separator products. (PX1018 at 004). {

} (PX00975 at 001, *in camera*).

564. On or about November 30, 2001, {

} (PX2190 at 019, *in camera*; RX00974 at

001, *in camera*).

565. {

} (RX00974 at 001, *in camera*).

566. Furthermore, Exide has also conceded that FLEX-SIL® is a different type of product, with different consistency, and requiring different machines than Daramic’s HD product or Microporous’ CellForce product. (Gillespie, Tr. 2935-36).

567. Exide also admits that its purchase of FLEX-SIL® separators for its golf cart batteries is not due to price. (Gillespie Tr. 3092).

568. In January 2008, Microporous was supplying Exide with ACE-SIL® products for stationary and submarine applications, and FLEX-SIL® products for golf cart applications.

Sales of those products from Microporous to Exide were approximately \$3 million in 2007. (PX1023 at 098).

569. {

} (Gillespie Tr. 3127-

3128, *in camera*).

570. The relationship between Exide and Microporous was difficult and constrained. (RX00748 at 002). For instance, in 2005, when the parties were negotiating a new agreement and Microporous implemented a price increase, Exide cancelled a meeting to discuss the issues at the last minute after Microporous personnel had traveled to Georgia. Thereafter, Exide began unilaterally deducting the announced price increase and energy surcharges from their invoices and failed to pay certain invoices. Following these actions by Exide, Microporous threatened to cut off shipments if receivables were not brought current. Exide and Microporous were not able to finalized an agreement in 2005. (RX00748 at 002).

571. As of October 12, 2006, Microporous considered Exide to be “severely overleveraged.” It had tightened its credit procedures with respect to Exide and purchased “receivables insurance” to protect itself from Exide’s possible financial collapse. (PX2110 at 007; Trevathan, Tr. 3610-11).

572. At nearly the same time, in March 2006, Exide had determined that the “[p]rices and [t]erms currently offered by Amerace are uncompetitive” and that Microporous had an “arrogant attitude” and “take it or leave it” approach. (RX00314).

573. {

} (Gillespie, Tr.

3041, *in camera*, 3085-86).

574. {

} (PX0910

(Trevathan Dep., 37-39), *in camera*).

575. Microporous continued to have concerns with Exide's lack of financial strength, but proceeded to discuss with Exide possible scenarios for an expansion of Microporous' Piney Flats and Feistritz facilities to accommodate Exide production. (PX1018 at 006; Trevathan, Tr. 3609-11; PX2030 (Heglie, IHT 40-41; PX2031 (Heglie Dep. 132-33)).

576. In order to consider a possible expansion based on Exide, Microporous "required an agreement . . . in the form of a long-term supply agreement that would have included terms for the company to supply a sufficient amount of volume that would have required or occupied a full production line . . . sold at a price that would have been financially attractive to [Microporous]." (Trevathan, Tr. 3613, 3758-59).

577. In addition, Microporous required funding for any expansion and approval from its board of directors before it could move forward with the expansion. (Trevathan, Tr. 3613).

578. Microporous could not have supplied SLI separators requested by Exide with its existing separator lines. (PX0909 (McDonald Dep. at 9-10)).

579. {

} (Gillespie, Tr. 3053, *in camera*). {

}

(Gillespie, Tr. 3053-54, *in camera*).

580. Despite this knowledge, Exide did not take any material steps to exhibit any commitment to Microporous sufficient to allow Microporous to seek funding required for an expansion, seek

approval from its board, or move forward with an expansion for Exide in any significant or realistic fashion. Specifically:

a. In Spring 2007, Microporous provided to Exide schedules, quotations, an MOU and a draft of a contract for the supply of SLI separators to Exide. Almost a full year later – on February 14, 2008, only ten days before the Acquisition - the only thing Microporous had received back from Exide was an MOU that was signed after it had already expired by its own terms. (RX00009; RX00399).

b. Following the original expiration of the MOU on August 31, 2007, Exide made no genuine effort to renew the MOU until mid-February 2008. (Gillespie, Tr. 3075-76), when the MOU was renewed, it was for only 45 days. (RX00403). Based on the testimony heard by the Court, there is no reason to believe that the parties could have accomplished in the next 45 days what they had failed to do in the 120+ days prior to the renewal.

c. Exide's reason for signing the MOU extension appears to be primarily because Microporous was insisting on a price increase that it had announced to Exide and had hinted to Exide that shipments from Microporous were "at risk." Alberto Perez of Exide specifically noted to his superior, Pradeep Menon, that "I am trying to do everything I can to keep the increase off the table until we can talk at the end of February and this extension (in my opinion) is [sic] a small concession." (RX00010).

d. Less than two months before the Acquisition, Microporous was "suddenly" asked by Exide to attend a "Separator Supplier Conference" in Paris, which included all of Exide's suppliers, for a limited presentation. (PX1018 at 004). Microporous was allotted only three hours of time out of a three day conference. (PX1018 at 002-3; PX1096; McDonald, Tr. 3838). There were no discussions related to the possible expansion or Exide's commitment to Microporous on the agenda. (PX1018 at 002-3).

e. None of the individuals from Exide or Microporous who were described as those controlling the "spend and buy" - the primary negotiators for a possible supplier relationship between Microporous and Exide – (Gilchrist, Tr. 400, 486-87) attended the conference in Paris. Mr. Gillespie, Mr. Gilchrist and Mr. Ulsh were all absent. (McDonald, Tr. 3836-3837). In fact, the main representative from Exide in Paris was Alberto Perez who had, at the time of the meeting in January, only been on the job for a month or two. (PX0396; McDonald, Tr. 3845).

f. Microporous was greatly disappointed at the length of time Microporous was given to do its presentation, and at the overall tone of the meeting. (McDonald, Tr. 3839).

g. The suggestion by Mr. Gilchrist in his testimony that the meeting in Paris was a progression toward a contract between Microporous and Exide is not credible in light of Mr. McDonald's testimony and the contemporaneous documents related to that meeting. (Gilchrist, Tr. 444-45, *in camera*; PX0512).



h. Exide told Microporous that the rubber pass through Microporous was seeking to implement could have an adverse effect on any plans the companies had to expand together. (PX0396). Microporous responded that if it could not maintain its margins on its FLEX-SIL® “core business” it would not be able to “do the other things [it] was discussing with Exide. (PX0396). Exide then short paid Microporous. (RX1034).

i. Exide was not privy to Microporous’ expansion plans (Gillespie Tr. 3095). In fact, {

} (Gillespie, Tr. 3029, 3034, *in camera* (“Microporous was in North Carolina”); Gillespie, Tr. 3064). The Court finds this to be telling of the lack of seriousness with which he and his company took Microporous as part of their long term plans.

j. Exide never made any commitment of money to secure Microporous’ expansion plans for it and, in fact, made clear to Microporous that any capital spending had to be shouldered by Microporous for any expansion. (Gillespie, Tr. 3088).

k. Exide did not meet the schedule set out by Microporous. (Gillespie, Tr. 3081]. The schedule provided to Exide by Microporous specified the dates by which Exide would be required to commit in order for Microporous to begin an expansion to supply Exide. Exide missed the required deadlines and thus, as of February 2008, Microporous was not in a position to complete an expansion in time for Exide. (Gillespie, Tr. 3081).

l. Microporous’ did not believe that the Exide contract would have become a reality. Mr. Gilchrist testified that while it was his “intent” to complete such a contract, “there were a lot of moving parts to be nailed down.” (Gilchrist, Tr. 445) In mid-February 2008, a year after discussions had begun with Exide, Mr. McDonald still did not believe that Exide was committed to having a business relationship with Microporous for the purchase of SLI separators. (McDonald, Tr. 3843, 3846-47).

581. The Court finds Mr. Gilchrist’s testimony that Exide was becoming “energized” in early 2008 as not being credible in light of the above facts. There is no evidence that a long term agreement would have resulted between the two companies based on the findings set forth above. Moreover, as set forth in findings above, Microporous could not have undertaken any sort of expansion on Exide’s behalf given the position of its Board of Directors.

582. In fact, taking the evidence and testimony related to the Exide/Microporous discussions and juxtaposing them to the discussions Microporous had with JCI in 2006 is telling regarding Exide. Microporous was much further along in its negotiations with JCI - a contract and redlines

had been exchanged, testing was almost complete and Microporous management had “reviewed [the opportunity with JCI] in-depth and [was] extremely confident that it will execute successfully.” (RX00741; Trevathan, Tr. 3597). As ultimately occurred for Microporous with respect to the JCI opportunity, the Court finds that Microporous’ opportunity with Exide was, at best, a “hope” of Microporous as shown by Exide’s conduct. Based on the foregoing findings, there is no evidentiary basis from which the Court can reasonably find that any agreement would have resulted between Exide and Microporous, or that Microporous was a genuine competitor for Exide’s separator business at the time of the Acquisition.

(d) Exide and Entek

583. { }  
(Gillespie, Tr. 3021-22, *in camera*, 3122-27, *in camera*).

584. { }  
(Gillespie Tr. 2695; 3124, *in camera*, 3128, *in camera*).

585. { }  
(Gillespie, Tr. 3021, *in camera*; 3126, *in camera*; 3129-30, *in camera*)

586. { }  
(Gillespie, Tr. 3122, *in camera*).

587. { }  
(Gillespie, Tr. 3123-24, *in camera*; Weerts, Tr. 4486; Weerts, Tr. 4521-23, *in camera*).

588. { }

} (Gillespie, Tr. 3126-27, *in camera*). Given the size and buying power that Exide has, the Court finds that the cost of purchasing tooling is a minor cost, particularly given Exide's alleged concerns about having an additional separator source of supply.

589. {

} (Gillespie, Tr. 3122-27, *in camera*).

(e) Exide's Continuing Action

590. In 2007, Exide issued a Request for Proposal ("RFP") to battery separator manufacturers around the world. (Gillespie, Tr. 2962).

591. Exide gave the suppliers to whom it issued the RFP the "choice to quote on part or all or whatever they felt comfortable with..." Exide "left it up to [the separator manufacturers] to decide what or any portion they wanted to quote on." (Gillespie, Tr. 2965).

592. The RFP called for each separator manufacturer to bid on all PE supplies globally at volumes of 25%, 50%, 75% and 100%; however, Exide did not define in the RFP how the supplier was to bid a lower percentage, whether by plant, product mix or otherwise. (Gillespie, Tr. 2967; Gillespie, Tr. 3015, *in camera*).

593. {

} (PX1036, *in*

*camera*).

594. In fact, Mr. Gillespie testified that at the time of the RFP, prior to the Acquisition, Daramic was the only company on the planet that could satisfy all of Exide's needs. (Gillespie, Tr. 2978).

595. At the time of the Acquisition, Exide had not started working with Microporous on testing or approving Microporous' industrial PE material. (Gillespie, Tr. 2974). It is telling that Exide had never even tested Microporous' SLI separators prior to RFP (Gillespie, Tr. 3083).

596. {

} (RX01036, *in camera*). Further, {

}

(Gillespie, Tr. 3106-3109, *in camera*; RX01036, *in camera*).

597. In 2007, Exide also began to seek out battery separator manufacturers in Asia to supply product to Exide. (Gillespie Tr. 2962).

598. {

} (RX00303 at 002, *in camera*; RX00303, *in camera*; RX00304;

RX00305; RX00306; RX00307). To that end, it began {

} (Gillespie Tr. 3022-23, *in*

*camera*).

599. Specifically, {

} (Gillespie, Tr. 3023-24, *in camera*).

{

} (Gillespie, Tr.

3034, *in camera*).

600. {

} (Gillespie, Tr. 3041, *in camera*).

601. The Court finds it telling that {

} (Gillespie,

Tr. 3026, *in camera*). Mr. Gillespie's credibility is again to be questioned.

602. {

} (Gillespie, Tr. 3051-52, *in camera*). The

Court finds that such testimony was coached, rehearsed and artificial and evidences Exide's intent to influence and use this proceeding for its own benefit.

603. Based on the foregoing findings, the Court finds that Exide has substantial buying power in the marketplace because of its size and global business. Exide, as evidenced by its ability to resist price increases and defeat energy surcharges (as found above), has the wherewithal and ability to constrain prices, and that Exide has and will continue to use such power against battery separator suppliers, including Daramic.

c. EnerSys

604. EnerSys is a global manufacturer of industrial batteries, manufacturing and selling batteries for fork lifts, UPS battery backup, specialty battery backup, telecom and utilities. (Axt, Tr. 2097). EnerSys is the world's largest manufacturer of industrial batteries. (Axt, Tr. 2228).

605. EnerSys has 20 plants worldwide, including four plants located in the United States, two located in Mexico, three located in China and five or six located in Europe. (Axt, Tr. 2227; RX01185 at 021). EnerSys manufactures flooded lead acid batteries in North America at its Richmond, Kentucky; Ooltewah, Tennessee; Monterrey, Mexico and Hays, Kansas facilities. (Axt, Tr. 2099).

606. EnerSys' total battery sales for the past year were approximately \$2 billion. (Axt, Tr. 2227; RX01185 at 063). This represents approximately 38-40% of the industrial battery sales in the world. (Axt, Tr. 2227).

607. EnerSys' annual spend for battery separators in 2007 was approximately { } (Burkert, Tr. 2411, *in camera*). In 2007, EnerSys' annual spend for separators in North America only was { } (Burkert, Tr. 2423, *in camera*; RX00220, *in camera*).

608. EnerSys manufactures batteries outside of the United States for importing into the United States. For example, EnerSys manufactures batteries for fork lifts in Mexico which it ships to the United States. (Axt, Tr. 2228). EnerSys also manufactures AGM batteries in China which it imports into the United States. (Axt, Tr. 2229).

609. EnerSys has acquired over 23 companies and has entered into joint ventures. (Craig, Tr. 2631, *in camera*; RX00229; RX001185 at 028). EnerSys has also entered into "global distribution and marketing alliances." (RX00230). In 2001, EnerSys purchased Hawker Batteries, a company whose manufacturing operations were principally located in Europe. (Axt, Tr. 2119). EnerSys also acquired the motive power battery business of FIAMM, S.p.A. ("FIAMM") in 2005. (RX001185 at 028).

(a) EnerSys Battery Separators Buying History

(i) Daramic

1. Daramic's Sales to EnerSys

610. In May 2004, {

} (RX00964, *in camera*).

611. {

} (RX00964 at 002, *in camera*). Daramic's reserving production capacity in its facilities is a benefit to EnerSys and reflects a risk being borne by Daramic as part of this relationship. (Hauswald Tr. 1039-41; Roe Tr. 1770-72, *in camera*).

612. {

} (RX00964 at 002, *in camera*). {

} (RX00964 at 001, *in camera*). {

} (Hauswald, Tr. 823-25, *in camera*).

613. {

} (RX00964 at 001, *in*

*camera*). Daramic complied with this term.

614. {

}

(RX00964 at 001, *in camera*).

615. {

} (RX00207, *in camera*).

616. {

} (Roe Tr. 1699; PX1289, *in camera*). Daramic sought a response to that proposal so that it could make a decision and develop a plan for supplying EnerSys and other customers from its facilities. (Roe, Tr. 1700). Despite repeated attempts to obtain a response to Daramic's proposal submitted in February, no response was received. Daramic was in essence talking to itself as EnerSys was unwilling to engage in meaningful negotiations. (Toth, Tr. 1405-06).

617. At the spring 2006 BCI meeting, Axt had a conversation with Toth. In that conversation, Axt told Toth that the contract between Daramic and EnerSys was not worth the paper it was written on, indicating that it would not be honored by EnerSys, and that Daramic's business was going to zero. (Toth, Tr. 1512; Axt, Tr. at 2167-68, *in camera*). Toth responded that Daramic remained interested in earning EnerSys' business. (Toth, Tr. 1512).

618. In July, Roe of Daramic met with Axt of EnerSys regarding Daramic's proposal. At that time, Axt advised Roe that EnerSys had decided to move most of their separator purchases from Daramic to Microporous. (Roe, Tr. 1701 at 02; Axt, Tr. 2169-70, *in camera*). Axt also advised Roe that EnerSys would move to Microporous its separator purchases for its Motecchio Italy plant serving the FIAMM business. (Roe, Tr. 1701 at 02; PX1240).

619. {

} (Roe, Tr. 1170-71, *in camera*; PX1240, *in camera*; PX1203, *in camera*). {

}

(Roe, Tr. 1170-71, *in camera*; PX1240; PX1203, *in camera*).



620. Following the July meeting between Axt and Roe, Daramic submitted another proposal to EnerSys. (PX1204). In September 2006, {

}

(Roe, Tr. 1772 *in camera*). At that time, EnerSys had made it clear to Daramic that it no longer viewed Daramis as a long-term strategic parenter and instead EnerSys intended to move Daramic's business over to Microporous and that this would happen on a rolling basis as the EnerSys plants began rolling off their contractual commitments with Daramic in January 2008. (Roe, Tr. 1701-02).

621. In October 2006, { } (PX1224, *in camera*). {

} (PX1224 at 003, *in camera*; RX00964, *in camera*).

{

} (Burkert, Tr. 2426-27, *in camera*).

622. {

} (RX01121, *in camera*; RX01119, *in*

*camera*). { } (RX01121, *in*

*camera*; Burkert Tr. 2396). { } (RX01121,

*in camera*).

## 2. EnerSys' Leverage in Pricing Negotiations

623. {

} (Seibert, Tr. 4194, *in camera*,

4213-17, *in camera*).

624. EnerSys, as the largest manufacturer of industrial batteries in the world, with annual sales in 2007 of \$2 billion, approximately half of which was for industrial separators, had great leverage over its suppliers over issues of price and terms. (Craig, Tr. 2557, 2561; Burkert, Tr. 2421-23, *in camera*).

625. {

} (Axt, Tr. 2230-31, 2244, *in camera*).

626. In 2005, Daramic sought to pass on an energy surcharge to EnerSys for both Europe and the U.S. (RX00608). {

} (RX00582 *in*

*camera*; Axt, Tr. 2242-43, *in camera*). The negotiations between Daramic and EnerSys as to this surcharge are telling as to EnerSys' strength in negotiating the price of separators. Even though EnerSys had objected only to an increase over 3% for Europe, and obtained a concession on this point from Daramic (RX00582, *in camera*; RX00209), EnerSys later sought to use this concession to argue for a price concession for the US as well. (RX00584 at 001). ("Why do you continue to try for an additional 3% in the US, it is not validated and will never be confirmed."). (RX00584 at 001).

627. {

}

(RX00596, *in camera*; Axt Tr. 2249, *in camera*). It is apparent that EnerSys, even in 2005, was a tough negotiator. (RX00595).

628. In 2006, Daramic announced a price increase to its customers effective January 1, 2007 due to its increasing cost of production. (RX00831; RX00773; RX00606; RX01549; RX00590; RX00768 *in camera*). {

} (RX00768, *in camera*). Yet, {

}

(Burkert, Tr. 2436, *in camera*) {

} (RX00768, *in camera*; RX01032; Burkert, Tr. 2438, *in camera*).

629. In 2008, Daramic announced to its customers a price increase for 2009. (PX1550; PX0372, *in camera*; RX00536, *in camera*; Seibert, Tr. 4191-93, 4194-95. *in camera*; RX00542).

630. {

} (Seibert, Tr. 4189-91, *in camera*). {

} (Seibert, Tr. 4191, *in*

*camera*). {

} (Seibert, Tr. 4195, 4215-16, *in camera*; Axt,

Tr. 2215-16, *in camera*).

631. {

} (Burkert, Tr. 2433, *in camera*;

Seibert, Tr. 4193, *in camera*). {

} (Seibert, Tr. 4214-15, *in camera*). **{EnerSys subsequently objected to the**

**energy surcharge and demanded a refund.}** (Seibert, Tr. 4216, *in camera*; RX00927 at 005-13, *in camera*).

632. In October 2008, Daramic announced that due to extraordinary cost increases, including unprecedented energy cost increases, Daramic was increasing its pricing effective January 1,

2009. (RX00564). { } (Burkert, Tr. 2434, *in camera*).

633. {

} (Axt, Tr. 2465, *in camera*). {

} (Seibert, Tr. 4193-94, *in camera*). {

} (Seibert, Tr. 4193-94, *in camera*).

634. {

} (Burkert, Tr. 2434, 2464-65, *in camera*; Seibert Tr. 4216-17, *in camera*; PX2264, *in camera*; RX00927 at 14-16, *in camera*). {

} (Seibert, Tr. 4217, *in*

*camera*). Based on the foregoing finding, the Court finds {

}

635. EnerSys has itself announced price increases, including a 6% increase effective January 1, 2006 and another increase of 5% to 10% in 2006. (RX00231; RX00232). In reporting on its price increases in 2006, and in its subsequent Form 10-K filing for Fiscal Year 2008, EnerSys has noted cost increases for lead, copper, plastics and utilities. (RX00232; RX01185 at 016, 034, 044). No mention is made of polyethylene separators in these documents. In any event, EnerSys makes “strong efforts . . . to pass through sales price increases in all regions” rather than eroding margins as Craig testified to in the hearing. (RX01185 at 044; Craig, Tr. 2553, *in camera*). And

EnerSys attempts to “control [its] raw materials costs through strategic purchasing decisions” including hedging arrangements. (RX01185 at 034; RX01185 at 011).

### 3. Force Majeure Event

636. Complaint Counsel and EnerSys have both claimed in this hearing that Daramic’s force majeure, declared in October 2006, was fake. The evidence presented at trial adequately demonstrates that the force majeure event was not only real, but posed substantial difficulty to Daramic in the operation of its business. (Hauswald, Tr. 1101).

637. {  
  
} (Hauswald, Tr. 884-85, *in camera*). In 2006, {  
  
} (Hauswald, Tr. 885-86, *in camera*).

638. UHMWPE is the primary raw material used by Daramic. Daramic’s purchases of UHMWPE are approximately 10 times greater than those of Microporous. (Trevathan, Tr. 3646).

639. In September 2006, Ticona notified Daramic that it was experiencing a force majeure and Ticona anticipated that it would not be able to supply more than 50% of Daramic’s demand for several months. (RX01077, *in camera*; Hauswald Tr. 885, *in camera*; RX01598; Toth, Tr. 1404-05).

640. {  
  
} (Hauswald, Tr. 884, 890-91, *in camera*).

641. {

} (Hauswald,

Tr. 886, *in camera*).

642. Following Ticona's announcement of the Force Majeure, Daramic attempted to find alternative supply of UHMWPE. (Hauswald, Tr. 887, *in camera*; Roe, Tr. 1707). Representatives of Daramic worked long hours, traveling around the world trying to locate alternate supply of UHMWPE and to move some of its existing supply of UHMWPE from Daramic's facilities in North America to Asia and Europe. (Hauswald, Tr. 891-92, *in camera*; RX01054).

643. {

} (Hauswald, Tr. 887-88, *in camera*; RX00698 at 005, *in camera*).

644. Daramic declared a force majeure event as a result of the reduction of supply by Ticona and advised EnerSys, among other customers. (Hauswald, Tr. 889, *in camera*; RX00698 at 005, *in camera*; RX01052; PX1048; Roe, Tr. 1708-09). {

} (Hauswald, Tr. 889, *in camera*; RX00698 at

005, *in camera*).

645. {

}

(Hauswald, Tr. 890, *in camera*; Hauswald Tr. at 1143-46, *in camera*). Daramic advised its customers that it would need to allocate its separator production among its customers during this period of time. (Hauswald, Tr. 889-90, *in camera*; RX00698 at 005; PX1048, (“[O]ur current estimate is that this event will likely impact our ability to supply you with your full allocation of products through at least the middle of November.”)).

646. {

}

(RX00964 at 002-03 (emphasis added), *in camera*).

647. While Complaint Counsel has repeatedly attempted to portray Daramic as telling EnerSys that it would receive only 10% of its PE supply, a full review of the evidence demonstrates amply that this simply was not the case at all. (Roe, Tr. 1707-09). Daramic actually advised in its letter to EnerSys that EnerSys would “receive most likely 10 to 20%, if possible up to 50%, of your normal material requirements for the next six to eight weeks. Based on the timing communicated to us by our vendor, our current best estimate is that this event will likely impact our ability to supply you with your full allocation of products through at least the middle of November.” (PX1207). The Court finds Complaint Counsel’s assertion to this Court that it would receive only 10% to be, at best, overstated.

648. Daramic’s internal documents (RX00707 at 005, *in camera*; RX00698 at 005, *in camera*; RX00806 at 035, *in camera*) reflect {

} (RX01054).

649. EnerSys admits that it confirmed with Microporous that Ticona had suffered a production disruption. (Axt, Tr. 2284-85; PX1209). {

} (RX00235, *in camera*; Craig,

Tr. 2617-18, *in camera*). Kubis was one of several EnerSys employees (including Craig) that Axt alerted about Daramic's force majeure on October 7, 2006. (PX2104). Craig also admits that Toth explained that Daramic was declaring the force majeure due to a problem that it was having with a supplier. (Craig, Tr. 2577).

650. Daramic did not tell EnerSys' employees that if EnerSys signed a contract the force majeure would go away. (Toth, Tr. 1579; Roe, Tr. 1713, 1724). Not one single contemporaneous document has been provided by the FTC to support EnerSys' bald assertion that Toth told Craig that if EnerSys signed a contract the force majeure would go away. (Craig, Tr. 2571; Axt, Tr. 2294, 2296).

651. {

} (Axt, Tr. 2181-82, *in camera*). {

} (Axt, Tr. 2172, *in camera*).

Axt testified that with spot pricing, there would be no stability of price, no stock of inventory and no guaranteed availability of supply. (Axt, Tr. 2116). {

(Axt, Tr. 2172, *in camera*).

Yet, Axt also testified that EnerSys prefers not to have written contracts and would rather purchase product from its suppliers on a purchase order basis only. (Axt, Tr. 2110-11). ("We are a handshake type of company, we make agreements and we issue purchase orders for our material requirements for all of our factories around the world.").



Q Now, do you have any preference – at EnerSys would you prefer – how would you prefer to purchase your separators?

A. We have a couple of hundred suppliers. We do not have contracts as a norm. The only commodity we have contracts on is lead that we utilize in our plants.

Q. When do you – I mean, with respect to the contract you have with Daramic, would it be your preference to purchase from Daramic by contract or on a purchase order basis?

\* \* \*

A. I would like to place purchase orders like I do with 90 percent of our other suppliers.

(Axt, Tr. 2115-16).

652. Such purchasing would of course be subject to availability of supply and pricing would vary. EnerSys' testimony is at best contradictory. EnerSys' assertions in this hearing that it was forced to sign a contract in October 2006 or else face spot pricing and availability, which its Vice President, Global Procurement testified he preferred anyway, are not credible.

653. Even during the negotiation over the last the contract extension with Daramic in 2006, when EnerSys claims to have had a "gun to its head" or "feet to the fire," EnerSys negotiated better contractual terms with Daramic than were found in its then existing contract. (PX1211, *in camera*; PX1212; PX1224, *in camera*; Axt, Tr. 2265-67, *in camera*; Axt, Tr. 2291, 2293).

654. Complaint Counsel's and EnerSys' assertion that the force majeure was fake is also not borne out by any contemporaneous documentation submitted as evidence in this case. Both Craig and Axt admit they have no written email or memorandum reporting on the conversation that Craig claims to have had with Toth. (Craig, Tr. 2571, 2574-76, 2659-60; Axt, Tr. 2296). The only document that Craig could point to and only after prompting by Complaint Counsel on re-direct (after testifying first in his deposition and then again at the hearing that he was not aware of any documentation of his purported conversation with Toth) was the Complaint filed by

EnerSys against Daramic in October 2006. (RX00243; Craig, Tr. 2658-59). Yet, as Craig admits, Toth is nowhere referenced in the Complaint. (Craig, Tr. 2658-59).

655. Significantly, EnerSys' Complaint seeks temporary and preliminary injunctive relief (RX00243 at 002), yet no evidence exists that EnerSys took any additional steps to obtain such relief from any court, including holding a hearing, submitting any motions, briefs or affidavits, or obtained such relief. {

} (RX01601, *in camera*; PX1224 *in camera*). As is clear, EnerSys was represented by counsel throughout this timeframe. No evidence has been presented to this Court that EnerSys ever sought to have its contract with Daramic nullified for supposedly signing it under duress and no evidence has even been presented to this Court that EnerSys ever made that assertion prior to the institution of this matter.

656. Daramic was proactive in its dealing with EnerSys on this force majeure event. Tucker Roe attempted to reach EnerSys over the telephone before sending the letter notifying EnerSys of the force majeure situation. (Roe, Tr. 1707-1711). Bob Toth on at least two occasions sent emails to John Craig assuring EnerSys that Daramic was doing what it could to handle the situation fairly with it and apprising of the status of deliveries. (PX1287; PX1288; Craig, Tr. 2577-82). Roe developed a plan with Axt whereby they would talk daily about the supply situation during this force majeure period. (Roe, Tr. 1711). Toth told every customer with whom he spoke, including Craig, that Daramic was doing everything that it could to get separators to them and that Daramic did not want to shut any of the customer's plants down. (Toth, Tr. 1406).

657. Daramic employees worked 12 hour days during this force majeure period trying to manage the situation, juggling schedules and verifying inventories all in an effort to meet the customer requirements. (Roe, Tr. 1704-05).

658. {

} (Hauswald, Tr. 893-894, *in camera*).

659. {

} (Axt, Tr. 2207, *in camera*).

(ii) Microporous

660. EnerSys purchased ACE-SIL® and CellForce battery separators from Microporous. (Burkert, Tr. 2377; RX01120, *in camera*). {

} (RX01120, *in camera*). EnerSys

admits that no other separator can be used in batteries using ACE-SIL® separators except ACE-SIL® separators. (Axt, Tr. 2235).

661. From 1996 up until the merger between Daramic and Microporous, EnerSys purchased separators from Microporous' Piney Flats, Tennessee facility and shipped those separators to EnerSys' plants located in Europe and China. (Burkert, Tr. 2377, 2379). And from there, EnerSys used the Microporous battery separators in EnerSys batteries which it then sold to its customers. (Burkert, Tr. 2382-83).

662. Prior to the merger of Microporous and Daramic, less than 10% of the separators purchased by EnerSys from Microporous remained in the United States. (Burkert, Tr. 2380, 2381).

663. {

} (Axt, Tr. 2145, *in camera*). {

} (Burkert,

Tr. 2407-08, 2458, *in camera*; Axt, Tr. at 2145, *in camera*).

664. At the time of the merger of Microporous and Daramic, the Feistritzplant was not in commercial operation, and EnerSys, to the extent it needed separators from Microporous for its worldwide operations, would buy them from Microporous' Piney Flats, Tennessee facility. (Burkert, Tr. 2384-85; Axt, Tr. 2239).

665. EnerSys does not believe it is necessary for its business for its separator suppliers to be physically located in both North America and Europe. (Burkert, Tr. 2385; RX00224).

666. EnerSys had for years purchased battery separators from North America and shipped them to its plants located in Europe and China. (Burkert, Tr. 2377-79; RX00206 at 003, *in camera*).

1. EnerSys Enters Into Contract with Microporous

667. {

} (RX00953, *in camera*).

668. {

} (RX00206 at 005, *in camera*). {

} (RX00206 at 004, *in camera*).

669. {

} (RX00206 at 003, *in camera*).

670. No credible evidence is in the record that the Feistritz facility was intended to provide separators to EnerSys for its North America operations.

671. {  
} (Axt, Tr. 2256, *in camera*; RX00207 at 009, *in camera*).

672. { } (RX00207, *in camera*). {

} (RX00207 at 001-002 *in camera*). {

} (RX00207 at 10, *in camera*).

673. EnerSys did not enter into the contract with Microporous until January 2007 due to the fact that the Microporous board of directors, and the owners of Microporous, IGP Partners, did not provide its support to the project until that time. (Axt, Tr. 2256, 2153, *in camera*; PX2300; PX2301).

2. EnerSys Intended to Move 100% of its Purchases from Daramic to Microporous

674. In its budget for 2009, which was presented in February 2008, EnerSys planned to move all of its purchasing of PE type separators from Daramic to Microporous. (Burkert, Tr. 2424, *in camera*; RX00241). {

} (Craig, Tr. 2637-38, *in camera*). {

} (RX00220 at 008, *in camera*; Burkert, Tr. 2428, *in camera*).

675. {

} (Burkert, Tr. 2429, 2431, *in camera*; RX00221, *in camera*).

676. {

} (RX01349 at 002 *in camera*).

677. Finally, in its contract entered into with Microporous in January 2007, {

} (RX00953 at 001, 005, *in camera*). {

} (RX00953 at 003, *in camera*). The Court finds that

Daramic was not and would not be a competitive factor as related to EnerSys until at least July 2013.

3. EnerSys Refused Microporous Price Increases and Surcharges

678. {

} (RX00210; Axt, Tr. 2245-46,

*in camera*). {

} (Axt, Tr. 2246, *in camera*; RX00210).

679. Again, in 2007, {

} (RX00228, *in camera*). {

} (RX00228 at 002-03, *in camera*). {

} (Burkert,

Tr. 2434-37, *in camera*; RX00228 at 001 *in camera*). This further evidences EnerSys' strength to use its buying power.

(b) Today

(i) Other Sources of Supply Are Available

680. EnerSys has available to it potential suppliers of battery separators for its industrial batteries and, in fact, has been in discussion with three potential suppliers since the merger of Daramic and Microporous was announced.

1. Entek

681. Entek, which had been a supplier of PE separators for industrial application in the 1990s, has at least twice expressed an interest to EnerSys to supply it with battery separators. (Burkert, Tr. 2311; Burkert, Tr. 2446, 2448, *in camera*; Gagge, Tr. 2514, *in camera*). During Daramic's force majeure in 2006, Entek also expressed a willingness to provide samples to EnerSys. (RX00201).

682. {

} (Burkert, Tr. 2448, *in camera*).

683. {

}

(Burkert, Tr. 2448, *in camera*).

684. {

} (Gagge, Tr.

2514, *in camera*).

2. Asian Producers

685. {

}

(RX00239, *in camera*; RX00193; RX00203, *in camera*). {

} (RX01203, *in camera*). EnerSys also gave

consideration to PT Separindo located in India (RX00194) and Epoch located in China

(RX00195).

3. BFR

686. {

} (Hall, Tr. 2849-52, *in camera*; RX00023 at 002, *in camera*). {

} (RX00025 *in camera*); {

}; (RX01206 *in*

*camera*). {

} (Axt, Tr. 2267-68, *in camera*).

687. BFR, which produces battery separators for JCI, the world's largest manufacturer of automotive batteries, has advised EnerSys that it is capable of producing industrial PE separators for EnerSys. (RX00225). BFR has also stated that it prefers establishing long term contracts with its key customers. (RX00225).



688. EnerSys agreed to support the financial cost of a new profile roll for BFR, at an approximate cost of \$5,000. (RX00237).

689. { }

(RX00204; Burkert, Tr. 2441, *in camera*; Gagge, Tr. 2513, *in camera*). {

} (RX00238; Axt, Tr. 2270, *in camera*).

{ } (RX238; Axt, Tr. 2270, *in camera*).

#### 4. Anpei

690. { }

(Axt, Tr. 2272, *in camera*).

691. {

} (RX00222, *in camera*).

692. {

} (RX00197, *in camera*).

693. {

} (Burkert, Tr. 2445, *in camera*).

694. {

} (Axt, Tr. 2273, *in camera*; Burkert, Tr. 2445, *in*

*camera*).

#### 5. Alpha Beta

695. {

} (Burkert, Tr. 2449-51, *in camera*). {

} (RX00199 *in*

*camera*; Axt, Tr. 2277, *in camera*; Burkert, Tr. 2456, *in camera*).

696. {  
} (RX00223, *in camera*; Burkert, Tr. 2450, *in camera*).

697. {  
} (Axt, Tr. 2278, *in camera*).

698. {  
  
} (Axt, Tr. 2278, *in camera*).

#### 6. Amer-Sil

699. {  
  
} (Burkert, Tr. 2451, *in camera*; PX1262).

700. {  
  
} (Gagge, Tr. 2512, *in camera*; Axt, Tr. 2288, 2183, *in camera*; PX1280). EnerSys has considered using Amer-Sil PVC separators. (PX1283).

701. {  
  
} (RX00199, *in camera*; RX00239, *in camera*; Burkert, Tr. 2456, *in camera*). {  
  
} (Burkert, Tr. 2356, *in camera*).

702. {  
  
  
  
} (RX00215, *in camera*). EnerSys also used Amer-sil for increased production during the fall 2006 *force majeure*. (Axt, Tr. 2287-88).

#### 7. Other Sources

703. {

} (Burkert, Tr. 2453-56, *in camera*; RX00199, *in camera*).

704. {

} (Gagge, Tr. 2510, *in camera*).

705. {

}

(Craig, Tr. 2629-30, *in camera*, 2631-32, *in camera*).

706. For example, {

} (Axt, Tr. 2272-2274, *in camera*).

707. {

} (Craig, Tr. 2631, *in camera*).

708. {

} (Axt, Tr. 2273, *in*

*camera*; Burkert, Tr. 2445, *in camera*).

709. {

} (Craig, Tr. 2632-33, 2635, *in camera*). {

}

(Gagge, Tr. 2518-19, *in camera*).

710. The above findings demonstrate a lack of any serious effort on EnerSys' part to find a supplier of PE separators despite ample opportunities to do so.

711. {

} (Craig, Tr. 2625, *in camera*). {

} (Craig, Tr. 2626, *in*

*camera*).

712. {

}

(Axt, Tr. 2238-39, 2250, *in camera*). This Court does not credit Axt's testimony.

(c) EnerSys Testing of Battery Separators

713. {

} (Gagge, Tr. 2508, *in camera*). For example, during the strike at Daramic's Owensboro facility, EnerSys accepted battery separators manufactured at the Feistritz location for use in EnerSys' facility in Monterrey, Mexico, after, at most, five months of testing. (Burkert Tr. 2400-01).

714. {

} (PX2188 at 002, *in camera*). {

}

715. {

} (RX00717, *in*

*camera*).

716. {

} (Burkert, Tr. 2441, *in*

*camera*; RX00204).

717. In a complaint filed by EnerSys against Daramic in state court in Pennsylvania in October 2006, which was verified by Axt as EnerSys' Vice President, Global Procurement, EnerSys admitted that obtaining replacement separators and qualifying an alternate supplier takes less than a year:

Moreover, even if EnerSys was able to purchase replacement battery separators from other vendors, such products could not immediately be used by EnerSys *and satisfy industry standards for battery performance and life testing*. Rather, significant engineering, testing, and manufacturing hurdles would be encountered to ensure that the replacement battery separators *would satisfy these specifications*. *These engineering, testing and manufacturing hurdles can take as long as one year to overcome*.

(RX00243 at 007 emphasis added).

718. {

} (RX00953 at 009, *in camera*).

{

} (RX00953 at 001, *in camera*). Accordingly,

EnerSys agreed with Microporous that EnerSys would be in a position to purchase, and

Microporous would be in a position to sell, separators within 18 months of the execution of the contract.

719. In addition, {

} (Axt, Tr. 2256, *in camera*). {

} (Axt, Tr. 2151-53, *in camera*, 2166-67, *in camera*).

(d) EnerSys' Business Today

720. {

} (Craig, Tr. 2639 *in camera*).

721. {

} (Craig, Tr.

2642 *in camera*). {

} (Axt, Tr. 2254, *in camera*).

(e) The Microporous Acquisition Did Not Result In A Loss Of Technological Innovation

722. {

} (Burkert, Tr. 2407, *in*

*camera*; RX01208, *in camera*). {

} (Burkert, Tr. 2407

at 08, *in camera*). {

} (Burkert, Tr. 2408, *in camera*). Daramic also considers the white PE project as being active, and awaits further information from EnerSys regarding this sample testing. (Hauswald, Tr. 1099).

723. While EnerSys witnesses testified that Microporous' white PE product in development was the answer to the Black Scum problem, the evidence demonstrates that, at best, this assertion is incorrect. (Whear, Tr. 4731-32, *in camera*; RX01298).

a. First, so-called Black Scum is a problem encountered with any PE product and is the result of oils found in the separator oxidizing. (Hauswald Tr. 1097-99; Whear Tr. at 4710-11; Burkert, Tr. 2316-17, 2468).

b. Second, Daramic studied the Black Scum problem in the 1990s and determined that the problem was the result of oils used in the separators and developed a process using so-called clean oil to reduce the Black Scum problem. (Whear, Tr. 4710-11). Daramic has a patent on this clean oil. (Whear, Tr. 4711).

c. Third, while Gilchrist testified at this hearing that Black Scum was the result of use of carbon black in PE separators and that Microporous' white PE was an example of Microporous' "innovation," the Court finds that Gilchrist is misinformed. Black Scum is not caused by carbon black but rather by oil from the separator, and that the white PE product (also known as LENO) is not in fact the dramatic technological improvement that Gilchrist made it out to be. (Gilchrist, Tr. 353-355; Hauswald, Tr. 1098; Whear, Tr. 4710-11; Whear, Tr. 4731-32, *in camera*; PX0662, *in camera* { }.

724. EnerSys complained to Daramic that it was experiencing a Black Scum problem at its Hays, Kansas plant. (Whear, Tr. 4714). Daramic studied the problem extensively and determined that cutting fluids used by EnerSys was causing this particular Black Scum problem. (Whear, Tr. 4719-21). Daramic met with representatives of EnerSys and recommended that EnerSys change its cutting fluid to reduce the frequency of the Black Scum incidents. (Whear, Tr. 4721-22; PX1253; Burkert, Tr. 2397-98).

(f) EnerSys' Witnesses Are Not Credible

725. This Court has heard the live testimony of Mr. Larry Axt, Mr. Larry Burkert, Mr. John Gagge and Mr. John Craig. Having viewed these witnesses and heard their testimony, the Court

does not credit their testimony as being credible. The EnerSys witnesses were heavily coached by FTC lawyers. (Axt, Tr. 2230; Burkert, Tr. 2369-76; Gagge, Tr. 2543-47; RX00192 at 001-2).

726. Led by Mr. John Craig, EnerSys has been a vocal opponent to the Daramic-Microporous merger. Craig, having been described as being on the “warpath” about the announced merger (RX00211; Gagge, Tr. 2544-46), {

}(Craig, Tr. 2619, *in camera*), {

} (RX00233, *in camera*; Craig, Tr. 2619-21, *in camera*). Craig

then instructed EnerSys employees to cooperate fully with the FTC lawyers (Gagge, Tr. 2547), which included voluntarily providing documents, dummy batteries and other information – some of which was not even requested by the FTC (Burkert, Tr. 2372-74; Burkert, Tr. 2404-10, *in camera*; RX00192; RX01017, *in camera*; RX00221 *in camera*; RX01012; RX01208 *in camera*). Craig also provided the contact information for its outside counsel, Stevens & Lee, to EnerSys’ competitors to contact the FTC regarding the Daramic merger with Microporous. (Craig, Tr. 2623, *in camera*; Godber, Tr. 280-282).

727. In addition to the clear bias of EnerSys in this matter, the Court finds the testimony of EnerSys’ witnesses as inconsistent with each other, certain exhibits and prior deposition testimony. For example, Mr. Craig repeatedly feigned a lack of recollection of his deposition testimony but yet was able to recall, unsolicited, a particular page of his deposition transcript. (Craig, Tr. 2574-81, Craig, Tr. 2619-20, *in camera*; RX00243; PX1288; PX1287).

728. Craig testified that he could not recall the content of the complaint filed by EnerSys against Daramic, even though he was questioned about it at his deposition and admitted at that time that the complaint did not allege that Daramic threatened to shut EnerSys down. (Craig, Tr. 2575-76). Yet Craig was able to recall the content when asked questions about it by the FTC on re-direct, contradicting his prior sworn and unchanged testimony. (Craig, Tr. 2652-53).



729. Craig also admitted that he read the testimony after the deposition, which included his prior testimony regarding the complaint, made no changes to it and signed the transcript under oath. (Craig, Tr. 2589-90, 2591-92; Craig, Tr. 2620-21, *in camera*).

730. Axt and Craig both testified regarding a purported conversation that they claim occurred with Mr. Toth regarding Daramic's declaration of a force majeure in October 2006. Yet, both Craig and Axt admitted that despite the supposed critical importance of Daramic separators to its business and supposed potential impact on its business of the force majeure, no one at EnerSys sent a single email or wrote a single memorandum documenting the purported conversation. (Craig, Tr. 2593, 2659-60; Axt, Tr. 2293-96). {

} (Axt, Tr. 2191, *in camera*), yet Craig testified that he alone was on the call with Toth and that he briefed Axt after the call. (Craig, Tr. 2592, 2571).

731. {

} (Craig Tr. 2617-18, *in camera*; RX00235, *in camera*). {

} (Craig, Tr. 2258, *in camera*), and did not even bother to search the Internet for "force majeure and Ticono" to see what information he could learn. (Craig Tr. 2587). Had he contacted Exide's purchasing manager, Gillespie, he would have learned that Exide also received notification of the force majeure from Daramic. (RX01048). {

} (RX00207 at 005 *in camera*).

732. Axt claims that EnerSys is "a company of our word" and "we make agreements and we stick to them." (Axt, Tr. 2116). {

} (Axt, Tr. 2148, *in camera*; RX00206, *in camera*).

{

} (Axt, Tr. 2251, *in camera*;

PX1201, *in camera*). {

} (Axt, Tr. 2263-

64, *in camera*; PX1205). Axt's past conduct further undermines his credibility in this hearing.

733. Thus, as set forth in the above findings, the Court finds that EnerSys has participated in this proceeding for purposes of obtaining advantages for EnerSys and that EnerSys' employees offered their testimony in effect to achieve those purposes. Accordingly, the Court cannot credit any of the EnerSys witnesses.

d. Trojan

734. Trojan Battery Company ("Trojan") is a global manufacturer of industrial batteries, manufacturing and selling batteries primarily for golf carts, but also for marine, floor scrubber and aerial work platform applications. (Godber, Tr. 133-134, 142-143). Trojan products are sold in what Trojan terms a "niche market." (Godber, Tr. 133).

735. Trojan is the largest manufacturer of golf cart batteries in the world. (Godber, Tr. 274).

{ } (Godber, Tr.

253, *in camera*). In 2007, {

} (Godber, Tr. 252-253, *in camera*).

736. Trojan sells approximately 40% of its batteries to original equipment manufacturers and sellers of new equipment and 60% to the after-market, where batteries are sold for use in used equipment). (Godber, Tr. 144.) Trojan's OE sales are mostly domestic (which Trojan defines as

North America) with only 4% being sold internationally. In after-market sales, 35-38% of Trojan's sales are domestic with the remainder being international. (Godber, Tr. 144.)

(a) Trojan's Products

737. Trojan believes the composition of its golf cart batteries is unique and it refers to the material in its batteries, including separators, as "our Coke formula" to which Trojan attributes its success. (Godber, Tr. 138.)

738. Trojan acquires AGM battery separators from China and uses those separators primarily in its marine line. (Godber, Tr. 148.) Trojan's product sales and purchases of component parts indicate that it is involved in activity throughout the global marketplace.

739. Trojan competes with US Battery, Exide, Crown Battery, East Penn Battery, Surette, a Canadian company, Johnson Controls, Global and Yuasa for customers. (Godber, Tr. 145.) Global and Yuasa are Asian battery manufacturers. (Godber, Tr. 145; Thuet, Tr. 4369-70).

740. Trojan considers FLEX-SIL® to be a unique battery separator. Because of FLEX-SIL®'s uniqueness, Trojan has invested substantial time and effort in marketing FLEX-SIL® to its customers. (Godber, Tr. 277.)

741. Trojan had never tried to qualify CellForce for use in OEM applications until late 2008. (Godber, Tr. 277-278.)

(b) Trojan's Relationship with Microporous

742. Trojan began purchasing battery separators from Microporous in the mid-1980's and signed its first agreement with Microporous in 1987. (Godber, Tr. 155.) Until the acquisition of Microporous by Polypore in 2008, Microporous was Trojan's exclusive battery separator supplier. (Godber, Tr. 153). Trojan believes that it was Microporous' largest customer. (Godber, Tr. 157).

743. Trojan first began purchasing FLEX-SIL® from Microporous in the mid-1980's and in approximately 1999, began purchasing CellForce from Microporous. (Godber, Tr. 155-156, 166).

744. {

}

(c) Trojan and Daramic

745. Trojan first heard of Daramic's HD battery separator in the February-April 2005 timeframe. (Godber, Tr. 178-179). Trojan obtained samples of the HD product and began testing it. Testing took approximately 9 months and resulted in Trojan qualifying the HD product for its Pacer battery line in March 2006, a low-end golf cart battery line sold in the after market. (Godber, Tr. 170-171, 273). The Pacer battery is not colored the same as other Trojan batteries and it would take a sophisticated buyer to determine that the Pacer battery is in fact a Trojan battery. (Godber, Tr. 271-272). Pacer is the only battery product for which Trojan qualified Daramic's HD product. (Godber, Tr. 271).

746. Since March 2006, Trojan had not initiated any additional testing whatsoever with respect to HD until 2009. (Godber, Tr. 273-274). Trojan has never purchased any HD separators from Daramic and it has no contract presently to purchase any HD product. (Godber, Tr. 270-271). Trojan has never made any attempt to qualify Daramic's HD product for an OEM application. (Godber, Tr. 271).

747. Trojan's testing of Daramic's HD product revealed that CellForce performed better than HD by 10-15% and that FLEX-SIL® performed better than CellForce by 15-20%. (Godber, Tr. 271). Accordingly, FLEX-SIL®, based on Trojan's testing, has a significantly better performance than Daramic's HD.

748. Complaint Counsel contends and Trojan claims, through the testimony of its Chief Executive Officer, Rick Godber, that Daramic's HD constituted economic "leverage" for Trojan to use in negotiations with Microporous concerning price increases. The facts do not support such contention and claim:

a. Trojan and Microporous were in a long-term contract or relationship at the time Trojan's CEO alleges such "leveraging" discussions took place.

b. The only evidence adduced through Trojan's CEO concerning savings consisted of \$200,000-300,000 in savings attributable to redesign and reengineering by Microporous – not price concessions. (Godber, Tr. 282-283).

749. After having been in conversation with Complaint Counsel concerning Polypore's acquisition of Microporous, in August 2008, Trojan's CEO emailed the FTC that:

{

} (RX00167, *in camera*.) (Godber, Tr. 255-256, *in camera*). (Emphasis added.)

750. {

} (RX00171, *in camera*) – {

} If, however, such

"leveraging" discussions had been as prominent as Trojan's CEO testified, his memory would have been clearer 9 months ago, and he would not have sent this email stating that he could not

swear to any “leveraging” in August 2008. Instead, Trojan’s CEO’s memory appears to have been the product of coaching rather than true, sincere recollection – raising questions about his truthfulness.

751. As shown in finding of fact 744, above, in the 5 years preceding the merger, Trojan’s purchases of CellForce constituted less than 6% of its total purchases from Microporous. The annual average of dollars spent on CellForce was \$907,000, compared to \$14,133,000 spent on FLEX-SIL®. CellForce was only approved for after market products. Accordingly, given the low percentage of purchases of CellForce, it is not credible that Trojan could have used the replacement of CellForce with HD as “negotiating leverage” against Microporous. Even if Trojan had threatened to convert all of its CellForce purchases to HD, the amount was not significant enough to have the negotiating impact claimed by Trojan.

752. Trojan’s CEO’s testimony regarding disclosures of Trojan’s testing information is inconsistent with the testimony of Mike Gilchrist, Microporous’ former CEO, and Steve McDonald, Microporous’ VP of Sales. Mr. Godber testified that he had made Microporous aware of Trojan’s test results of the HD product since late spring 2006. (Godber, Tr. 286-87). Mike Gilchrist testified that Microporous had not been informed of Trojan’s test results. Confirming this testimony is an email to Mr. Godber from Mike Gilchrist in September 2007, stating that no test results had been shared with Microporous concerning Trojan’s test results of HD products:

{

}

(PX0428 at 003, *in camera*)

753. As a matter of logic, Trojan would not have shared test results that on their face would have reduced its negotiating “leverage.” Again, these facts raise issues of credibility about Mr. Godber’s testimony.

754. Based on the above, the Court finds that the combination of these things all point to a simple fact, Trojan’s purchases and Trojan’s mode of dealing with Microporous was such that it used the prospect of Daramic’s HD product as negotiating leverage and it had not achieved prior reductions or surcharge elimination based on the threat of switching to HD.

755. Further, Trojan’s purchases of FLEX-SIL® are such that there is no indication Trojan has made any real effort to move from either CellForce or to HD as Mr. Godber claims.

(d) Trojan’s Bias (and Use of Its Buying Power) Against Daramic

756. Trojan had been single sourcing its battery separator supply for a number of years and had made very little effort to obtain a second source. (Godber, Tr. 278-279.)

757. Shortly after the merger, Trojan’s CEO talked with EnerSys’ CEO, John Craig, during which Trojan was invited to join an effort to fight Polypore’s acquisition of Microporous. Trojan responded that it was willing to participate “wholeheartedly” in the effort. Trojan thereafter returned a questionnaire submitted by counsel selected by EnerSys and soon thereafter was in direct and regular communication with the FTC concerning this matter. (Godber, Tr. 280-282).



758. As set forth below, Trojan's buying power and "wholehearted" efforts to fight the acquisition are shown in Trojan's negotiations with Daramic regarding a new long-term contract and price increases.

759. Harry Seibert, Daramic's Vice President and Business Director, met with Trojan on October 1, 2008, to discuss Daramic's requested price increases for 2009 of 13% and 15% for FLEX-SIL® and CellForce. (Seibert, Tr. 4196-98). The meeting was short and terse, as Trojan's CEO unequivocally rejected the price increase. (Seibert, Tr. 4196-4200) Seibert persisted in following up and shortly thereafter offered to compromise to 10% increases for both products, the implementation of the increases to be split between September 2008 and 2009.

{ (Seibert, Tr. 4200, *in camera*). {

} (Seibert, Tr.

4205-08, *in camera*; PX2115, *in camera*). {

} (Godber, Tr. 245, *in camera*). {

} (Godber, Tr. 246, *in camera*).

760. {

} (Seibert, Tr. 4209, *in camera*). {

}

(Seibert, Tr. 4209-4210, *in camera*). {

} (Seibert, Tr. 4210, *in*

camera). { } (Seibert, Tr. 4211, *in*

camera). {

} (Seibert, Tr. 4212, *in camera*).

761. In response to Trojan's continuing threats of a lawsuit, Daramic's CEO, in March 2009, initiated a telephone call to Trojan's CEO in response to Toth's request that he explained why there was this kind of disagreement that caused Trojan to threaten a lawsuit. Godber responded: "We need exclusivity and we need a long-term, secure supply position." (Toth, Tr. 1542-1543). Toth proceeded to give Trojan and Godber ideas about how the two companies could come together, to which Godber told Toth that he would have to call him back. (Toth, Tr. 1543-1544). Even after an additional message from Toth, however, Godber never returned the call. Instead, Daramic received another threat of a lawsuit, at which point Daramic decided to initiate a lawsuit in North Carolina in order to avoid suit in California. (Toth, Tr. 1544-1545). Even in his cross-examination, {

} (Godber, Tr. 250, *in camera*). Nonetheless,{

} (Godber, Tr. 251, *in camera*).

762. Based on the foregoing findings of fact, the Court finds that Trojan is a sophisticated buyer that utilized its size and buying power to reject or hold down price increases with both Microporous and Daramic. Trojan has repeatedly and consistently used its superior economic power in its negotiations with Microporous.

763. The Court further finds that, consistent with its prior conduct with Microporous, Trojan used that economic power, the pendency of this proceeding and the threat of California-based lawsuits to negotiate a long-term contract and lower pricing for Daramic.

764. The Court further finds, based on the above, that Trojan has the economic power to constrain prices of battery separator manufacturers, including Daramic.

B. The Other Buyers

a. East Penn

765. East Penn Manufacturing (“East Penn”) is a global lead-acid battery and wire and cable manufacturing company, with manufacturing facilities in the United States and China. (Leister, Tr. 3968-69). East Penn’s annual sales revenue is approximately \$1.25 billion. (Leister, Tr. 3968).

766. East Penn’s business is segmented into “Wire and Cable,” “Automotive,” and “Industrial” divisions. (Leister, Tr. 3968-69). The automotive division manufactures starting, lighting and ignition (“SLI”) batteries for use in cars, trucks, boats, recreational vehicles, power sports vehicles (e.g., “four-wheelers”) and golf carts. (Leister, Tr. 3976-77). The industrial division is separated into motive power batteries used in forklifts and other equipment, and stationary batteries used for backup power systems. (Leister, Tr. 3977).

767. The separators used by East Penn have different base materials including PE, AGM and phenolic resin. (Leister, Tr. 3980). Primarily, East Penn used PE separators in its products. (Leister, Tr. 3978-79).

768. East Penn uses “straight PE” separators (i.e., containing no other additives) in the batteries it manufactures for golf carts, floor scrubbers, and other deep cycle batteries. (Leister, Tr. 3979).

769. The PE separators used by East Penn for SLI batteries and industrial motive batteries are made of the same material, and can be made using the same process and equipment. Only the finishing process is different. (Leister, Tr. 3984).

(a) East Penn Battery Separator Buying History

(i) Daramic

770. {

} (RX01519, *in*

*camera*).

771. {

} (RX01519, *in camera*).

772. {

} (Leister, Tr. 3999-4000, *in camera*). {

} (Leister, Tr.

4000, *in camera*).

773. {

} (RX01519, *in camera*).

774. {

} (RX01519, *in*

*camera*). {

} (Leister, Tr. 4001-02, *in camera*; PX1550).

775. Prior to the entry of the Purchase Agreement, Daramic and East Penn also engaged in negotiations regarding price increases, which resulted in a lesser price increase than Daramic originally requested. (RX00086).

776. East Penn reviews its suppliers on a regular basis in the areas of quality, delivery performance, technology, information feedback and cost. (Leister, Tr. 3986). Daramic consistently ranks in the top 20 suppliers, with a score of 80%-90%. (Leister, Tr. 3987). Daramic rates "excellent" with East Penn in on-time delivery and technology, and is equal to all competitors with respect to quality. (Leister, Tr. 3988).

(ii) Microporous

777. East Penn has previously purchased small quantities of a rubber-based PE separator from Microporous for use in motive power batteries. The separators purchased from Microporous never exceeded 10% of the total amount of separators purchased for use by East Penn in motive power batteries. (Leister, Tr. 3980). East Penn has never purchased any other type of separator from Microporous for commercial use in any other battery application. (Leister, Tr. 3985-86, 3990, 3991).

778. East Penn has never had a long-term supply contract or a memorandum of understanding with Microporous for the purchase of separators. (Leister, Tr. 3989, Gilchrist, Tr. 503, *in camera*).

779. {

} (Leister, Tr. 4002-03, *in camera*). {

} (Leister, Tr. 4003, *in camera*).

780. In 2007, East Penn discussed the possibility of Microporous supplying PE separators to East Penn for use in SLI batteries. (Leister, Tr. 3990). East Penn provided Microporous part numbers and volumes that East Penn might be interested in purchasing from Microporous, but Microporous did not have the machinery or the tooling to supply the volumes that East Penn requested. (Leister, Tr. 3991).

781. Microporous never committed to East Penn that it could supply East Penn with the sizes and volumes of PE separators discussed in 2007. (Leister, Tr. 3991). East Penn did not want to enter into a memorandum of understanding (“MOU”) with Microporous, therefore, the discussions between the two companies “fizzled out” prior to Daramic’s acquisition of Microporous. (Leister, Tr. 4019).

782. Microporous has never been qualified by East Penn as an alternative supplier of PE separators.

783. Based on the foregoing, this Court finds that there is no credible evidence that East Penn would have entered into any supply contract with Microporous had the merger not occurred. Complaint Counsel’s suggestion otherwise is pure speculation.

(iii) Entek

784. East Penn purchases approximately 30% of its SLI PE separator needs from Entek, plus or minus 10% depending on seasonality. (Leister, Tr. 3984-85).

785. Approximately three years ago, East Penn also purchased PE separators from Entek for use in deep-cycle applications. (Leister, Tr. 3985). When East Penn purchased separators for both SLI and deep-cycle applications from Entek, Entek supplied approximately 50% of all of East Penn’s PE separator needs. (Leister, Tr. 3985).

786. Entek has approached East Penn within the last year to supply separators that can be used in deep-cycle applications. (Leister, Tr. 3993).

787. East Penn considers Entek an alternative supplier of PE separators for use in deep-cycle applications. (Leister, Tr. 3993).

(iv) Today

788. East Penn's sales to date in 2009 are down approximately 10% over last year. (Leister, Tr. 3970).

789. Although East Penn purchases PE separators from only Daramic and Entek, it has tested PE separators from Anpei and considers Anpei to be a viable alternative supplier for its operations in the United States. (Leister, Tr. 3992-93; RX00079).

b. Crown Battery Manufacturing Co.

790. Crown Battery Manufacturing Co. produces and sells SLI and industrial batteries. (Balcerzak, Tr. 4092).

791. The SLI segment constitutes approximately half of Crown's business. (Balcerzak, Tr. 4092). Crown's SLI batteries are used in automotive replacement, truck and bus applications, as well as deep cycle applications such as golf carts, sweeper/scrubber and marine. (Balcerzak, Tr. 4092).

792. The motive power industrial segment constitutes the remaining half of Crown's business. (Balcerzak, Tr. 4092). These batteries are primarily used in forklift and mining equipment applications. (Balcerzak, Tr. 4092).

793. Each year, Crown manufactures between 800,000 and 1 million automotive batteries. (Balcerzak, Tr. 4092-93). In its industrial division, Crown produces between 350,000 and 400,000 cells per year. (Balcerzak, Tr. 4093).

794. Crown uses PE separators in nearly all of its batteries. (Balcerzak, Tr. 4093-95). In its golf cart batteries, Crown uses FLEX-SIL® separators. (Balcerzak, Tr. 4093).

795. A number of batteries manufactured by Crown {  
} (Balcerzak, Tr. 4113-14, *in camera*).

(a) Crown Battery Separator Buying History

(i) Daramic

796. Crown and Daramic were parties to a Supply Agreement which was effective from January 1, 2005 to December 31, 2007. (RX00995 at 001). Pursuant to the terms of that contract, Crown purchased 100% of its PE separator requirements from Daramic. (RX00995 at 001).

797. Crown tested Daramic's HD product for use in its golf cart batteries, but HD did not perform as well as FLEX-SIL®. (Balcerzak, Tr. 4095). Based on those testing results, Crown did not consider switching from FLEX-SIL® to HD for use in its golf cart batteries. (Balcerzak, Tr. 4095). Crown has never used HD in its golf cart batteries. (Balcerzak, Tr. 4096, 4124).

798. During the labor stoppage at Daramic's Owensboro plant, Crown did not have to shut down any of its production lines and did not lose any production time. (Balcerzak, Tr. 4098-99). To help Crown stay in production, Daramic produced separators for Crown at its plants in Corydon, Indiana and Piney Flats, Tennessee. (Balcerzak, Tr. 4099-4100). In addition, Daramic maintained daily communications with Crown during the strike. (Balcerzak, Tr. 4100).

799. During the work stoppage, {  
} (Balcerzak, Tr. 4117, *in camera*).

800. Crown emerged "remarkably unscathed" from the labor stoppage and congratulated Daramic for doing "a heckuva good job" keeping Crown in production. (RX00330; Balcerzak, Tr. 4101-02).



801. {

} (Balcerzak, Tr. 4109, *in camera*).

802. The Owensboro work stoppage did not impact Crown's business. (Balcerzak, Tr. 4132).

(ii) Microporous

803. Crown uses FLEX-SIL® separators in its golf cart batteries. (Balcerzak, Tr. 4093).

Crown has used FLEX-SIL® in its golf cart batteries since at least 1988. (Balcerzak, Tr. 4095).

804. Crown has never used CellForce on a commercial basis in its golf cart batteries. (Balcerzak, Tr. 4096).

805. Crown approved CellForce for use on a temporary variation basis during the Owensboro strike. (Balcerzak, Tr. 4119). Crown used CellForce in lieu of PE separators in its industrial batteries for two weeks during the strike. (Balcerzak, Tr. 4119-20).

806. CellForce has not been qualified by Crown for general commercial use in any application. (Balcerzak, Tr. 4119-20).

(iii) Entek

807. In the past, Entek supplied nearly 100% of Crown's needs for industrial PE battery separators. (Balcerzak, Tr. 4097). Around 2002 or 2003, Entek moved the production of industrial separators to its facility in the United Kingdom. (Balcerzak, Tr. 4097). At that same time, the quality of Entek's product deteriorated significantly, and Crown's engineering department disqualified Entek's separators for use in Crown's industrial batteries. (Balcerzak, Tr. 4097).

808. When Entek began producing industrial separators in the United Kingdom, the logistics of obtaining separators from overseas did not create an impediment. (Balcerzak, Tr. 4129). The poor quality of Entek's industrial separators, not the location of Entek's plant, caused Crown to drop Entek as a supplier. (Balcerzak, Tr. 4128-29).

809. Crown has not attempted to obtain industrial separators from Entek since the Owensboro strike because Crown does not need a second supplier. (Balcerzak, Tr. 4131).

810. Entek is currently developing a deep cycle separator. (Balcerzak, Tr. 4130-31, 4138-39). At the BCI conference in May 2009, Entek expressed a desire to supply samples of its deep cycle separator to Crown and indicated that it would provide samples this year. (Balcerzak, Tr. 4138-39).

(iv) Today

811. { }  
(RX00994, *in camera*; Balcerzak, Tr. 4104, *in camera*). The effective date of the contract was January 1, 2008. (Balcerzak, Tr. 4097-98). { } (Balcerzak, Tr. 4104, *in camera*).

812. { } (Balcerzak, Tr. 4105, *in camera*). Daramic's initial contract proposal to Crown was for a term of three years. (Roe, Tr. 1722). In its response to Daramic's proposal, Crown asked for a term of five years. (Roe, Tr. 1722).

813. { } (Balcerzak, Tr. 4108, *in camera*). { } (Balcerzak, Tr. 4107, *in camera*). In fact, { } (Balcerzak, Tr. 4107-08, *in camera*).

814. { } (Balcerzak, Tr. 4106-08, *in camera*). { }

(Balcerzak, Tr. 4106-08, *in camera*). {

}

(Balcerzak, Tr. 4107-08, *in camera*). {

}

(Balcerzak, Tr. 4107-08, *in camera*).

}

815. {

} (Balcerzak, Tr.

4108, *in camera*). {

} (Balcerzak, Tr. 4108, *in camera*).

816. Crown decided to sole-source its separators from Daramic because of Daramic's history of supplying high quality separators. (Balcerzak, Tr. 4125).

817. {

} (Balcerzak, Tr. 4109, *in camera*).

818. As a customer, Crown has not seen any difference in the quality of Daramic's products since the acquisition. (Balcerzak, Tr. 4103). In fact, the acquisition has had absolutely no impact on Crown's business. (Balcerzak, Tr. 4103).

c. Douglas Battery Manufacturing Company

819. Douglas Battery Manufacturing Company ("Douglas Battery") is a battery manufacturer headquartered in Winston-Salem, North Carolina. (Douglas, Tr. 4048). This family owned and managed company was founded in 1921. (Douglas, Tr. 4048).

820. Prior to 2005, Douglas Battery produced automotive batteries. (Douglas, Tr. 4048). In 2005, however, Douglas Battery made a strategic decision to no longer produce batteries for automotive applications. (Douglas, Tr. 4048).

821. Douglas' decision to stop producing SLI batteries was driven by several factors, including the rising costs of raw materials, the consolidation of the battery manufacturing industry, and "intense" competition from offshore and south of the border. (Douglas, Tr. 4048-49, 4051-52).

822. Following the consolidation of the battery industry, only five battery manufacturers remain in the United States: (1) Johnson Controls, a "behemoth" of an organization, (2) Exide, a large company that has experienced financial turmoil, including a bankruptcy, over the past few years, (3) East Penn, a "fine" private company, (4) Crown, a smaller player, and (5) Douglas Battery. (Douglas, Tr. 4049).

823. Douglas Battery currently produces cycling batteries, including "material-handling batteries, coal mining batteries, and batteries for UPS and telecom." (Douglas, Tr. 4047-48, 4054).

824. Douglas Battery purchases separators for both flooded lead-acid batteries and valve regulated lead-acid batteries. (Douglas, Tr. 4053-54). Douglas uses AGM separators in its VRLA batteries. (Douglas, Tr. 4053-54).

(a) Douglas Battery Separator Buying History

(i) Daramic

825. Douglas Battery has purchased separators for its flooded lead acid batteries from Daramic since at least 1974. (Douglas, Tr. 4059). Jim Douglas, the Executive Vice President at Douglas, described Daramic as having the "highest integrity, good people devoted to the battery business" and Daramic's employees as "good, honest type people." (Douglas, Tr. 4060, 4062).

826. {

} (Douglas, Tr. 4072, *in camera*; PX2058, *in camera*).

827. Douglas is, and has been, satisfied and impressed with the quality of Daramic's separators. (Douglas, Tr. 4061) Furthermore, Douglas believes the pricing it has received from Daramic has been "very fair" and "value-added." (Douglas, Tr. 4061).

(ii) Microporous

828. Douglas Battery { }.  
(Douglas, Tr. 4063, Douglas, Tr. 4067, *in camera*).

829. Microporous has not contacted Douglas about a possible supply relationship or agreement since 2004. (Douglas, Tr. 4063).

830. At that time, Steve McDonald, on behalf of Microporous, approached Douglas Battery about purchasing battery separators from Microporous. (Douglas, Tr. 4062-63).

831. Douglas Battery found the Microporous product too brittle and decided not to purchase separators from or enter into a supply agreement with Microporous at that time, or at any later time. (Douglas, Tr. 4062-63, 4084).

832. Microporous has had no competitive influence on Douglas. In fact, Microporous has not even discussed the supply of separators with Douglas since 2004. (Douglas, Tr. 4063, Douglas, Tr. 4067, *in camera*).

833. { } (Gilchrist, Tr. 503, *in camera*).

(iii) Entek

834. Douglas Battery purchased separators from Entek many years ago when Douglas Battery was engaged in selling SLI separators. (Douglas, Tr. 4064). Douglas Battery has had no discussions about future supply with Entek since that time. (Douglas, Tr. 4064-65).

(iv) Today

835. Douglas Battery has felt the effects of the current economic recession. (Douglas, Tr. 4056). Sales for 2008 total approximately \$57 million. (Douglas, Tr. 4056-57). On the other hand, sales for 2009 are projected to be approximately \$33 to \$35 million. (Douglas, Tr. 4056).

836. {

} (PX2058, *in camera*; Douglas, Tr. 4066,

*in camera*). {

} (PX2058 at 001, *in camera*).

837. {

} (Douglas, Tr. 4066, *in*

*camera*, PX2058 at 015-17, *in camera*). {

} (Douglas, Tr. 4066-67, *in camera*).

838. {

} (Douglas, Tr. 4068, *in*

*camera*).

839. Currently, Douglas is also in discussions with AmerSil, a Luxembourg company and manufacturer of PVC separators. (Douglas, Tr. 4063). Amersil contacted Douglas Battery in 2008 expressing an interest in “establishing a foothold in North America.” (Douglas, Tr. 4063). Douglas Battery is currently waiting to test a new product technology that Amersil is developing. (Douglas, Tr. 4063-64).

840. This Court concludes based on the above findings, that Complaint Counsel has failed to show that Microporous was a competitive factor with respect to Douglas, Crown or East Penn

(the companies comprising the so-called "MP Plan") at the time these companies entered into their contracts with Daramic in late 2007 or early 2008.

d. U.S. Battery

841. U.S. Battery Manufacturing ("U.S. Battery") is headquartered in Corona, California. (Wallace, Tr. 1927).

842. U.S. Battery has two manufacturing facilities: one in Corona, California and another in Augusta, Georgia. (Wallace, Tr. 1957).

843. Although U.S. Battery purchases separators from North American suppliers, the separators are used in batteries that are sold across the globe. (Wallace, Tr. 1958-59). In fact, from its two North American manufacturing facilities, U.S. Battery sells batteries to customers in sixty countries worldwide. (Wallace, Tr. 1957-58).

844. U.S. Battery primarily manufactures batteries used in deep cycle applications, but also manufactures specialty batteries and batteries used in military SLI applications. (Wallace, Tr. 1927, 1930; Qureshi, Tr. 2075).

845. U.S. Battery's deep cycle batteries are used in golf carts, floor scrubbers, aerial lifts, marine applications, long-haul trucks, recreational vehicles, wind and solar power applications, and reserve power applications. (Wallace, Tr. 1955-56; Qureshi, Tr. 2076-77).

846. In fact, U.S. Battery can adjust the wiring of its deep cycle batteries so that the batteries can be used in a wide variety of end-use applications. (Wallace, Tr. 1956-57).

847. U.S. Battery's 2008 revenues were in excess of \$160 million. (Wallace, Tr. 1929-30).

848. In the past few years, U.S. Battery has been able to increase its revenue by aggressively developing new markets, such as Europe and the Pacific rim, and acquiring new accounts. (Wallace, Tr. 1930).

849. U.S. Battery's competitors include Trojan Battery, East Penn Manufacturing, Crown Battery, Exide, Superior Battery, and Johnson Controls. (Wallace, Tr. 1938).

850. U.S. Battery provides a warranty on its batteries based upon its level of confidence in the product. (Qureshi, Tr. 2066-67).

851. The warranty U.S. Battery offers on its premium line of batteries is one year. The warranty U.S. Battery offers on its economy line of batteries is six months. (Wallace, Tr. 1965-66). U.S. Battery prefers to use a FLEX-SIL® separator be used in any battery it offers under a one-year warranty. (PX1764 at 002). Consequently, U.S. Battery uses only FLEX-SIL® separators in its premium batteries. (Wallace, Tr. 1967; Qureshi, Tr. 2062).

(a) U.S. Battery Separator Buying History

852. Prior to the acquisition, U.S. Battery was purchasing separators from Daramic and Microporous. (Wallace, Tr. 1938). Microporous, however, was U.S. Battery's primary separator supplier. (PX0681 at 001).

853. U.S. Battery first began buying separators from Daramic for deep cycle applications in 2003. (Wallace, Tr. 1945; Qureshi, Tr. 2021). At this time, U.S. Battery was purchasing the Daramic DC separator. (Wallace, Tr. 1946-47; Qureshi, Tr. 2021). U.S. Battery began using Daramic HD, and stopped using Daramic DC, in 2006. (Qureshi, Tr. 2028).

854. U.S. Battery was also purchasing FLEX-SIL® separators from Microporous in 2003. (Wallace, Tr. 1945-46). In fact, U.S. Battery has been using FLEX-SIL® separators since at least 1993. (Qureshi, Tr. 2013).

855. Prior to the acquisition, U.S. Battery was purchasing Daramic HD separators for its low-end batteries and FLEX-SIL® separators for its premium batteries. (Wallace, Tr. 1958-60, 1967).



856. U.S. Battery purchased FLEX-SIL® separators from Microporous' Piney Flats, Tennessee facility and Daramic HD separators from Daramic's Owensboro, Kentucky facility. (Wallace, Tr. 1945, 1958-59).

(b) U.S. Battery Today

857. U.S. Battery currently purchases Daramic HD and FLEX-SIL® separators from Daramic for use in its deep cycle batteries. (Wallace, Tr. 1931, 1942-43). FLEX-SIL®, however, is the only separator U.S. Battery uses in its premium batteries. (Wallace, Tr. 1967; Qureshi, Tr. 2062; Whear, Tr. 4840, *in camera*).

858. U.S. Battery has two new products that it plans to bring to the market in 2009, US 27DC and US 31DC. Both batteries will use a FLEX-SIL® separator. (Wallace, Tr. 1948-49, Qureshi, Tr. 2044).

859. U.S. Battery will soon be manufacturing a deep cycle battery that uses an absorptive glass mat ("AGM") separator. (Wallace, Tr. 1975). For these batteries, U.S. Battery intends to purchase AGM separators from a supplier in China and import the separators to its North American manufacturing facilities. (Wallace, Tr. 1975-76).

(c) Separators Used in Deep Cycle Applications

860. U.S. Battery considers itself, and in fact holds itself out to its customers, as the leading manufacturer of deep cycle batteries. (Wallace, Tr. 1955; Qureshi, Tr. 2076).

861. U.S. Battery is the second largest manufacturer of deep cycle batteries, with a market share of 45% - 48% in the deep cycle battery market. (Wallace, Tr. 1938-39).

862. U.S. Battery manufactures between 1.5 million and 2 million deep cycle batteries per year. (Qureshi, Tr. 2076).

863. Approximately 80% of U.S. Battery's revenue is attributable to sales of deep cycle batteries. (Wallace, Tr. 1930).

864. U.S. Battery's annual spend on separators used in deep cycle batteries is approximately \$8 million. (Wallace, Tr. 1931). In 2007, over 90% **{(approximately \$7.275 million)}** of U.S. Battery's separator purchases were FLEX-SIL® separators. (Wallace, Tr. 1961-62; Qureshi, Tr. 2064-65; PX0949 at 229, *in camera*).

865. This is true even though a FLEX-SIL® separator costs twice as much as a Daramic HD separator. (Wallace, Tr. 1972; Qureshi, Tr. 2064).

866. Premium batteries make up at least 80% of U.S. Battery's deep cycle business. (Wallace, Tr. 1967). However, less than 20% of U.S. Battery's deep cycle batteries are used in original equipment applications. (Wallace, Tr. 1976).

(d) FLEX-SIL®

867. U.S. Battery advertises to its customers that the components of its batteries maximize the life and performance of its batteries. (Wallace, Tr. 1963). This message is set forth on U.S. Battery's website. (Wallace, Tr. 1963).

868. On its website, U.S. Battery describes its batteries as using "premium micro-rib FLEX-SIL® separators." (Wallace, Tr. 1964; RX01643). In fact, the website materials were created specifically to show that U.S. Battery's batteries contained a FLEX-SIL® separators. (Wallace, Tr. 1978-79). In contrast, there is no reference to Daramic HD anywhere on U.S. Battery's website. (Wallace, Tr. 1963-65).

869. FLEX-SIL® is the only separator U.S. Battery uses in its premium deep cycle batteries. (Wallace, Tr. 1967; Qureshi, Tr. 2062; Whear, Tr. 4840, *in camera*).

870. Batteries with FLEX-SIL® separators have a minimum warranty of one year and the warranty could last for as long as two years. (Wallace, Tr. 1966). U.S. Battery distinguishes its premium batteries to its customers based on this extended warranty. (Wallace, Tr. 1970). The longer warranty is significant to customers who continue to purchase U.S. Battery's premium

batteries based in part on the longer warranty on these premium batteries. (Wallace, Tr. 1970-71).

(e) Daramic HD

871. While premium batteries make up at least 80% of U.S. Battery's deep-cycle business, U.S. Battery does not use Daramic HD separators in its premium batteries. (Wallace, Tr. 1967).

872. Furthermore, Daramic HD has not been qualified by U.S. Battery for deep cycle batteries that are used in original equipment end-use applications. (McDonald, Tr. 3822; Roe, Tr. 1762).

873. U.S. Battery did develop a new, low-cost golf cart battery using Daramic HD that would be sold without a warranty. (McDonald, Tr. 3822; Roe, Tr. 1762; Whear, 4840).

874. Daramic HD has the disadvantage of being more flexible than FLEX-SIL®, which causes problems on U.S. Battery's production lines. (Qureshi, Tr. 2072).

875. {

} (McDonald, Tr. 3914; PX1746 at 002; RX00780 at 001;

RX01093; RX00657, *in camera*).

876. U.S. Battery offers a six month warranty for batteries made with Daramic HD. (Wallace, Tr. 1965).

877. For these reasons, U.S. Battery has never switched from FLEX-SIL® to Daramic HD in a golf cart battery. (McDonald, Tr. 3945-46, 3956-58).

878. U.S. Battery suspended purchases of Daramic HD in late 2007. (Qureshi, Tr. 2073).

(f) CellForce

879. In 2007, U.S. Battery informed Microporous that it would not recommend a CellForce separator for use in its premium batteries. (Qureshi, Tr. 2070; PX1763 at 003).

e. Bulldog Battery

880. Bulldog Battery manufacturers flooded lead-acid batteries for motive power industrial applications. (Benjamin, Tr. 3504). The batteries manufactured by Bulldog are used primarily in fork truck (fork lift) applications. (Benjamin, Tr. 3504).

881. Bulldog is headquartered and has its sole manufacturing facility in Wabash, Indiana. (Benjamin, Tr. 3533).

882. There are only five North American battery manufacturers producing and selling motive power batteries. (Benjamin, Tr. 3537).

883. Bulldog comprises 10% of the North American motive power market and competes with EnerSys, Douglas and East Penn. (Benjamin, Tr. 3507).

884. Bulldog uses a .140 width separator profile for 95% of its batteries. (Benjamin, Tr. 3534-3535, 3545).

885. The .140 width separator used by Bulldog is an off-size thickness for a battery separator. (Benjamin, Tr. 3537). The .140 width separator used by Bulldog is the thickest battery separator found in forklift batteries. (Benjamin, Tr. 3537). Bulldog is the only North American manufacturer of motive power batteries that uses a .140 width separator. (Benjamin, Tr. 3537).

886. It is difficult for battery separator suppliers to manufacture a .140 width separator. (Benjamin, Tr. 3537-3539).

887. Bulldog has encountered several quality issues with the .140 width separator, including pinholes in the separator. (Benjamin, Tr. 3538).

888. A battery separator supplier needs a particular calender roll in order to manufacture a .140 width separator. (Benjamin, Tr. 3539-3540).

(a) Bulldog Battery Separator Buying History

(i) Through 2002

889. Through 2002, Bulldog purchased all of its battery separators from Daramic. (Benjamin, Tr. 3509).

(ii) 2003

890. In 2003, Bulldog began purchasing all of its separator requirements for the .140 width separator profile from Microporous. This represented 95% of Bulldog's battery separator needs. (Benjamin, Tr. 3534-3535).

891. The remaining 5% of Bulldog's battery separator needs continued to be supplied by Daramic, as Microporous did not have the tooling to manufacture these particular separator profiles. (Benjamin, Tr. 3512-3513, 3534-3535).

892. After the switch to Microporous, Bulldog began using Microporous' CellForce battery separator product for the .140 width separator. (Benjamin, Tr. 3518, 3535).

893. From 2003 until the acquisition, Bulldog used only the CellForce battery separator product for the .140 width separator. (Benjamin, Tr. 3518, 3535).

894. Before Microporous could supply .140 width separators to Bulldog, it was necessary for Microporous to purchase a new calender roll that was capable of manufacturing .140 width separators. (Benjamin, Tr. 3512, 3514, 3540).

895. Microporous required Bulldog to enter into a supply agreement with Microporous before it would agree to acquire the new calender roll. (Benjamin, Tr. 3540).

896. After Bulldog switched suppliers and began purchasing all of its .140 width separator requirements from Microporous, Daramic scrapped the calender roll it had been using to manufacturer .140 width separators. (Benjamin, Tr. 3541).

897. From the time Daramic scrapped the calender roll it had been using to manufacturer .140 width separators for Bulldog up through the present, Microporous (and now Daramic post-

acquisition) was the only battery separator supplier in the world that had a calender roll capable of manufacturing a .140 width separator. (Benjamin, Tr. 3542-3543).

898. From 2005 up until the present, it would take only about 12 weeks for any other separator supplier to be able to manufacture and supply Bulldog with .140 width separators. (Benjamin, Tr. 3543).

(iii) 2006

899. Daramic approached Bulldog Battery in 2006 with a proposal to regain Bulldog's business for the .140 width separator. (Benjamin, Tr. 3516, 3545).

900. At this time, Daramic would have needed to acquire and groove a new calender roll in order to be able to manufacturer a .140 separator for Bulldog. (Benjamin, Tr. 3541).

901. Bulldog ultimately kept its business with Microporous in 2006. (Benjamin, Tr. 3549).

902. Pricing was not a factor in Bulldog's decision to keep Microporous as its sole supplier for the .140 width separator. (Benjamin, Tr. 3516).

903. Bulldog actually informed Microporous of the proposal it received from Daramic. (Benjamin, Tr. 3546).

904. At that time, Bulldog also informed Microporous that it had no intention of leaving Microporous and made it clear that Bulldog was not threatening Microporous with the Daramic proposal. (Benjamin, Tr. 3546-3547).

905. In fact, Bulldog did not have any intention of switching its supplier of the .140 width separator from Microporous to Daramic. (Benjamin, Tr. 3545).

906. Bulldog did not use the Daramic proposal as an ultimatum to obtain price concessions from Microporous. (Benjamin, Tr. 3547).

907. In actuality, Bulldog informed Microporous of Daramic's proposal so that Microporous would be aware of Daramic's intentions in the marketplace. (Benjamin, Tr. 3547).

908. Microporous lowered the price of the .140 width battery separator to Bulldog as a thank-you for Bulldog informing Microporous of Daramic's activities in the marketplace. (Benjamin, Tr. 3548).

909. This price adjustment took effect January 2, 2007. (Benjamin, Tr. 3547-48).

910. Less than one year after Microporous lowered the price of the .140 width separator, Bulldog received a price increase on the .140 width separator from Microporous consisting of a price increase and a rubber surcharge. (Benjamin, Tr. 3548-49).

(iv) Post-Acquisition

911. Bulldog Battery continues to use the CellForce separator today for at least 95% of its battery separator requirements. (Benjamin, Tr. 3504, 3518, 3535-36).

912. Similar to the pre-acquisition time period, post-acquisition only one battery separator supplier produces the CellForce separator. (Benjamin, Tr. 3549).

913. Bulldog has not qualified Daramic's HD separator product for use in its batteries. (Benjamin, Tr. 3564).

914. Setting aside any quality issues during the Owensboro strike, Bulldog is pleased with the quality of the .140 width separator being manufactured by Daramic. (Benjamin, Tr. 3556).

915. Bulldog has had no discussions with Entek regarding its battery separator needs over the past several years. (Benjamin, Tr. 3521).

(v) Price Adjustments

916. When Daramic was forced to implement an energy surcharge in 2008, Bulldog accepted the surcharge. (Benjamin, Tr. 3521).

917. Daramic also notified Bulldog of a price increase effective January 1, 2009. (Benjamin, Tr. 3521-3522).

918. Daramic's energy surcharge and 2009 price adjustment were based on raw material cost increases. (Benjamin, Tr. 3523).

919. Bulldog did not protest Daramic's price adjustments because Bulldog understood Daramic was just passing along its cost increases. (Benjamin, Tr. 3553-3554).

920. In 2009, Daramic lowered the price of the .140 width separator to Bulldog by rescinding the energy surcharge. (Benjamin, Tr. 3554).

(vi) Owensboro Strike

921. In the fall of 2008, a strike at Daramic's Owensboro facility resulted in Bulldog receiving partial shipments from Daramic. (Benjamin, Tr. 3529, 3531).

922. Daramic stayed in constant communication with Bulldog during the course of the Owensboro strike and informed Bulldog that it was using all means necessary to fulfill Bulldog's separator supply needs. (Benjamin, Tr. 3551-3552).

923. In fact, Daramic informed Bulldog that it would attempt to get Bulldog as much of its requested supply as possible during the strike. (Benjamin, Tr. 3531).

924. Bulldog threatened legal action against Daramic because of the supply issues during the Owensboro strike. (Benjamin, Tr. 3552).

925. Bulldog did not commence any legal proceedings against Daramic, however, because it was Bulldog's opinion that Daramic was doing everything within its power to supply Bulldog with separator material. (Benjamin, Tr. 3552).

## **VI. The Competition**

### **A. Entek**

#### **a. Company Background**

926. Entek consists of three companies: Entek Holding Company, Entek International LLC and Entek International Ltd. Entek Holding Company is a holding company that controls and operates Entek International LLC, which is located in Lebanon, Oregon, and Entek International



Ltd., which is located in the United Kingdom. (Weerts, Tr. 4450). Unless otherwise stated, “Entek” refers to all of them.

927. {  
} (RX00116, *in camera*). Entek is the largest battery separator manufacturer for SLI in North America {  
}. (Gilchrist, Tr. 624; RX00124, *in camera*).

928. {  
} (Roe, Tr. 1365, *in camera*; Gillespie, Tr. 3126, 3128, *in camera*). {  
} (Gillespie, Tr. 3125, *in camera*, RX00116 at 006, *in camera*).

929. A company related to Entek is in the business of selling equipment that can be used to make a PE line. (Hauswald, Tr. 1167). {  
} (RX00146 at 002, *in camera*).

930. {  
} (Weerts, Tr. 4456, *in camera*; RX00114 at 004, *in camera*).

931. {  
} (RX00114 at 006, *in camera*). {  
} (RX00114 at 006-07, *in camera*).

932. {  
} (Weerts, Tr. 4457-4458, *in camera*).

933. Entek serves the world from only two facilities, one in North America and one in the U.K. (Weerts Tr. 4450-51) {

} (Weerts, Tr. 4460, *in*

*camera*; RX00115 at 002, *in camera*). {

} (Weerts, Tr. 4460, *in camera*). {

} (Weerts, Tr. 4460, *in*

*camera*).

934. {

} (Weerts, Tr. 4461, *in camera*).

935. {

} (Weerts, Tr. 4461, *in camera*). {

} (Weerts, Tr. 4461-62, *in camera*).

936. {

} (RX00117, *in camera*; Weerts Tr.

4465-4466, *in camera*). {

} (RX01001, *in camera*; RX00114, *in camera*; PX0907, *in camera*; PX1833)

937. {

} (Weerts, Tr. 4466-67, *in camera*).

938. {

} (Weerts, Tr. 4492, *in camera*). {

} (Weerts, Tr. 4456-

57, *in camera*).

939. {

} (RX00114 at 005, *in camera*). {

} (RX00114 at 005-06, *in camera*). {

} (RX00114 at 006, *in camera*).

940. {

} (Weerts, Tr.

4522, *in camera*). {

} (Weerts,

Tr. 4489, *in camera*).

b. Entek's Competitors

941. {

} (RX00115 at 007, *in camera*;

Weerts, Tr. 4465, *in camera*; RX00115 at 007-08). {

} (RX00124 at 005,

*in camera*; Weerts, Tr. 4468, *in camera*). {

} (RX00124 at 005, *in camera*;

Weerts, Tr. 4468, *in camera*).

942. {

} (RX00124 at 004, *in camera*). {

} (RX00124 at 004, *in*

*camera*). {

} (Weerts, Tr. 4468-69, *in camera*).

c. Entek's Current Excess Capacity Crisis

943. {

} (Weerts, Tr. 4459-60, *in camera*). {

} (Weerts, Tr. 4495-96, *in camera*).

944. {

} (Weerts, Tr. 4522-23, *in camera*). {

} (Weerts, Tr. 4522-23, *in camera*).

945. Based on the foregoing findings of fact, the Court finds that Entek's excess capacity is significant economic motivation for Entek to pursue customers for all types of PE separators and to lower prices. The Court further finds that today's existing economic conditions and Entek's excess capacity are significant motivation for Entek to lower prices and compete aggressively based on price, which will constrain price increases by competitors, including Daramic.

d. Entek's Growth

946. {

} (RX00133, *in camera*; Weerts, Tr. 4483, *in camera*). {

} (Weerts, Tr. 4470, *in camera*). {

} (RX00133, *in camera*; Weerts, Tr. 4483, *in camera*).

{

} (RX01119, *in camera*). Additionally, Entek was recently approached by Trojan battery about becoming a second source of supply for Trojan at the 2009

BCI convention. (Godber, Tr. 278). Entek continues to compete with Daramic for East Penn's business. (Seibert, Tr. 4176-77).

947. From the above findings, the Court further finds that Entek is highly motivated to produce industrial PE separators and to be a deterrent to Daramic, or anyone else in raising prices.

(a) JCI

948. {

} (RX00133, *in camera*). {

} (Weerts, Tr. 4469, *in camera*).

949. {

} (Weerts, Tr. 4472, *in camera*;

RX00131, *in camera*). {

} (RX00133, *in camera*; Weerts, Tr. 4469, *in camera*).

950. {

} (Hauswald, Tr. 909, *in*

*camera*).

951. {

}

(RX00133, *in camera*; Weerts, Tr. 4476, *in camera*).

952. {

} (Weerts, Tr. 4473-74, *in camera*). {

} (RX00129 at

001-2, *in camera*; Weerts, Tr. 4474, *in camera*).

953. {

} (RX00133, *in camera*, Weerts, Tr. 4478, *in camera*).

954. {

} (RX00133, *in camera*, Weerts, Tr. 4477, *in camera*).

955. {

} (RX00131, *in camera*, Weerts, Tr. 4458, *in camera*). {

} (Weerts, Tr. 4458, *in camera*).

956. {

} (Weerts, Tr. 4496, *in camera*). {

} (Weerts, Tr.

4458, 4496, *in camera*). {

} (Weerts, Tr. 4459, *in camera*; Hall Tr. 2828, *in camera*; RX00065 at 007, *in camera*).

957. {

} (Weerts, Tr. 4457-58, *in camera*). {

} (Weerts, Tr. 4458, *in camera*).

958. {

} (Weerts, Tr. 4496-97, *in camera*). {

} (Weerts, Tr. 4497, *in camera*).

959. {

} (Weerts, Tr. 4479-80, *in camera*). {

} (Hauswald, Tr. 943, *in*

*camera*). {

} (RX000133, *in camera*; Weerts, Tr. 4477, *in camera*)

960. {

} (Weerts, Tr. 4521, *in camera*).

961. {

} (RX00132, *in camera*). {

} (Weerts, Tr. 4483, *in camera*).

962. {

}

(RX00150, *in camera*; RX00183, *in camera*).

(b) Exide

963. {

} (Weerts, Tr.

4483, *in camera*; Gillespie, Tr. 3021, *in camera*). {

} (Gillespie, Tr. 3126, *in camera*). {

} (Gillespie, Tr. 3021, *in camera*).

964. {  
} (RX00114 at 008, *in camera*). {

} (Weerts, Tr. 4488-99, *in camera*). {

} (RX00114 at 008, *in camera*).

{

} (Weerts, Tr. 4489, *in camera*).

965. { }

(Weerts, Tr. 4485, *in camera*). {

} (Gillespie, Tr. 3021, *in camera*).

966. {

} (RX00145, *in camera*). {

} (Weerts, Tr. 4484, *in camera*).

{ }

(Weerts, Tr. 4485, *in camera*).

967. {

} (RX00141, *in camera*; Gillespie, Tr. 3124, *in camera*).

968. {

} (Weerts, Tr. 4489, *in camera*). {

} (Weerts, Tr. 4522, *in camera*). {

} (Weerts, Tr.

4522-23, *in camera*).



969. {

} (Weerts, Tr. 4494, *in camera*).

970. {

} (Gillespie, Tr. 3037, *in camera*).

971. {

} (RX00146, *in*

*camera*; Weerts, Tr. 4487-88, *in camera*). {

} (Weerts, Tr. 4490, *in*

*camera*).

972. {

} (Weerts, Tr. 4487-88, *in camera*). {

} (Weerts, Tr. 4488, *in camera*).

e. Entek as a Supplier

973. {

} (Weerts, Tr. 4462-63, *in camera*). {

} (Weerts, Tr. 4463, *in*

*camera*).

f. Entek's Relationship with Dumas

974. Around 2000, Entek entered into an alliance with Dumas, an AGM manufacturer. (Roe, 1745; RX00151). Entek and Dumas presented themselves jointly in the marketplace. (Roe, Tr. 1745). This prompted Daramic to enter into a similar alliance with H&V. (Roe, Tr. 1745).

g. Summary Findings

975. Based on the foregoing findings, the Court further finds that: Entek's 2008 capacity expansion is a significant factor which impacts the supply of PE battery separators because it increases the PE battery separator production capacity worldwide and in North America.

976. Entek's underutilized capacity will result in its aggressive solicitation of new business and the reduction of its prices. Entek's extra capacity and the global economy are factors that will constrain prices for all battery separator manufacturers, including Daramic.

B. Other Competitors

a. BFR

977. {

} (RX00049; RX00050 at 004, *in camera*; Hauswald, Tr. 1033, *in camera*;

RX00032, *in camera*). James Kung, who built the PE lines that are currently in operation at BFR, was also a partial owner when BFR was established. (Hauswald, Tr. 1033). {

}

(RX00069, *in camera*).

978. {

} (RX00053, *in camera*; RX00052, *in*

*camera*; Hall, Tr. 2715-16; Hall, Tr. 2820-21, *in camera*).

979. {

} (RX00032, *in camera*; Hall, Tr. 2825, *in camera*).

980. Currently, BFR operates four production lines. (Hauswald, Tr. 1034). {

} (RX00032, *in camera*; Hall, Tr. 2769, 837-38,

2860, *in camera*; PX0922 (Roe, IHT at 328), *in camera*).

981. { } (Hall, Tr. 2765, *in camera*). {

(RX00032, *in camera*; Hall, Tr. 2766, *in camera*). { } (RX00032, *in camera*; Hall, Tr. 2770, *in camera*).

982. { } (RX00032, *in camera*).

983. { } (Hall, Tr. 2844-45, *in camera*). { } (RX00057, *in camera*).

984. BFR also believes that it will continue to become more price competitive. (RX00056).

985. { } (RX00050 at 011, *in camera*). JCI's intends to "make [BFR] a world class separator supplier to JCI and other battery manufacturers," and its operations could expand outside of Asia. (RX00051; RX00055). { } (RX00058, *in camera*).

986. BFR competes with both Entek and Daramic, as well as other smaller separator manufacturers. (Hauswald, Tr. p. 1034).

987. Daramic's witnesses testified that Daramic has lost business to BFR, and that the business "goes back and forth." (Hauswald, Tr. 1034; Thuet, Tr. 4331, 4348, 4445).

988. Using its access to competitive material, Daramic has tested BFR's PE separators and has found them to be comparable to Daramic's product, with no significant difference in the material. (Thuet, Tr. 4335-36).

989. {

} (RX00048, *in camera*; RX00049; Hall, Tr. 2853-54, *in camera*).

990. {

} (Hall, Tr. 2838-39, *in camera*).

991. {

} (RX00059, *in camera*; RX00060, *in camera*; RX00025, *in camera*; RX00026, *in camera*; RX00027, *in camera* {

}; RX00061, *in camera*; RX00062, *in camera*). {

} (RX00061, *in camera*).

992. {

} (Axt, Tr. 2218, *in camera*)

993. {

} (Burkert, Tr. 2388, *in camera*).

994. {

} (Gagge, Tr. 2500, *in camera*).

995. {

Tr. 2846-47, *in camera*). {

} (Hall,  
} (Thuet, Tr.

at 4352, *in camera*) {

} (Thuet Tr. at 4353, *in camera*). {

} (Hall, Tr. 2846-47, 2880, *in camera*). The process is not secret and anyone could do it.  
(Hall, Tr. 2894, *in camera*). {

} (Thuet, Tr. 4434; RX00677, *in camera*).

996. In addition to Entek and BFR, there are numerous companies throughout the world that compete with Daramic in the sale of battery separators. (Hauswald, Tr. 853, 859, *in camera*; Hauswald, Tr. 1032-37; RX00239, *in camera*). These companies have become prolific in the past few years and their influence and reach is expanding rapidly. (Hauswald, Tr. 1032-37; Thuet, Tr. 4331, 4348, 4445).

b. NSG

997. {

} (PX0917 (Cullen, Dep. at 251), *in camera*;

PX0922 (Roe, IHT at 331-32, *in camera*). {

} (Hauswald, Tr. 867, *in camera*).

998. NSG is a public company that releases and publishes its financial condition. (Thuet, Tr. 4386).

999. The capacity of NSG's Japanese plant is approximately 30 million square meters, and the capacity of the line in China is 10 million square meters. (Hauswald, Tr. 1108; Thuet, Tr. 4330).

1000. Daramic considers NSG to be one of its primary competitors. (Thuet, Tr. 4330; PX0522).

1001. {

} (Hauswald, Tr. 867, *in camera*).

1002. {

} (Hauswald, Tr. 870, *in camera*;

Hauswald, Tr. 1108; Thuet, Tr. 4325).

1003. {

} (Hauswald, Tr.

869-70, *in camera*; RX01435, *in camera*; PX0923 (Hauswald IHT at 261-62), *in camera*).

1004. {

} (Hauswald, Tr. 878-79, *in camera*).

1005. {

} (PX0923; (Hauswald, IHT at 267-68), *in camera*). NSG does not use a

Jungfer line, but has designed its own PE line. (Hauswald, Tr. 1185).

1006. {

} (PX0923

(Hauswald IHT at 267-68), *in camera*).

1007. {

} (Siebert, Tr. 4260, *in camera*; RX01073, *in camera*).

1008. In addition to its facility in Japan, NSG has a footprint in North America with a facility in North Carolina. (Thuet, Tr. 4382-84, 4441-42)

1009. Since the joint venture between Daramic and NSG was consummated, Daramic has continued to test NSG's competitive product from Japan, and has continued to find NSG's separators to be comparable to its own separators. (Thuet, Tr. 4335-36; PX0194, *in camera*).

1010. {

} (PX0923 (Hauswald, IHT at 267-68), *in camera*).

1011. Daramic faces competition from NSG not only throughout Asia, but also in Eastern Europe and other parts of the world. (Thuet, Tr. 4340).

1012. Daramic faces competition with NSG for both automotive and industrial separators, both directly in Asia; and indirectly throughout the world. For example, Asian companies, such as Leoch in China, export industrial batteries containing NSG separators to North America. (Thuet, Tr. 4348).

1013. {

} (PX0917 (Cullen Dep. at 245-46, 251), *in camera*;

RX00095, *in camera*).

1014. Exide requested that NSG bid on the RFP it provided to worldwide battery separator manufacturers in 2007. NSG did not submit a quote because it did not have capacity at its Japanese facility. (PX1079; Gillespie, Tr. 2953).

c. Anpei

1015. Anpei is a Taiwanese company with plants in Tianjin, China, Guangzhou, China, and Taiwan. Anpei's PE plant is in Tianjin, China. (Hauswald, Tr. 1030).

1016. {

} (PX0907 (Kung Dep. at 42-43), *in camera*).

1017. {

} (PX0907 (Kung Dep. at 50-51), *in camera*; RX00043 at 003, *in camera*).

1018. {

}

(Hauswald, Tr. 859-60, *in camera*; Hauswald, Tr. 1030; Thuet, Tr. 4331; PX0917 (Cullen Dep. at 283, *in camera*; PX0907 (Kung Dep. 42-43, 50-51), *in camera*).

1019. Anpei sells and ships its product throughout the world. (Hauswald, Tr. 860-63, *in camera*; Hauswald, Tr. 1030; Thuet, Tr. 4331, 4340; RX01064; RX01342).

1020. {

} (RX00342 at 072, *in camera*).

1021. Anpei's product, like that of BFR and NSG, is considered to be comparable to the product manufactured by Daramic and Entek. Anpei produces high quality PE separators which are used in OEM applications. (Hauswald, Tr. 1037).

1022. {

} (Seibert, Tr. 4165, 4175-76, *in camera*; Thuet, Tr. 4340; RX000342 at 072-73, *in camera* (noting that Entek lost SLI business to Anpei and Daramic because its pricing was not competitive)).

1023. Daramic has tested Anpei material and found it to be comparable to its own separators, with no significant difference in the quality of the material. (Thuet, Tr. 4336, 4349)



1024. {

}

(Axt, Tr. 2219, *in camera*).

1025. {

} (Axt, Tr. 2272-73, *in camera*).

1026. {

} (Axt, Tr. 2272-73, *in camera*).

1027. {

} (Burkert, Tr. 2388, *in camera*).

1028. East Penn has also solicited a quote for PE separators from Anpei. (Leister, Tr. 3993).

1029. East Penn has tested and approved the Anpei separators. (Leister, Tr. 3993, 4032-33).

1030. Mr. Leister from East Penn testified that if the PE separator industry were to change such that East Penn could not obtain supply from its current PE suppliers, it would consider Anpei to be an alternative supplier. (Leister, Tr. 3993).

d. Separindo

1031. Separindo is a company located in Indonesia that produces PE separators for SLI and industrial applications. Its lines were built by James Kung and have a total capacity of 17-20 million square meters. Separindo is about the same size as the former Microporous. (Hauswald, Tr. 1036; PX1073; Seibert, Tr. 4160, *in camera*; Thuet, Tr. 4331; PX0922 (Roe, IHT at 337), *in camera*).

1032. Daramic has tested Separindo separators and has found them to be "quite good" and comparable to Daramic's separators with no significant difference between the products. (Thuet, Tr. 4335-36; 4542-43).

1033. {

} (PX0922 (Roe, IHT at 328), *in camera*).

e. Sebang

1034. Sebang is located in Korea. {

}

(Gilchrist, Tr. 563; Hauswald, Tr. 1035; Seibert Tr. 4264-65, *in camera*; Thuet, Tr. 4331; (PX0922 (Roe, IHT at 337), *in camera*).

1035. {

} (PX0922 (Roe, IHT at 329), *in camera*).

1036. {

} (Gaugl, Tr. 4532; PX0905 (Gaugl, Dep. at 10-12), *in camera*).

1037. At the time that the Jungfer lines were installed at Sebang/Global, Mr. Gaugl was required to prove that the lines could produce material that was "in spec" and capable of running a certain "throughput," both of which were defined in the equipment purchase agreement between the two companies. (Gaugl, Tr. 4539-40).

1038. To be "in spec" means that the separator is specified by certain characteristics, including, but not limited to, tensile strength, pin puncture resistance, electrical resistance, dimensional stability. All these specs were specified in the contract, and Mr. Gaugl and his team were required to show that the material produced on those lines met the specifications. (Gaugl, Tr. 4539-40).

1039. In order to prove that the material was "in spec," a head-to-head comparison was made with other separators, including those of Daramic, Entek and Jungfer, showing that the new lines

at Global/Sebang were able to produce a separator of equal quality. The results proved the material was in spec and capable of the required throughput. (Gaugl, Tr. 4541-42).

1040. Daramic has tested Sebang separators and has found them to be "quite good" and comparable to Daramic's separators with no significant difference between the products. (Thuet, Tr. 4335-36; 4542-43).

f. Baotou

1041. Baotou is located in Inner Mongolia, Northern China. It produces PE separators for industrial and automotive applications with one Jungfer line that was installed in the late-1990s. (Gilchrist, Tr., 563; Hauswald, Tr. 1035, 1110; Thuet, Tr. 4336; PX0184, *in camera*).

1042. The line at Baotou was originally installed by Peter Gaugl. The line has a capacity of 7 million square meters. (Gaugl, Tr. 4532-33).

1043. Daramic has tested Baotou material and found it to be comparable to Daramic material, with no significant difference in the quality of the material. (Thuet, Tr. 4336, 4349).

1044. Further, at the time that Mr. Gaugl installed the line at Baotou, he was responsible for testing the material that came off the line and ensuring that it was within certain specifications outlined in the agreement between Jungfer and Baotou. The specifications constituted the industry standards at that time for separators sold by all competitors. (Gaugl, Tr. 4538).

1045. Mr. Gaugl and Jungfer were able to prove that the material produced on the Baotou lines was "in spec" in a head-to-head comparison with Daramic, Entek and Jungfer separators, and capable of the required throughput. (Gaugl, Tr. 4541-42).

g. Smaller Competitors

(a) Epoch

1046. Epoch is a company formed by former employees of BFR which started operations in late 2006 or early 2007. (Thuet 4333-34). Epoch operates one 6 million square meter production line

near Shanghai. (Hauswald, Tr. 1036; Thuet, Tr. 4331-32). The line was not built by Jungfer. (Hauswald, Tr. 1185).

1047. Daramic considers Epoch to be very aggressive in the global separator market. Today, Daramic faces competition from Epoch in China, as well as exports from Epoch in other areas of the world, including Europe. (Thuet, Tr. 4333; Hauswald, Tr. 1035-36; RX00195; PX0994, *in camera*; RX00551 at 004, *in camera*; RX01003 at 007, *in camera*).

1048. Mr. Thuet testified that Epoch is currently producing and selling separators, and Daramic continues to meet Epoch in the competitive market every day. (Thuet, Tr. 4333).

1049. {

} (Thuet, Tr. 4411, *in camera*).

(b) M-Arrow and Genius

1050. M-Arrow is a very small operation in India, with only 1 to 1.5 million square meters of capacity. M-Arrow began operations in 2006, and {

} (Hauswald, Tr. 932-33, *in camera*; Thuet, Tr. 4332-4334).

1051. Genius is another small separator manufacturer, with one million square meters of capacity. It competes with Daramic in China. (Thuet, Tr. 4332).

h. The Threat of Other Competition

1052. {

} (RX00115 at

007, *in camera*; Weerts, Tr. 4465, *in camera*; RX01003, *in camera*).

1053. Further, Daramic has had to react competitively to the surplus capacity all over the world, including that of Asian competitors, by being as creative as possible with new products and making sure its customer service is as good, if not better, than its competition. Daramic has also had to adjust its prices in response to aggressive competition from Asian separator manufacturers. (Thuet, Tr. 4342-43).

1054. {

} (Weerts, Tr. 4469, *in camera*).

1055. {

} (Weerts, Tr. 4468, *in camera*).

1056. {

} (Weerts, Tr. 4468, *in camera*).

1057. Additionally, Asian deep-cycle batteries for use in floor-scrubbers and golf carts are already being imported into North America by at least two Chinese companies, Leoch and RPS, which is exporting deep-cycle batteries to Florida from China. (Thuet, Tr. 4446-47).

1058. Based on the foregoing findings, the Court finds that there are numerous battery separator manufacturers who have the ability to produce, and have a history of producing, battery separator products comparable to Daramic and Entek. Many of these manufacturers are located in Asia.

1059. The Court further finds that given the excess capacity in the marketplace, these manufacturers are likely to begin aggressive efforts to sell separators in North America.

1060. The Court further finds that current market conditions, including without limitation the number of Asian suppliers, the strength of competition, and the amount of excess capacity, will constrain pricing and prevent any potential anti-competitive effects of the acquisition.

## VII. Ease of Entry

### A. Timeliness

#### a. Construction of a PE Production Line

1061. A PE separator production line can be completely installed and begin commercial operation in { }. (Gaugl, Tr. 4543; PX0907 (Kung, Dep. at 27-29, 43), *in camera*). On average, it takes { }. (Gaugl, Tr. 4543; Hauswald, Tr. 873-75, 880, 883, *in camera*).

1062. Generally, the time period to install a PE line can be broken down as follows: The layout of the production line and specifications of the equipment can be completed in 2 months. (Gaugl, Tr. 4543). The longest lead time equipment takes about 10 months to procure. (Gaugl, Tr. 4543-44). Engineering details of the line are typically finalized while waiting for the equipment to arrive, so there is no additional time needed for this step. (Gaugl, Tr. 4544). Installation of the equipment can be completed in approximately 4 months, and the initial start-up and debugging of the production line takes about 2 months. (Gaugl, Tr. 4544).

1063. PE separators have been manufactured for over fifty (50) years and the manufacturing technology for such separators is well known. (Hauswald, Tr. 957-59). Daramic uses the original equipment installed on its lines in Owensboro in 1981. (Hauswald, Tr. 960-61).

1064. The equipment used to build a PE production line can be purchased from several different vendors located in the U.S. and Europe. (Gaugl, Tr. 4544). Most pieces of equipment, including the mixers, the extruder, the calender, the dryers, the slitter and the windup, are purchased “off the shelf.” (Gaugl, Tr. 4545). {

} (Weerts, Tr. 4499, *in camera*). {

}

(Weerts, Tr. 4498-99, *in camera*).

1065. Other pieces of equipment, such as the distillation unit, the condensation unit, the carbon beds and the extractor, must be ordered. (Gaugl, Tr. 4544-45). Although this equipment must be ordered, there is nothing special or unique about it. For instance, a distillation unit may be ordered for a PE production line, but it can also be ordered for other applications, such as making alcohol. (Gaugl, Tr. 4545-46).

1066. Calender rolls can be procured in 12-14 weeks from any one of several vendors located in the U.S. and Europe. (Gaugl, Tr. 4553-54).

1067. It is not difficult to find and learn about the equipment needed to build a PE line. (Gaugl, Tr. 4546). Anyone can learn about the equipment by visiting trade shows, researching online, or reviewing catalogues provided by vendors. (Gaugl, Tr. 4546).

1068. The equipment and technology needed to set up a new PE line is not proprietary and is generally known and available in the industry. (Gaugl, Tr. 4547). The process of manufacturing PE separators is not a secret. (Gaugl, Tr. 4547). To the contrary, there are “a lot of people” who know the process. (Gaugl, Tr. 4547).

1069. Several individuals in the battery separator industry know how to install a PE separator line. (Gaugl, Tr. 4547-48). For example, James Kung, Dr. Herwig Winkler, a former Jungfer employee, and Hans-Peter Gaugl, who is not under a non-compete with Daramic, knows how to install a PE line. (Gaugl, Tr. 4547-48, 4611; Kung Depo, 10). {

}

(RX00058, *in camera*).

1070. { } have all developed and set up new production lines in 18 months or less. (RX00147 at 001, *in camera*; RX01314 at 001, *in camera*; RX01045 at 001, *in camera*). For example, Daramic built a greenfield production facility in Prachinburi, Thailand with a capacity of 15 million square meters in approximately 16 months. (Hauswald, Tr. 1111-12). When Daramic moved two production lines from Austria to Thailand, it took { } to reassemble the lines and begin producing product. (Hauswald, Tr. 873-75, *in camera*; RX00699 at 032, *in camera*). Moreover, Daramic built a 30 million square meter line and began producing PE separators on that line { } (Hauswald, Tr. 880, 883, *in camera*).

1071. { } (Weerts, Tr. 4496, *in camera*). { } (Weerts, Tr. 4496, 4516-17, *in camera*).

1072. Microporous installed a PE production line and began commercial production from its facility in Austria in { }. (RX01045, *in camera*).

1073. { } (Gaugl, 4543-44, 4550; RX01029, *in camera*; RX01045, *in camera* { }; RX01046, *in camera*).

1074. James Kung, one of the individuals who knows how to install a PE line, { } (PX0907 (Kung, Dep. at 27-28), *in camera*). Additionally, Kung { } (PX0907 (Kung, Dep. at 43), *in camera*).



1075. {

} (RX00053, *in camera*). {

} (RX00032, *in camera*).

b. Testing of PE Product

1076. A battery separator manufacturer does not need to complete construction of a new PE separator line before it can begin testing products from that line. Rather, much of the required testing {

(RX01045-001, *in camera*).

1077. {

} (RX01137, *in camera*; RX01139; RX01140; RX01141, *in camera*;

RX01142; RX01144, *in camera*; RX01145, *in camera*; RX01146; RX01147, *in camera*;

RX01148 at 2 { }, *in camera*; RX01149 at

002 { }, *in camera*; RX01150

at 003 { }, *in camera*; RX01151

("testing will take 6 months); RX01153; RX01155 at 002, *in camera*; RX01156 ("BMW's requirement is 12 weeks on tests"). (Whear, Tr. 4788-4789). Customers can {

} (Gagge, Tr. 2507, *in camera*; Gillespie, Tr. 2975-2976;

RX00321). {

} (Gagge, Tr. 2508, *in camera*). For example, life cycle

testing and production testing { } (Gagge, Tr. 2507-08, *in camera*).

1078. Battery manufacturers can also send batteries to outside firms for testing, often resulting in shorter testing times. (RX00007). For instance, Exide determined that complete life cycle testing would take less than six and a half months if the testing was conducted by an outside firm. (RX00007).

1079. Testing of a separator product can take as little as a couple of months. (Gilchrist, Tr. 567). In fact, testing the basic functionality of a separator can be accomplished in a few weeks. (Gilchrist, Tr. 567-68). The testing process for an automotive separator typically lasts less than a year. (Gilchrist, Tr. 567; RX00014 at 001). Complete testing and final acceptance of a new separator by a customer typically takes less than one to two years. (PX2300 (Heglie, IHT at 127); RX00243-007; RX00014 at 001). A battery should last at least 700 cycles. (Quershi, Tr. 2031).

1080. In a complaint filed by EnerSys against Daramic in October 2006, which was verified by Larry Axt as EnerSys' Vice President, Global Procurement, EnerSys admitted that obtaining replacement separators and qualifying an alternate supplier takes less than a year:

*Moreover, even if EnerSys was able to purchase replacement battery separators from other vendors, such products could not immediately be used by EnerSys and satisfy industry standards for battery performance and life testing. Rather, significant engineering, testing, and manufacturing hurdles would be encountered to ensure that the replacement battery separators would satisfy these specifications. These engineering, testing and manufacturing hurdles can take as long as one year to overcome.*

(RX00243 at 007, emphasis added).

1081. Axt's admission comports with what was summarized in a Microporous call report with him in October 2006. (RX01162-02)("6-12 months period for qualification/acceptance of new product.").

1082. Nawaz Qureshi, the Vice President of Engineering and Technology at U.S. Battery, testified that a separator can be qualified after 750 cycles. (Qureshi, Tr. 2068). During testing, a

battery can be cycled 2-4 times per day. (Qureshi, Tr. 2067-68). Thus, a separator can be fully qualified for commercial use in less than one year. (Qureshi, Tr. 2067-68).

1083. Trojan Battery completed testing and qualified Daramic's HD product in a total of nine months. (Godber, Tr. 170-71).

1084. {  
  
}. (Weerts, Tr. 4496-  
97, *in camera*). {  
  
}. (Weerts, Tr.  
4497, *in camera*).

1085. In 2006, {  
  
}. (RX00342 at 030, *in camera*). Furthermore, {  
  
} in 2006.  
(RX00342 at 020, *in camera*).

1086. The Technical Requirements outlined in Exide's Global PE Separator RFQ state that the testing and validation process will take up to 1 year and 9 months for transportation (SLI) separators and up to 2 years for industrial separators. (RX00013 at 009). According to Exide, these validation times include both life cycle and field testing. (RX00013 at 009).

1087. {  
  
},  
(Hall, Tr. 2814, *in camera*; RX01161 ("According to Dr. Johns the qualification process will take 6 months from time of receipt of samples")), and {  
  
} (RX00076, *in camera*; RX00043 at 003, *in camera*).

1088. Based on the above findings, the Court finds that the introduction of a competitive product can be accomplished in a timely fashion (i.e., less than two years).

B. Sufficiency

1089. Today, Entek has {  
}. (Weerts, Tr. 4459-60, *in camera*). Thus,  
Entek currently has a {  
}. (Weerts, Tr.  
4459-60, *in camera*).

1090. {  
}. (PX0174 at 102, *in camera*). {  
}. (Weerts, Tr. 4459-60, *in  
camera*).

1091. In addition to producing SLI separators, Entek manufactures {  
}. (Weerts, Tr. 4492-93, *in camera*). Customers who purchase separators from  
Entek {  
}. (Weerts, Tr.  
4492-93, *in camera*).

1092. Entek {  
}. (Weerts, Tr. 4493, *in camera*). {  
}. (Weerts, Tr. 4493-94, *in  
camera*).

1093. As long as a separator manufacturer has calender rolls on hand, it takes only a few hours  
to switch production from SLI to industrial, or vice versa. (Gilchrist, Tr. 558-59). Calender rolls  
cost around \$20,000, regardless of whether they are used to make SLI or industrial product.  
(Gilchrist, Tr. 559).

1094. Based on the findings listed above, the Court finds that the introduction of additional  
production is sufficient to counteract any competition which could potentially be lost due to the  
acquisition.



1104. {

} (RX01570, *in camera*).

b. Asian Competitors

1105. Daramic's primary competitors in Asia include NSG (33 million square meter capacity), BFR (30 million square meter capacity), Anpei (22 million square meter capacity), Separindo (17 million square meter capacity), Sebang (15 million square meter capacity) and Epoch (6 million square meters capacity). (Thuet, Tr. 4330-32). Daramic's competitors in Asia are very aggressive. (Thuet, Tr. 4330).

1106. The Asian PE separator industry is expanding rapidly. (Thuet, Tr. 4333). Since 2006, BFR added two additional production lines which doubled its capacity. (Thuet, Tr. 4333). In addition, Separindo and Anpei each recently added a production line. (Thuet, Tr. 4333).

1107. Daramic tested PE separators produced by its Asian competitors and found no differences between its separators and those manufactured by the competitors. (Thuet, Tr. 4335-36; Gaugl, Tr. 4541-42). The test results showed that the competitors' separators are comparable to Daramic's separators from a materials and performance standpoint. (Thuet, Tr. 4335-36; Gaugl, Tr. 4541-42).

1108. Currently, there are 50 million square meters per year of excess PE separator production capacity in Asia. (Thuet, Tr. 4329-30). Daramic has 10-15 million square meters of excess capacity in Asia. (Thuet, Tr. 4338).

1109. Due to the excess capacity in Asia, separator manufacturers located in Asia are exporting products to other parts of the world. (Thuet, Tr. 4339-40). For example, Daramic is exporting separators to Europe, the Middle East and South America. (Thuet, Tr. 4339). NSG, Anpei and Epoch are also exporting to Europe and South America. (Thuet, Tr. 4339-40).

1110. The costs of shipping from Asia {  
}. (Thuet, Tr. 4351-52, *in camera*).

{  
} (Thuet, Tr. 4352, *in camera*). {  
}. (Thuet, Tr. 4352, *in camera*).

However, {  
}. (Thuet, Tr. 4352-53, *in camera*). For example, BFR, which is located in China, is able to eliminate part of the 12% non-recoverable VAT through the establishment of a duty book which tracks all material in and out of the plant. (Hall, Tr. 2846-47, *in camera*).

1111. The cost of manufacturing separators in Asia {  
}. (Thuet, Tr. 4357-58, *in camera*). It costs {  
} a typical SLI separator in Asia compared to Europe. (Thuet, Tr. 4357, *in camera*). Likewise, the cost of manufacturing separators in the U.S. {  
} the cost of producing in Asia. (Thuet, Tr. 4357-58, *in camera*).

c. Entek Excess Capacity

1112. In order to {  
}. (Weerts, Tr. 4495, *in camera*). {  
}.  
(Weerts, Tr. 4495, *in camera*).

1113. Entek {  
}. (Weerts, Tr. 4495, *in camera*). Entek is using its excess capacity to aggressively price and market its products on a global basis. (Weerts, Tr. 4495-96, *in camera*).

d. Sponsored Entry/Vertical Integration

1114. One example of sponsored entry is {  
}. (Weerts, Tr. 4480, *in camera*). {  
}. (Hall, Tr. 2820, *in camera*). {  
}. (Hall, Tr. 2749, 2825,  
*in camera*). {  
} (Hall, Tr. 2749, 2825, *in camera*).

1115. {  
}. (RX00073; Hall, Tr. 2826-28, *in camera*).

1116. Another example is {  
(PX0907 (Kung, Dep. at 59), *in camera*). {  
}. (PX0907 (Kung, Dep. at 59), *in camera*). BFR was founded in 2000 through a joint  
venture agreement between Fengfan Group and Rising Group. (RX00050 at 04). {  
}. (RX00053, *in  
camera*; RX00052, *in camera*; Hall, Tr. 2715-16). The resulting three-party joint venture  
continued to be called BFR. (Hall, Tr. 2716). {  
}. (RX00032, *in camera*).

1117. BFR supplies separators on a global basis, including into South America. (RX00050 at  
11). When the supply agreement with BFR was signed, JCI intended to “make [BFR] a world  
class separator supplier to JCI and other battery manufacturers.” (RX00055).

1118. Through comments to JCI and BFR, {  
}. (RX00062,  
*in camera*). As a result, {



}. (RX00061, *in camera*).

1119. { } (Hall, Tr. 2820-21, *in camera*; RX00950, *in camera*).

1120. { } (Thuet, Tr. 4361-65, *in camera*). {

} (Thuet, Tr. 4361-65, *in camera*).

1121. { } (Seibert, Tr. 4263-65, *in camera*). {

} (Seibert, Tr. 4264-65, *in camera*).

1122. Based on the above findings, the Court finds that entry into the separator industry would be profitable. The Court further finds that entry is likely by Entek, numerous Asian suppliers, and/or sponsored entry/vertical integration by battery manufacturers.

### **VIII. The H&V Agreement**

#### **A. The Cross Agency Agreement Between H&V and Daramic was a Legitimate Sales Joint Venture Between the Companies**

1123. Pursuant to the 2001 Cross Agency Agreement ("Agreement"), {

} (RX00688, *in camera*). The companies also planned potential sharing of technologies and development of new products at the outset of the Agreement. (Roe, Tr. 1746-47).

1124. Importantly, Daramic makes PE separators; H&V did not, and does not. (Whear, Tr. 4679-80; PX0094; PX0200). {

} (PX0925 (Porter, Dep. at 15-16), *in camera*; PX0917 (Cullen, Dep. at 5-6), *in camera*; Whear, Tr. 4738, *in camera*). Daramic had and has no plans to produce AGM separators, and H&V had and has no plans to produce PE separators. (PX0925 (Porter, Dep. at 39), *in camera*; PX0200). In fact, one of the benefits of the Agreement to Daramic was having an AGM product in its portfolio. (Roe, Tr. 1746). Accordingly, Daramic and H&V were not actual or potential competitors. (PX0011; PX0200; Hauswald, Tr. 645).

1125. One of the primary motivations for the Agreement was to allow Daramic and H&V to compete with a similar joint venture between Entek and Dumas, an AGM producer. (Roe, Tr. 1745; RX00151). {

} (PX0925 (Porter, Dep. at 110), *in camera*). {

} (PX0925 (Porter, Dep. at 110), *in camera*). Likewise, Daramic felt that it needed an alliance with H&V in order to effectively compete against Entek/Dumas. (Roe, Tr. 1745).

1126. As part of the Agreement, H&V and Daramic engaged in joint activities including significant joint marketing, promotional efforts and joint exhibits at trade shows and conventions - activities which have been "very successful." (PX0925 (Porter, Dep. at 126-28), *in camera*; Roe, Tr. 1746-47; RX00373). In addition, Daramic and H&V participated in joint customer appreciation events. (Roe, Tr. 1746-47; RX01102; RX01103; RX01104; RX01105). These efforts were successful in opening doors in regions of the world where Daramic or H&V had little or no presence. (Roe, Tr. 1746-47; PX0925 (Porter, Dep. at 126-27), *in camera*; RX01101;

RX00363; RX01106). {

} (Roe, Tr. 1747-48; RX00363; RX00364; RX00365; RX00381;

RX01100, *in camera*; RX01108, *in camera*; RX01109, *in camera*; RX01110, *in camera*;

RX01111, *in camera*; RX01112, *in camera*; RX01113, *in camera*; RX01114, *in camera*;

RX01115, *in camera*; RX01116, *in camera*; RX01117, *in camera*; RX01118).

1127. Because they produced products using different technologies, H&V and Daramic looked at joint research and development opportunities for new products. (Roe, Tr. 1747; PX0917 (Cullen, Dep. at 119-23), *in camera*). {

} (PX0917

(Cullen, Dep. at 119-23), *in camera*).

1128. {

} (PX0917 (Cullen,

Dep. at 114-15), *in camera*). Daramic represented H&V primarily in India and Brazil. (Roe, Tr. 1747-48). {

} (PX0917 (Cullen, Dep. at 314-15), *in camera*).

1129. {

}. (RX00381, *in camera*). {

} (PX0917 (Cullen, Dep. at 14), *in*

*camera*). {

} (PX0917 (Cullen, Dep. at 68-69), *in camera*).

1130. {

} (PX0925 (Porter, Dep. at 65-66), *in camera*). {

} (PX0925 (Porter, Dep. at 65-66), *in camera*). These exchanges

promoted and facilitated the venture's activities. (PX0925 (Porter, Dep. at 126-28), *in camera*;

Roe, Tr. 1746-47). {

} (PX0925 (Porter, Dep. at 65-66), *in camera*).

1131. {

} (PX0925 (Porter, Dep. at 65-66), *in camera*). {

} (PX0925

(Porter, Dep. at 65-66, 131), *in camera*).

1132. Based on the above findings, the Agreement between Daramic and H&V was a legitimate and productive cooperative venture which (1) had no effect of limiting or restraining competition between the two companies and/or (2) was reasonably ancillary because it promoted the success of this more extensive cooperation.

## **IX. Remedy**

### **A. There is no Basis for any Required Divestiture of the Feistritz Plant**

1133. The FTC seeks divestiture of the former Microporous plant in Austria (the "Feistritz Plant"). For the reasons set forth herein, no relief is necessary, but even if it were, divestiture of the Feistritz Plant is unwarranted, inappropriate under the facts and, significantly, outside of the jurisdiction of the FTC.

1134. First, the Feistritz Plant was not a part of the acquisition as an operating facility since it was not in operation as of February 29, 2008.

1135. Second, the Feistritz Plant is not located within North America, the relevant geographic market alleged by the FTC.

1136. {

} (Trevathan, Tr. 3571-72;

RX01227 at 002, 039,063-066, *in camera*; RX01228, *in camera*; RX01229 at 047, *in camera*; RX01572; RX01042, *in camera*; RX00546, *in camera*).

1137. Fourth, inclusion of the Feistritz Plant with U.S.-based assets that could be subject to a divestiture order is not necessary in order for those assets to be "viable." In fact, Gilchrist admitted during the hearing that the Feistritz Plant was not necessary for Microporous to be viable, and that Microporous for years had manufactured and shipped separators out of Piney Flats to Europe and Asia. (Gilchrist, Tr. 511, *in camera*; Gilchrist, Tr. 540-41).

1138. Fifth, the Feistritz Plant, which came online in March - June 2008, does not sell products to customers located in North America or the United States. (Gaugl, Tr. at 4643).

1139. Sixth, the FTC has not shown that operation of the Feistritz Plant enhanced North American (or United States) competitive conditions, the United States being the jurisdiction for which the FTC has authority to act regarding maintenance of competitive conditions. More specifically, there is no evidence that opening of the Feistritz Plant had the effect of enabling the plant in Piney Flats, Tennessee, to sell products either in the United States or North America that it otherwise would not have been able to sell.

1140. There is no dispute that the plant was not in operation as of February 29, 2008. The Feistritz Plant did not commence operation until March 2008 and did not become fully operational until June 2008. (Gaugl, Tr. 4603; Gilchrist, Tr. 374-75). Thus, when Daramic acquired Microporous on February 29, 2008, as a part of that transaction it did not acquire an operating plant in Feistritz, Austria. Divestiture should not be required of a business that was simply not part of the acquisition.

1141. {

} (Kahwaty, Tr. 5519, *in camera*). {

}

(Kahwaty, Tr. 5519, *in camera*). Even if Respondent's global geographic market is accepted, the "competitive effects story," does not support any required divestiture of the Feistriz Plant.

1142. {

} (Gilchrist, Tr. 528-31, *in camera*).

1143. {

}

(Gilchrist, Tr. 502, *in camera*). The Microporous Board was concerned about Microporous' financial situation given this exposure and questioned Gilchrist's financial acumen. (PX2301 (Heglie Dep. at 91-93, 149-153)). As of December 31, 2007, Microporous had tremendous debt of approximately \$46,139,000. (PX0078 at 021; Gilchrist, Tr. 549). This debt included monies expended in 2007 for the Feistriz expansion. (PX0078 at 021, Gilchrist, Tr. 550).

1144. Whatever may have been the circumstances as of February 2008, it is quite clear today that adding Feistriz to a divestiture package would only create serious viability issues for the "newco" and would add to the difficulty of accomplishing divestiture. Feistriz is now operating at approximately 70% capacity and 2009 forecasts were that, considered as a free-standing entity, {

} (Gaugl, Tr. 4569, 4571-73;

Riney, Tr. 4962, 4969, *in camera*; Hauswald, Tr. 922, *in camera*). Moreover, without the addition of the transferred Potenza orders, the capacity level at Feistritz would only be about 35-40%. (Gaugl, Tr. 4572-73). This is the level at which Feistritz would be operating had the merger not occurred. Including Feistritz operating at 35-40% of capacity with a projected net income deficit of approximately \$4 million would create an extremely unattractive divestiture package. {

} (RX01603, *in camera*). (Riney, Tr. 5020-22, *in camera*; RX01603, *in camera*).

1145. Nor is there evidence to support any claim that the Feistritz plant has indirectly added to output or otherwise promoted competitive conditions in the U.S. or North America. While the CellForce line at Piney Flats was apparently operating at or near full capacity in 2005, there was discussion of expanding that capacity (Trevathan, Tr. 3582) and an expansion plan was momentarily implemented. That plan, however, was terminated in 2007, never revived and the Piney Flats CellForce line is now operating at 35-40% capacity. (Trevathan, Tr. 3647).

1146. At the time of the acquisition, apparently some 60% of the PE line at Piney Flats was being exported to Europe and sold to EnerSys. (Trevathan, Tr. 3774; Gaugl, Tr. 4555). The plan, which was implemented, was for the EnerSys product to be produced at the Feistritz Plant when it came online. These numbers show that the CellForce line at Piney Flats did not add to its customer base after the transfer of 60% of its production to Feistritz. The transfer to Feistritz theoretically enabled Piney Flats to produce more product for U.S. and North America sales, but that production did not occur and that has never been the reality.

1147. Different plans had been considered regarding the addition of production facilities in Europe and at Piney Flats. The facility at Feistritz was to be used primarily to supply EnerSys in Europe. But conversations with JCI and Exide in the U.S. led to consideration of adding a line in Piney Flats. In fact, certain assets for this "third line" (at Piney Flats) were purchased. However, both JCI and Exide terminated their interests in purchasing product from Microporous and the equipment purchase was put "on hold" in May 2007. The equipment that had already been purchased was put in boxes and, as of June 2009, it was sitting in those boxes located in Feistritz and Piney Flats. (Gaugl, Tr. 4558-65; Trevathan, Tr. 3598-3615).

1148. Trevathan testified that producing the EnerSys products at Feistritz freed up capacity at Piney Flats (Trevathan, Tr. 3721) and "helped Microporous expand its business in the United States." Trevathan, Tr. 3773. He said that "we would be able to go out to customers and bring in incremental volume." (Trevathan, Tr. 3774). But he was never asked and never testified that Microporous actually obtained new business in the U.S. that made use of the freed-up capacity.

{

} (Gilchrist,

Tr. 503, *in camera*).

1149. In short, there is no credible evidence that the capacity at Piney Flats that became available as a result of the Feistritz plant was actually put to use producing product for U.S. or North American customers. And there is certainly no credible evidence that that capacity was necessary to enable Piney Flats to supply all of its customers.

1150. Accordingly, there is no basis for any requirement that the Feistritz Plant be divested.

B. Any Competitive Harm From the Merger Could Be Addressed Through Divestiture of Microporous' PE Line in Piney Flats



1151. No evidence has been presented to this Court that Daramic's acquisition of the ACE-SIL® product line from Microporous has had any anticompetitive effect. Accordingly, there is no basis for its request that the ACE-SIL® production line be divested.

1152. {

} (Kahwaty, Tr. 5238-40, *in camera*).

1153. Witnesses from U.S. Battery and Exide testified that they are interested in increasing the amount of HD they purchase. If there were a separate company producing Daramic HD, that would be in conformity with the plans of these companies. A divestiture of Daramic HD would be easier to accomplish than a divestiture of a CellForce production facility, as there would be no lingering issue of obtaining the ACE-SIL® dust. Divestiture of the PE line with the ability to make Daramic HD would produce the same competitive effect and avoid the issue of obtaining the ACE-SIL® dust by the acquiring company that it would need to make CellForce.

1154. If there were some competitive concern about the alleged motive market segment, such concern could be adequately addressed by divestiture of the PE line in Piney Flats designed to

produce straight PE separators and also having the ability to produce either CellForce or HD. That capacity would replicate the capacity of Microporous PE line pre-merger.

1155. Evidence has been presented to this Court that a divestiture of the PE line at Piney Flats is feasible. The Piney Flats facility is actually comprised of two plants: a rubber plant and a PE plant. The rubber and PE plants are housed in separate facilities and have separate entrances and loading bays. (Gilchrist, Tr. 311-14, 539; Hauswald, Tr. 999-1000).

1156. {

} (Kahwaty, Tr.

5546-49, *in camera*). {

} (Kahwaty, Tr. 5547-48, *in camera*).

Moreover, even if two nearby factories were producing competitive products, there would be no competitive problem as this is a common circumstance in other industries, such as computers software or steel production.

C. Conduct Remedy

1157. This Court has reviewed the record and finds no basis for any remedy pertinent to the H&V Cross-Agency Agreement as there is no evidence that that agreement in any way harmed competition. The FTC has wholly failed to introduce any evidence that H&V has given any serious consideration to ever getting into the PE separator industry. In fact, the evidence is to the contrary.

1158. Similarly, the Court has reviewed the record and finds no basis for any relief relating to Daramic's contracts. These contracts did not restrict entry and the principal contracts at issue

(Exide, EnerSys and JCI) either have expired or are about to expire. As to the remaining North America contracts, East Penn, Douglas and Crown have only expressed great satisfaction with their contracts and dealings with Daramic and Trojan actually wishes to contract with Daramic for a ten year period.

**X. Expert Testimony**

A. Dr. John Simpson

1159. Complaint Counsel has proffered the testimony of Dr. John Simpson (“Simpson”) as an expert in antitrust economics and industrial organization. This Court ruled that it would consider such opinions offered by Simpson if they meet the proper legal standard. (Simpson, Tr. 3164).

1160. This Court has considered the opinions offered by Simpson in this matter. In general, the Court finds that Simpson, while qualified to offer opinions as an expert in antitrust economics and industrial organization, failed to undertake any serious analysis of the issues in this matter. Instead, Simpson in many respects ignored the Merger Guidelines and its commentary and undertook a cursory review of testimony and exhibits, many of which were assembled by Complaint Counsel or FTC staff attorneys. Simpson’s work fell far short of the standard required of the FTC here.

a. Simpson Is Biased in Arriving at His Opinions

1161. While not by itself disqualifying, this Court notes that Dr. Simpson is biased in his work in this matter.

1162. First, Dr. Simpson has been employed by the FTC his entire career. (Simpson, Tr. 3268).

1163. Second, when Simpson began his review of this matter, he was provided a copy of four or five binders of documents assembled by Complaint Counsel or FTC staff attorneys for his review. (Simpson, Tr. 3269, 3271). Simpson used these binders in arriving at his opinions in

this case. (Simpson, Tr. 3270). Simpson did not undertake a wholly independent review of the evidence in this matter.

1164. Third, Simpson never visited a battery manufacturing facility or a battery separator manufacturing facility. (Simpson, Tr. 3285-86). Nor did Simpson personally look at a PE production line, or an extruder or extractor, as did Dr. Kahwaty. (Simpson, Tr. 3286). Simpson only looked a *single* separator at the time he gave his deposition, which was *after* he had arrived at his opinions in this matter. (Simpson, Tr. 3286-87). Simpson's failure to review the actual products and their manufacturing process here is troubling and certainly underscores the lack of any thorough analysis by Simpson. Instead, Simpson's review appears to have largely started and stopped with his consideration of documents and testimony provided to him by the FTC's counsel. (Simpson, Tr. 3270-71, 3273-74, 3278-79; Simpson, Tr. 3446, *in camera*; Simpson, Tr. 3499 ("I relied heavily on [some review of documents and some review of testimony] in forming my opinions"); RX01651).

1165. Fourth, Simpson obtained a copy of the Complaint and reviewed the product markets defined in that Complaint before he began his work in this matter. (Simpson, Tr. 3270). Simpson's opinion that there are four product markets – the same product markets defined in the Complaint which he reviewed at the onset of this engagement – casts doubt on the independence of his work.

1166. Fifth, Simpson did not review each relevant deposition transcript, or review all of the relevant testimony at trial, in arriving at his opinions in this matter. (Simpson, Tr. 3271, 3278-79; Simpson, Tr. 3391-92, *in camera*; Simpson, Tr. 3168; RX01651). {

} (Simpson, Tr. 3327, 3329-30, 3473-74, 3478, 3481-82, *in camera*). Simpson did not test his theories or conclusions against the data available to him.

1167. For example, Simpson did not review the testimony of John Craig, the CEO of EnerSys, and did not even know at his deposition, after he had prepared his report setting forth his opinions, who Craig was. (Simpson, Tr. 3271, 3273-74). Attorneys working with Complaint Counsel directed Simpson to deposition testimony to review. (Simpson, Tr. 3279). Simpson did not read the deposition testimony of Kevin Porter of H&V (“Porter”) (Simpson, Tr. 3278-79, 3287; Simpson, Tr. 3391, *in camera*; RX01651), yet offered the opinion to this Court that the Cross Agency Agreement between Respondent and H&V was evidence of anticompetitive conduct. (PX0033, *in camera*; Simpson, Tr. 3264; Simpson, Tr. 3391-92, *in camera*). {

} (PX0925 (Porter, Dep. at 39), *in camera*). This Court believes that Porter’s testimony is relevant and important to the consideration of the question of what weight, if any, should be given to the Cross Agency Agreement. Simpson’s failure to consider this testimony undermines the validity of his opinions and demonstrates the lack of analysis that further undermines his opinions. This Court cannot credit Simpson’s opinion with respect to the Cross Agency Agreement.

1168. Simpson also did not review the trial testimony of several other witnesses in this matter. “I’ve been following the transcript pretty much until the last couple of days when there was a day or so that I missed.” (Simpson, Tr. 3168). {

} (Simpson, Tr. 3197, 3441-42, *in camera*). {

} (Simpson, Tr.

3446, *in camera*). {

} (Hall, Tr. 2825-26, *in camera*). Certainly,

no evidence has been presented to this Court that {

} (Burkert,

Tr. 2446-48, *in camera*). The Court finds this testimony of Mr. Hall to be particularly important to the Court's consideration of the issues here, and Simpson's failure to consider this testimony while still arriving at his opinion undermines the validity of the opinion offered and demonstrates the lack of careful and thorough consideration of the facts in this matter throughout Simpson's report. This Court does not credit Simpson's opinion regarding the significance of the Entek-JCI contract.

1169. Simpson provided drafts of his report to the FTC and modified his report to incorporate the FTC's suggested changes to it. (Simpson, Tr. 3280).

1170. Simpson testified that his report contained all of his opinions and bases for his opinions. (Simpson, Tr. 3277). Simpson never supplemented his report beyond his initial rebuttal report. (Simpson, Tr. 3277). At the hearing, Simpson tried to offer additional testimony and bases for his opinions not reflected in his reports, including the use of a demonstrative that he provided in his testimony (PX4001; Simpson, Tr. 3278). This Court will not consider such testimony or exhibit from Dr. Simpson.

b. Simpson's Methodology Is Flawed

1171. This Court has considered Simpson's testimony regarding his methodology followed in arriving at his opinions. The Court believes that Simpson's methodology was fatally flawed, inconsistent with the teaching of the Horizontal Merger Guidelines ("Merger Guidelines"), and

biased toward arriving at opinions on markets set out by Complaint Counsel in the Complaint. This Court cannot give any weight to Simpson's opinions in this matter.

c. Simpson Did Not Do Quantitative Analysis As Required by the Merger Guidelines and Commentary

1172. Simpson agrees that the Merger Guidelines are an appropriate methodology to use in considering this merger and that analysis is required under the Merger Guidelines. (Simpson, Tr. 3281-82).

1173. {

} (PX0033 at 004 (emphasis added), *in camera*). At the hearing, evidently realizing the fundamental problem with his work, Simpson shifted his position, testifying his analysis followed the Merger Guidelines. (Simpson, Tr. 3166, 3282). However, a review of Simpson's work shows that Simpson fell far short of what is required under the Merger Guidelines or even "broadly following" the Merger Guidelines.

1174. The Commentary to the Merger Guidelines states:

In evaluating the likely competitive effects of a proposed merger, the Agencies assess the full range of qualitative and quantitative evidence obtained from the merging parties, their competitors, their customers and a variety of other sources."

(RX01652)

1175. Simpson surprisingly disagreed with this stated position of the FTC. (Simpson, Tr. 3282).

1176. Simpson also surprisingly testified that he had never read the entirety of the Commentary to the Merger Guidelines. (Simpson, Tr. 3283-84).

1177. Simpson admitted repeatedly in his testimony that with the exception of his consideration of the HHI numbers, his opinions are based on qualitative, not quantitative evidence.

1178. For example:

- a. {  
} (Simpson, Tr. 3327, 3366, *in camera*);
- b. {  
  
} (Simpson, Tr. 3327-28, *in camera*; Simpson, Tr. 3496-97);
- c. {  
  
  
}  
(Simpson, Tr. 3475-76, *in camera*);
- d. {  
  
  
} (Simpson, Tr. 3332-34, *in camera*; Simpson, Tr. 3497-98);
- e. {  
  
} (Simpson, Tr. 3345-46, *in camera*);
- f. {  
  
  
} (Simpson, Tr. 3414-15, *in camera*);
- g. {  
  
} (Simpson, Tr. 3481, *in camera*; see also Simpson, Tr. 3474, *in camera*) {  
} (Simpson, Tr. 3482, *in camera*); and
- h. {  
  
} (Simpson, Tr. 3482, *in camera*).

1179. This Court finds that Dr. Simpson did not perform any serious quantitative analysis in this matter – rigorous or otherwise – which is contrary to the dictates of the Merger Guidelines and Commentary. As Simpson himself testified:

{



}

(Simpson, Tr. 3327, *in camera*).

d. Simpson Did Not Follow the Merger Guidelines in Defining His Four Product Markets

1180. The Merger Guidelines require that in defining the product market that the analysis starts with each product of the merging companies “narrowly defined”:

Specifically, the Agency will begin with each product (narrowly defined) produced or sold by each merging firm and ask what would happen if a hypothetical monopolist of that product imposed at least a ‘small but significant and nontransitory’ increase in price, but the terms of sale of all other products remained constant.

(RX01653 at 009).

1181. {

} (Simpson, Tr. 3294, *in camera*). In

fact, Simpson testified that he followed this approach. (Simpson, Tr. 3170; Simpson, Tr 3294-95, *in camera*).

1182. {

} (Simpson, Tr. 3292, *in camera*).

1183. {

} (PX0033 at 005 (emphasis added), *in camera*;  
Simpson, Tr. 3295, *in camera*).

1184. While Simpson testified that he followed the Merger Guidelines, it is apparent from his testimony that he did not. Simpson did not define his markets by starting with the products, narrowly defined, of the merging firms.

a. {  
} (Simpson, Tr. 3296, 3297-98, 3299, 3300-01, 3302,  
3470-71, *in camera*).

b. {  
} (Simpson, Tr. 3301, 3295, *in camera*).

c. {  
} (Simpson, Tr. 3296-97, *in camera*).

d. {  
}

(Simpson, Tr. 3301-02, *in camera*; PX0033 at 004 (fn. 3), *in camera*).

1185. {

} (PX0033 at 017, *in camera*). {

} (PX0033 at 003-4, *in camera*).

{

} (Simpson, Tr. 3302, *in camera*).

1186. {

} (Simpson, Tr.

3354, 3376-77, *in camera*). Simpson's treatment of his UPS separator market highlights the inadequacy of his work.

1187. {

} (Simpson, Tr.

3299-3300, *in camera*).

{

}

(Simpson, Tr. 3300, *in camera*).

1188. {

} (Simpson, Tr. 3300, *in camera*).

1189. Simpson's deep cycle product market is also flawed in that it fails to account for the use of PE only separators by battery manufacturers.

a. {

} (Simpson, Tr.

3308, *in camera*).

b. { } (Simpson, Tr. 3309, *in camera*).

c. East Penn's witness testified that East Penn uses straight PE separators in some of its deep cycle batteries. (Leister Tr. at 3978-80).

d. { } (Simpson, Tr. 3310-11, *in camera*).

1190. **Even with regard to the SLI market itself, however, Simpson describes this market as being for separators used in car batteries, but relies on Daramic data that includes cars, trucks, buses, boats, and lawn & garden equipment. {**

} (Simpson, Tr. at 3308, *in camera*). Yet, Simpson did not account for this "dual usage" of separators in analyzing his product markets.

1191. { } (Simpson, Tr. 3302-03, *in camera*).

1192. Simpson also acknowledges that there is overlap of the use of separators from one of his product market to another:

{ }  
}

(Simpson, Tr. 3308, *in camera*).

1193. {

} (Simpson, Tr.

3306-08, *in camera*).

1194. This Court cannot give any weight to Simpson's opinions with respect to product markets and his opinions in this regard are not accepted.

e. Simpson Ignored the All PE Separator Market in Arriving at His Opinions

1195. {

} (Simpson, Tr. 3322, *in*

*camera*).

1196. {

} (Simpson, Tr. 3323, *in camera*).

1197. {

}

(Simpson, Tr. 3324, *in camera*).

f. Simpson Does Not Account for ACE-SIL® at All in His Product Markets

1198. {

} (Simpson, Tr. 3320-21, *in camera*). {

} (PX2251 at 001, *in camera*) {

} {

}

(Simpson, Tr. 3321, *in camera*). {

} (Simpson, Tr. 3321, *in camera*).

1199. Again, Simpson's failure to account for the ACE-SIL® product in his product markets demonstrates that Simpson's four markets are not properly drawn and Simpson has defined his product markets to meet the allegations of the Complaint. Simpson offers no opinion with respect to ACE-SIL®. This Court finds that the merger has had no effect on any market served by ACE-SIL®.

g. Simpson's Opinion on FLEX-SIL® is Contrary to the Facts and Not Supported by Analysis

1200. {

} (Simpson, Tr. 3320, *in camera*). In arriving at this opinion, however,

Simpson ignores that FLEX-SIL® is made of rubber and the overwhelming evidence in the case that FLEX-SIL® is considered the industry standard separator for deep cycle batteries (RX01643; Gilchrist, Tr. 535; Godber Tr. 271, 277; Wallace, Tr. 1964-1965; Quereshi Tr. 2072; McDonald, Tr. 3818), is demanded by battery customers due to its superior performance and product life (Gilchrist Tr. 536; McDonald Tr. 3787; Godber Tr. 271, 277; Wallace Tr. 1964-1965), and as such, bears a premium price (Wallace, Tr. 1967-72; Quereshi, Tr. 2065 (FLEX-SIL® is sold in US Battery's premium line, FLEX-SIL® constituted approximately 95% of US Battery's purchase of separators in 2007 and is twice as expensive as Daramic HD); McDonald Tr. 3820). From the evidence presented in this hearing, FLEX-SIL® is the only battery separator actually advertised by battery companies. (Godber, Tr. 277; Wallace, Tr. 1963-1965; RX01643). Moreover, despite FLEX-SIL® constituting over 95% of its separator purchases and being twice as expensive as Daramic HD, US Battery did not move its purchases to Daramic HD. (Quereshi, Tr. 2067; Wallace, Tr. 1972). This fact alone demonstrates the premium nature of the FLEX-

SIL® product. Simpson ignores all of this evidence and finds, instead, that FLEX-SIL®, Daramic HD and CellForce constitute his deep cycle battery separator market.

1201. Moreover, Simpson asserts that Daramic HD is the closest competitor, the closest substitute, to FLEX-SIL®. (Simpson, Tr. 3180-81). {

} (Simpson, Tr. 3322, *in camera*). He simply assumes this and did not estimate the cross-price elasticity between FLEX-SIL® and any other product, including Daramic HD.

h. Simpson Fails to Support His Geographic Market with Analysis

1202. Simpson offered his opinion that the relevant geographic market is North America. (PX0033 at 6-7, *in camera*; Simpson, Tr. 3182). The Court finds that Simpson's opinion regarding the relevant geographic market is not supported by any appropriate, quantitative analysis and is contradicted by substantial evidence in this case, which Simpson never addressed. Therefore, this Court does not give any weight to Simpson's opinion regarding the geographic market.

1203. First, in determining the geographic market, Simpson agrees that the relevant question is whether arbitrage can occur for products manufactured in North America:

{

}

(Simpson, Tr. 3328, *in camera*; RX01653 at 10.

1204. { } (Simpson, Tr. 3329-30, *in camera*).

1205. Instead, Simpson relied solely on the testimony of battery separator customers as to whether they would arbitrage separators:

{

}

(Simpson, Tr. 3333, *in camera*).

1206. {

} (Simpson, Tr. 3326-27, *in camera*).

1207. {

} (Simpson, Tr. 3327, *in camera*) {

} (Simpson, Tr. 3475-76, *in camera*).

1208. {

} (PX0033 at 006-7, *in camera*), {

} (Simpson, Tr.

3333-34, *in camera*).

1209. {

} (PX0033 at 006, *in camera*).

{

} (Simpson, Tr. 3334, *in camera*), {

} (Simpson, Tr. 3420,

3423, *in camera*).

1210. In arriving at his opinion, though, Simpson ignored

a. the testimony of Mr. Wallace of U.S. Battery, who testified about U.S. Battery obtaining Interstate Battery's Supplier of the Year Award for 7 years for on time shipments when it received all of its separator products for all of its facilities, in California and Georgia, from Microporous' facility in Piney Flats, Tennessee and Daramic's Owensboro, Kentucky facility (Wallace Tr. at 1936-37, 1957-60);

b. the testimony of Larry Burkert of EnerSys who testified that having the ability to supply locally was not a necessary requirement to supply product to EnerSys, a company with manufacturing facilities around the globe (Burkert Tr.



2383; Simpson, Tr. 3336-37, *in camera* {  
}; RX00224);

c. the testimony of Douglas and other witnesses regarding the {  
} (Douglas, Tr. 4066-67;  
Simpson, Tr. 3336, *in camera*; Hauswald, Tr. 1084-85); and

d. the fact that battery companies and battery separator suppliers, including  
BFR and JCI, enter into global supply agreements (Simpson, Tr. 3337-38, *in  
camera* {  
}; RX01602, *in camera*; RX00162, *in  
camera*).

1211. {  
} (Simpson,  
Tr. 3335, *in camera*). Simpson fails to explain or justify his opinion in the light of this evidence  
regarding the supply of separators.

1212. {  
} (Simpson, Tr. 3339-40, 3468-69, *in  
camera*; PX0522, *in camera*). Again, Simpson's opinion in this regard is not supported by  
credible evidence and fails to account for substantial evidence demonstrating that local supply is  
not a significant factor in determining the relevant geographic market.

1213. {  
} (Simpson, Tr.  
3444-45, *in camera*).

1214. Simpson selectively refers to information outside his purported geographic market when  
it suits his purpose and he ignores it elsewhere. For example, {

} (Simpson, Tr. 3400-01, *in camera*) {

} (Simpson, Tr. 3399, *in camera*). {

}

(Simpson, Tr. 3399-3400, *in camera*).

i. Simpson's Market Share and Concentration Analysis is Flawed

(a) Simpson Did Not Consider Uncommitted Entrants

1215. {

} (Simpson, Tr. 3341, *in camera*; RX01653 at 008, 014).

1216. {

} (RX01653 at 014; Simpson, Tr.

3342, 3347, *in camera*). {

} (Simpson, Tr.

3342-43, 3346-47, *in camera*).

{

}

(Simpson, Tr. 3347, *in camera*).

1217. {  
} (Simpson, Tr. 3346-48, *in camera*).

1218. {  
} (Simpson, Tr.  
3461, *in camera*). Simpson is incorrect.

1219. The Merger Guidelines do not require that an uncommitted entrant have an effect pre-merger. Rather, the Merger Guidelines simply state that a firm will be considered as an uncommitted entrant if it can enter in less than a year as such a firm, making such a quick entry, would have likely influenced the market pre-merger and post-merger:

Uncommitted entrants are capable of making such quick and uncommitted supply responses that they likely influenced the market premerger, would influence it post-merger, and accordingly are considered as market participants at both times.

(RX01653 at 008).

1220. {  
} (Simpson, Tr. 3343, *in camera*). {

} (Simpson, Tr. 3344, *in camera*). {  
}

(Simpson, Tr. 3344, *in camera*). {

} (Simpson, Tr. 3344, *in camera*). {

} (Simpson, Tr. 3445, *in*

*camera*), {

} (Simpson, Tr. 3478,

*in camera*).

1221. {

}

(Simpson, Tr. 3348-50, *in camera*).

1222. {

}

(Simpson, Tr. 3350-51, *in camera*).

1223. {

} (Burkert, Tr. 2407-08, *in*

*camera*; Axt, Tr. 2145, *in camera*).

1224. {

} (Simpson, Tr. 3352, *in camera*). {

} (Simpson, Tr. 3352, *in camera*).

1225. Simpson's disparate treatment of Entek and Microporous undermines any credibility in his opinions in this matter. This Court simply cannot give any weight to Simpson's opinions because of his shoddy methodology and complete disregard of Entek as an uncommitted entrant.

j. Simpson's HHI Analysis is Incorrect

1226. Complaint Counsel argues that the HHI numbers are a bar to the merger of Daramic and Microporous. This Court finds that Complaint Counsel cannot rely on the HHI numbers here, as Simpson's numbers are inaccurate.

1227. {

} (Simpson, Tr. 3355-56, *in camera*).

{

} (Simpson,

Tr. 3356, *in camera*). Simpson's view here is in accord with Kahwaty's view and the previous position of the FTC.

The Horizontal Merger Guidelines promulgated by the U.S. Department of Justice and the Federal Trade Commission state that 'market shares and concentration data provide only the **starting point** analyzing the competitive impact of a merger.' Nevertheless, the market share and concentration levels at which the Agencies have challenged mergers are significant. **Although large market shares and high concentration by themselves are an insufficient basis for**

**challenging a merger, low market shares and concentration are a sufficient basis for not challenging a merger.**

*(Merger Challenges Data, Fiscal Years 1999-2003, Issued by the Federal Trade Commission and the U.S. Department of Justice, December 18, 2003 (emphasis added); see also Kahway Tr. 5580-83, in camera.)*

1228. Beyond this basic point, though, the Court finds several significant deficiencies with Simpson's HHI calculations.

1229. {

} (Simpson, Tr. 3348-50). {

} (Simpson, Tr. 3341, *in camera*; RX01653 at 007-8, 014-20; Kahway, Tr. 5381, 5566-68, *in camera*). Under the Merger Guidelines, uncommitted entrants are to be assigned market shares.

1230. {

} (Simpson, Tr. 3439, *in camera*). {

} (Riney, Tr. 4959-61, *in camera*). {

}

(Gilchrist, Tr. 470-72). Reviewing Mr. Gilchrist's testimony with that of Mr. Heglie and other witnesses, it is apparent that Mr. Gilchrist was prone to exaggeration about Microporous' prospects. (Gilchrist, Tr. 498-99) {

}, 507-09, *in camera*; PX2301 (Heglie, Dep. at 8); Trevathan Tr. 3705-08; RX00401). Simpson gave no apparent consideration to this significant defect with his methodology.

1231. {

} (Simpson, Tr. 3358-59, *in camera*).

{

}

(Simpson, Tr. 3359, *in camera*).

1232. { } (Simpson, Tr. 3391, *in camera*). The loss of JCI as a customer resulted in Daramic losing \$55 million in annual sales and the closing of one plant in Italy (Potenza) in its entirety and a significant reduction in the production at its Owensboro facility. (Hauswald, Tr. 908, 1119). Obviously, the loss of JCI's business was significant to Daramic and reduced its share of Simpson's SLI market. Yet, Simpson did not consider this in his calculations. This is a fatal error.

1233. { } (PX0033 at 040-42, *in camera*). {

}

(Simpson, Tr. 3354, 3376, *in camera*). Again, this demonstrates the complete lack of any credible analysis by Simpson of the issues and undermines the credibility of his opinions.

1234. This Court gives no weight to Simpson's market share or market concentration analysis.

- k. Simpson's opinion regarding competitive effects is flawed and cannot be considered.

1235. {

} (PX0033 at 019-20, *in camera*; Simpson, Tr.

3201-02, *in camera*). Simpson's opinions, again, are flawed and cannot be given any credit by this Court.

1236. {

} (Simpson, Tr. 3363, *in camera*). The FTC

has shown neither here and Simpson has not expressed a credible opinion on either.



1237. {

} (Simpson, Tr. 3363, *in camera*), {

} (Simpson, Tr. 3348, 3364, *in camera*).

1238. {

} (PX0033 at 019, *in camera*). {

} (Simpson, Tr. 3478, *in camera*; Weerts, Tr. 4459. *in camera*).

1239. {

} (Simpson, Tr. 3389-91, *in camera*;

Simpson, Tr. 3278-79, 3287; Simpson, Tr. 3391, *in camera*; RX01651).

1240. {

} (Simpson, Tr. 3389, *in camera*;

RX1653 at 021).

1241. {

} (Simpson, Tr. 3393, *in camera*).

1. Simpson's Opinion on Ease of Entry is Not Supported

1242. { }

(Simpson, Tr. 3205, *in camera*). In arriving at this opinion, though, Simpson demonstrates a lack of analysis, a great exaggeration of certain facts and a complete disregard for others, all in an effort to support his opinion that entry cannot occur in less than two years.

1243. {

} (Simpson, Tr. 3205-07, *in camera*).

1244. {

} (Simpson, Tr. 3206, *in camera*). {

} (Simpson, Tr. 3393, *in camera*).

1245. {

} (Simpson, Tr. 3206, *in camera*). {

} (Simpson, Tr. 3393-94, *in camera*).

1246. {

} (Simpson, Tr. 3396-97, *in camera*; RX01649).

1247. {

} (Simpson, Tr. 3398,

*in camera*). {

} (Hall, Tr. 2892-94, *in camera*). {

} (Simpson, Tr. 3398-99, *in camera*).

1248. {

} (Simpson, Tr. 3401-02, *in camera*). The evidence in this case is that it took Microporous only 16-20 months to purchase, install and begin producing industrial separators off of the Jungfer line. (Gaugl Tr. 4543-44; RX01029, *in camera*; RX01045, { }, *in camera*; RX01046, *in camera*). This Court finds Simpson's failure to consider this evidence, as to his own geographic market, fatal to his opinion regarding entry.

1249. {

} (Simpson, Tr. 3402-03, *in camera*).

1250. This Court also acknowledges the evidence in this case that separator manufacturers in Asia have, in less than two years, added new capacity of equal or greater capacity than that of Microporous' Piney Flats single PE line and that these companies (Anpei, BFR, Separindo, Sebang) have greater PE capacity than Microporous. (Thuet, Tr. 4330-32; Hauswald, Tr. 1036; PX1073 at 015; Seibert, Tr. 4160; PX0922 (Roe, IHT at 337), *in camera*.)

1251. Based on the evidence that a new PE line of the same size as Microporous' single PE line in Piney Flats can be built and placed into operation in less than 18 months, as evidenced by Microporous, BFR and Entek, and testing can occur in less than 6 months, this Court simply does not find Simpson's opinion that entry cannot occur in less than two years to be credible. Simpson has discussed the timelines of entry only and has ignored the questions of sufficiency and likelihood of entry.

m. Daramic's Post Acquisition Price Increases Do Not Support the FTC's Position

1252. {

}

(Simpson, Tr. 3220, *in camera*).

1253. {

} {PX0033 at 023-024, *in camera*; Simpson, Tr. 3368, 3369,

*in camera*). This Court cannot accept Simpson's opinion here in that it is beyond what was expressed in his report, and at best, demonstrates an ever-changing opinion that Simpson attempts to bolster as he meets criticism of his work.

1254. Even if one moves past Simpson's ever-changing opinion, his opinion at the hearing regarding Daramic's price increases is flawed and cannot be given any weight.

1255. {

} (Simpson, Tr. 3369-70, *in*

*camera*). {

}

(Simpson, Tr. 3370, *in camera*). {

} {Simpson, Tr. 3218, *in camera*). {

} (RX00631, *in camera*;

RX00677, *in camera*; RX01119, *in camera*; RX01323, *in camera*; RX01604, *in camera*; RX01605, *in camera*; and PX01450, *in camera*).

1256. {

}

(Simpson, Tr. 3218-19, *in camera*). At best, Simpson's testimony begs the question as he did no

analysis here to show that is the case. Moreover, Simpson's testimony regarding Daramic's cost data demonstrates Simpson's lack of appreciation of the manner in which Daramic sets its pricing.

1257. {

} (Simpson, Tr. 3218, *in camera*; PX0033 at 024,

*in camera*) {

}.

1258. {

} (Seibert, Tr.

4189-91, *in camera*). {

} (Seibert, Tr. 4190-91, *in camera*). Following this approach, a drop in petroleum after August 2008 would have no bearing and would be irrelevant to the question of whether pricing sought in August of 2008 was cost justified. {

} (Kahwaty, Tr. 5203-08, *in camera*). Simpson's consideration of general costs following the relevant period when pricing was set demonstrates again that Simpson's methodology is flawed and that Simpson is attempting to find facts to buttress his opinion rather than basing his opinion on the relevant facts.

1259. {

} (PX0789, *in camera*; Simpson, Tr. 3373, *in camera*). {

} (Kahwaty,

Tr. 5205-07, *in camera*). {

} (Kahwaty, Tr.

5207, *in camera*).

1260. This Court finds Simpson's opinion regarding Daramic's price increase to be unreliable and therefore, it will be given no weight.

1261. {

} (Simpson, Tr. 3221, *in camera*). {

} (Simpson, Tr. 3224, *in*

*camera*).

1262. This Court has considered Simpson's testimony concerning his difference-in-difference analysis and finds that it is fundamentally flawed. This Court gives no weight to his opinion based on this analysis.

1263. {

} (Simpson, Tr. 3380-

81, *in camera*). As Simpson testified:

{

}

(Simpson, Tr. 3380-81, *in camera*).

1264. Yet, Simpson's control group, which consists of three customers that entered into contracts with Daramic in late 2007 or early 2008, in no way accounts for the extraordinary cost shocks experienced in 2008.

1265. {

} (Simpson, Tr.

3383-84, *in camera*).

1266. {

} (Simpson, Tr. 3382, *in camera*). Based on this fact alone, it is apparent that Simpson violated the very requirement that he testified must be followed of accounting for cost shocks.

1267. As there is no way that a contract with price adjustments set to 0% for 2009 could in any way account for and tell us anything about how pricing would have changed in 2009 had the acquisition not occurred, Simpson's opinion based on his DID analysis is without any merit and will not be considered by this Court.

1268. {

} (Simpson, Tr. 3378-79, *in camera*). {

} (Simpson, Tr. 3379-80, 3387-88, *in camera*). {

} (Simpson, Tr. 3388, *in camera*). {

} (Simpson, Tr. 3388, *in camera*).

1269. {

} (Simpson, Tr. 3473, *in camera*).

1270. Simply put, this Court can draw no conclusions from Simpson's DID approach and will give it no weight here.

n. Simpson's Opinion Regarding Monopolization is Flawed

1271. {

} *See e.g.* (Simpson, Tr. 3229, *in camera*). This Court has considered Simpson's testimony and finds it unpersuasive for a number of reasons and will not give it weight.

1272. {

} (RX00983

(EnerSys contract), *in camera*; RX01519 (East Penn Contract), *in camera*).

1273. {

} (Douglas, Tr. 4067, *in camera*; Balcerzak, Tr.



4106-07, *in camera*). In fact, Jim Douglas testified that Douglas Battery had not seen anyone from Microporous for years prior to the merger. (Douglas, Tr. 4062-63).

1274. {

} (PX0265, *in camera*; PX0295, *in camera*; PX0536, *in camera*).

1275. {

} (RX00927 at 071-72, *in camera*).

{

}

1276. Accordingly, at any given point, volume was available to be provided to a new supplier. In this case, customers could have begun to discuss buying from Microporous and Microporous could have entertained expansion based on those discussions at any given point.

1277. Significantly, Simpson fails to acknowledge that even though JCI was not under a contract with Entek or Daramic for its supply in the United States for years, JCI still did not buy separators from Microporous. (Hall, Tr. 2802-03). This fact undermines Simpson's premise that exclusive contracts impeded entry or buying from Daramic's rivals.

1278. Fourth, to the extent that Simpson's views here are based on his views regarding entry, the Court, as stated above, does not credit his opinion on entry barriers. {

} (Hall, Tr.

2765, 2827, *in camera*, Weerts, Tr. 4458, *in camera*; Seibert, Tr. 4165, 4175-76, *in camera*; Thuet, Tr. 4340; RX00062, *in camera*). And Simpson has offered no credible basis to believe that Daramic could somehow prevent the expansion or entry into North America by such firms.

1279. Fifth, to the extent that Simpson bases his opinion here on Daramic's dealings with EnerSys in 2006 during the force majeure, this Court rejects Simpson's opinion, as, for the reasons stated previously, this Court finds the force majeure experienced by Daramic in 2006 was real and not fake as the FTC and Simpson assert.

1280. Sixth, Simpson's opinion, based in part on Daramic's price increase announced in 2008, fails to account for the substantial evidence that Daramic negotiates price with its customers and that {

}. (Axt, Tr. 2213, 2249 *in camera*; Gillespie, Tr. 3044-3045, *in camera*; Seibert, Tr. 4194-4213, *in camera*; Godber, Tr. 201-202).

1281. {

} (Simpson, Tr. 3230-31, *in camera*); it is evident that Simpson did not consider all of the relevant facts and testimony. Daramic witnesses testified about the benefits to customers and Daramic in having contracts that set certain percentages to be supplied. (Hauswald, Tr. 1037-41, 1094-96; Roe, Tr. 1728-29). Daramic's contracts help provide certainty of supply to a customer and help Daramic plan to maintain its factories and production lines. Without adequate assurances of demand, Daramic cannot maintain its production lines throughout the world. These contracts amount to a sharing of risk between customer and Daramic. (Hauswald, Tr. at 1096).

1282. Moreover, Daramic cannot keep its lines operating without assurances from its customers that there will be enough demand to justify the plant's continued operation. It is for this reason that obtaining an assurance of demand of 10% or 50% may not be sufficient to make it economic to continue operating the plant if Daramic cannot fill the remaining capacity. This fact was evidenced by the impact on Daramic's business that resulted from its loss of the JCI business at the end of 2008. Based on that loss of commitment, Daramic closed one plant in Italy and reduced significantly its lines in Owensboro, Kentucky. (Hauswald, Tr. 918, *in camera*; Riney, Tr. 4930-31, *in camera*; Hall, Tr. at 2791-92). Simpson ignored the loss of the JCI business here, as he did in his HHI calculations.

1283. {

} (Simpson, Tr. 3229, *in camera*). {

} (Simpson, Tr. 3482, *in camera*).

1284. {

} (Simpson, Tr.

3404, *in camera*). In addition, the Complaint alleges that Daramic maintained “monopoly power”, not “market power.” (RX01572 at 008).

1285. {

}

(Simpson, Tr. 3406, *in camera*).

1286. This Court also is not aware of, and the FTC has not brought to this Court’s attention, a case where monopoly power was found to exist with less than a 50% share of the market.

1287. {

}

(Simpson, Tr. 3355-57, *in camera*; PX0033 at 041, *in camera*).

1288. Although the FTC alleges in the Complaint that Daramic maintained monopoly power in each of the FTC’s four product markets (deep cycle, motive, SLI, UPS) (Complaint ¶ 39), no evidence has been presented to this Court for which this Court to conclude that Daramic ever had a monopoly in any of those alleged markets, let along “maintaining” a monopoly in those markets. {

} (PX0033

at 040, *in camera*). {

} (PX0033 at 041, *in camera*).

1289. {

} (PX0033 at 031, *in camera*), yet offered no testimony as to this point at trial. {

} (PX0033 at 031, *in camera*).

1290. {

} (PX0925 (Porter, Dep. at 15-16), *in camera*; PX0917 (Cullen, Dep. at 5-6), *in camera*).

1291. Moreover, Simpson does not appear to have considered the substantial evidence regarding the joint marketing and cross selling that occurred as a result of this Agreement. (Roe, Tr. 1745-48; RX01100; RX01101; RX01102; RX01103; RX01104; RX01105; RX01107; RX01108; RX01109; RX01110; RX01111; RX01112; RX01113; RX01114; RX01115; RX01116; RX01117; RX01118; PX0117 (Cullen, Dep. at 11, 13, 18), *in camera*; PX0925 (Porter, Dep. at 17, 32), *in camera*). Nor did Simpson consider the evidence of the fact that the non-compete provision was utilized to protect the sharing of confidential business information between H&V and Daramic (PX0094, *in camera*; Roe, Tr. 1745-47).

1292. Finally, Simpson has offered no opinion, and no evidence has been presented by the FTC to this Court, that the Cross Agency Agreement has actually resulted in any competitive harm.

1293. This Court does not credit Simpson's opinions regarding the FTC's claims of monopolization.

- o. Simpson's Opinions Regarding Relief Are Overbroad and Unsupported by the Evidence

1294. Simpson's opinion regarding the appropriate remedy in this matter, should the Court find the need for some relief, is inconsistent at best, and in any event, clearly overstated.

1295. {

} (PX0033

at 032, *in camera*).

1296. {

(Simpson, Tr. 3410, *in camera*)

} (Simpson, Tr. 3408-09; 3410-11, *in camera*).

1297. {

} (Simpson, Tr. 3359, 3410-12, *in camera*).

1298. Accordingly, under Simpson's own view of restoring the level of competition at the time of the merger, in this geographic market, and with the only overlap of sales occurring in Simpson's motive market, competition could be adequately restored through a forced sale of Microporous' PE line in Piney Flats, Tennessee.

1299. {

} (Simpson, Tr. 3412, *in*

*camera*; PX0033 at 032, *in camera*). {

}

(PX2251 at 016, *in camera*).

1300. This Court does not credit Simpson's opinion on the appropriate relief. Simpson failed to acknowledge that the competition lost in his geographic market was only 1 production line of

less than 10 million square meters. Simpson also failed to acknowledge any competitive issue here could be adequately addressed by divesting only the PE line at Piney Flats, which is housed in a facility separate from the rubber separator plant in Piney Flats. There is also no evidence before this Court that Simpson gave any consideration to the separate facilities for manufacturing rubber and PE separators at Piney Flats. (Hauswald, Tr. at 999-1000; Gilchrist, Tr. at 539). Simpson's changing opinion on relief is overbroad.

1301. {

}

(Simpson, Tr. 3426-27, *in camera*). {

} (Hauswald,

Tr. 909-910, 923, *in camera*; Riney Tr. 4930-4931, *in camera*). {

} (Simpson, Tr. 3426-27, *in camera*).

p. Conclusion

1302. {

} (Simpson, Tr. 3483-86, *in camera*). Simpson's opinions fail to meet the required legal standard and are rejected.

B. Dr. Henry Kahwaty

a. Foundation for Economic Opinions

1303. Dr. Henry Kahwaty is now, and has been since 2001-02, a director with LECG, an economic consulting firm. LECG provides expert analysis relating to economics, finance and accounting. (Kahwaty, Tr. 5062). During the last three years of his employment at LECG, more than 90% of Dr. Kahwaty's time has been spent on antitrust-related matters. (Kahwaty, Tr. 5066).

1304. Dr. Kahwaty has an undergraduate degree, a masters in economics and a Ph.D in economics from the University of Pennsylvania. After obtaining his degrees from the University of Pennsylvania, from 1991 to 1995 he was employed by the Antitrust Division of the U.S. Department of Justice where he worked in the economic analysis group. That work involved both merger and monopolization matters and included preparing questions for industry executives, analyzing data, preparing civil investigative demands, drafting Hart-Scott-Rodino second requests, reviewing data and information obtained in connection with investigations and making recommendations either to close investigations or to bring enforcement actions. (Kahwaty, Tr. 5063).

1305. Dr. Kahwaty has authored papers on antitrust and industrial organization topics and, during his time at the University of Pennsylvania, he taught industrial organization and microeconomics. (Kahwaty, Tr. 5066). He has testified on antitrust-related issues in deposition, and has also testified at trial in the Southern District of New York. He testified at a hearing before the European Commission on an antitrust case. (Kahwaty, Tr. 5066-67; Kahwaty, Tr. 5252, *in camera*).

1306. In this matter, Dr. Kahwaty was asked to review the allegations of the complaint as well as the expert report of Dr. John Simpson and to present his opinions regarding both. He prepared



an expert report relating to these matters, which is RX00945. {

} (Kahwaty, Tr. 5070-71, *in camera*).

1307. {

} (Kahwaty, Tr. 5081, *in camera*). {

} (Kahwaty, Tr. 5081-82, *in camera*). {

} (Kahwaty, Tr. 5082-83, *in camera*). {

} (Kahwaty, Tr. 5083-84, *in camera*).

b. General Economic Opinions

1308. Dr. Kahwaty has offered a number of opinions as an expert in this matter, including that:

a. {  
} (Kahwaty, Tr. 5071, *in camera*);

b. { } (Kahwaty, Tr. 5071, *in camera*);

c. { \_\_\_\_\_ }  
(Kahwaty, Tr. 5072, *in camera*);

d. {  
} (Kahwaty, Tr. 5072, *in camera*);

e. {  
} (Kahwaty, Tr. 5072-73, *in camera*);

f. { \_\_\_\_\_ } (Kahwaty, Tr. 5073, *in camera*);

g. { \_\_\_\_\_ } (Kahwaty, Tr. 5073, *in camera*);

h. { \_\_\_\_\_ } (Kahwaty, Tr. 5074, *in camera*);

i. { \_\_\_\_\_ } (Kahwaty, Tr. 5075, *in camera*);

j. { \_\_\_\_\_ } (Kahwaty, Tr. 5075, *in camera*); and

k. { \_\_\_\_\_

}.  
\_\_\_\_\_

(Kahwaty, Tr. 5077-81, *in camera*).

1309. This Court credits Dr. Kahwaty's opinions as well stated and supported and accepts those opinions under the relevant standards.

1310. { \_\_\_\_\_

\_\_\_\_\_ } (Kahwaty, Tr. 5084-85, *in*

*camera*). \_\_\_\_\_ {

\_\_\_\_\_ } (Kahwaty, Tr. 5085, *in camera*).

1311. { \_\_\_\_\_

\_\_\_\_\_ } (Kahwaty, Tr. 5071, 5106-07, 5112-13, *in*

*camera*).

1312. {

} (Kahwaty, Tr. 5072. *in camera*).

1313. {

} (Kahwaty, Tr. 5072, 5179, *in camera*).

1314. {

} (Kahwaty, Tr. 5072-73, *in camera*).

1315. {

} (Kahwaty, Tr. 5073, *in camera*).

1316. {

} (Kahwaty, Tr. 5073-74, *in camera*).

1317. {

} (Kahwaty, Tr. 5242-5243, *in camera*).

{

} (Kahwaty, Tr. 5074, *in*

*camera*). {

} (Kahwaty, Tr. 5235-5236, *in camera*).

{

} (Kahwaty, Tr. 5074, *in*

*camera*).

1318. {

} (Kahwaty, Tr. 5074-75, *in camera*.)

1319. {

} (Kahwaty, Tr. 5075,

*in camera*).

1320. {

} (Kahwaty, Tr. 5076, *in camera*). {

} (Kahwaty, Tr. 5076, *in camera*) {

} (Kahwaty, Tr. 5077, *in camera*).

1321. {

} (Kahwaty, Tr. 5077, *in camera*). {

} (Kahwaty, Tr. 5077-78, *in camera*).

1322. {

}

(Kahwaty, Tr. 5080-81, *in camera*).

1323. {

} (Kahwaty, Tr. 5241, *in camera*).

1324. {  
} (Kahwaty, Tr. 5078, *in camera*).

1325. {  
  
} (Kahwaty, Tr. 5078-80, *in camera*; Simpson, Tr. 3187;  
Simpson, Tr. 3199, 3341-3342, *in camera*).

1326. {  
  
} (Kahwaty, Tr. 5080, *in camera*).

1327. {  
} (Kahwaty, Tr. 5080, *in camera*).

1328. {  
  
} (Kahwaty, Tr. 5090, *in camera*). {

} (Kahwaty, Tr. 5091, *in camera*; RX00677, *in camera*). {

} (Kahwaty, Tr. 5091, *in camera*). {

} (Kahwaty, Tr. 5092, *in camera*).

1329. {

}

(Kahwaty, Tr. 5093, *in camera*). {

} (Kahwaty, Tr. 5093-94, *in camera*). {

} (Kahwaty, Tr. 5094, *in camera*).

1330. {

} (Kahwaty, Tr. 5095-97,

*in camera*). {

}

(Kahwaty, Tr. 5097, *in camera*).

1331. Daramic now has substantial excess capacity. Its plant at Potenza has been shut down and the equipment is being relocated to Thailand. (Hauswald, Tr. 1118-1119). {

} (Kahwaty, Tr. 5098, *in camera*). {

} (Kahwaty, Tr. 5099, *in camera*; Weerts, Tr. 4459-60, *in*

*camera*).

1332. {

} (Kahwaty, Tr.

5100, *in camera*).

1333. {

}

(Kahwaty, Tr. 5102-04, *in camera*).

c. Product Market Issues

1334. {

}

(Kahwaty, Tr. 5107-10, *in camera*).

1335. {

} (Kahwaty, Tr. 5112-13, *in camera*).

1336. {

} (Kahwaty, Tr. 5114-19, *in camera*).

1337. {

} (Kahwaty, Tr. 5566, *in camera*).

1338. {

} (Kahwaty, Tr. 5115-16, *in camera*).

1339. {

} (Kahwaty, Tr. 5117-19, *in camera*; Gillespie, Tr. 2954-2955; Gillespie, Tr. 2996, *in camera*; Gillespie, Tr. 3092; RX01119, *in camera*).

1340. {

} (Kahwaty, Tr. 5119-31, *in camera*). {

} (Kahwaty, Tr. 5119-20, *in camera*). {



} (Kahwaty, Tr. 5121-23, *in camera*). {

} (Kahwaty, Tr. 5126-27, *in camera*).

1341. {

} (Kahwaty,

Tr. 5127-31, *in camera*; RX00983, *in camera*).

1342. {

} (Kahwaty, Tr. 5132-34, *in camera*).

1343. {

} (Kahwaty, Tr.

5137-39, *in camera*).

1344. {

} (Kahwaty, Tr. 5577-79, *in camera*). {

}

(Kahwaty, Tr. 5137-38, *in camera*).

1345. {

} (Kahwaty,

Tr. 5144-55, *in camera*).

1346. {

} (Kahwaty, Tr. 5155, *in camera*). {

} (Kahwaty, Tr. 5296, *in camera*).

{

} (Kahwaty, Tr. 5295, *in camera*).

1347. {

} (Kahwaty, Tr. 5304-05, *in camera*). {

} (Kahwaty, Tr. 5306, *in camera*).

1348. {

} (Kahwaty, Tr. 5385, *in camera*).

d. Geographic Market

1349. {

} (Kahwaty, Tr. 5158, 5172-73, *in camera*).

1350. {

} (Kahwaty, Tr. 5159, *in camera*).

1351. {

} (Kahwaty, Tr. 5159-60, *in*

*camera*)

1352.

} (Kahwaty, Tr. 5161, *in camera*).

1353. {

} (Kahwaty, Tr. 5161-63, *in camera*).

1354. {

}

Kahwaty, Tr. 5164-65, *in camera*).

1355. {

} (Kahwaty, Tr. 5163-65, *in camera*).

1356. {

} (Kahwaty, Tr. 5166-68, *in camera*).

1357. {

}

(Kahwaty, Tr. 5169-70, *in camera*). {

} (Kahwaty, Tr. 5168-70, *in camera*; RX00677).

1358. {

} (Kahwaty, Tr. 5171-72, *in camera*).

1359. {

} (Kahwaty, Tr. 5172, *in camera*).

1360. {

} (Kahwaty, Tr. 5544, *in camera*).

1361. {

} (Kahwaty, Tr. 5544-46, *in camera*).

e. Concentration and Competitive Effects

1362. {

} (Kahwaty, Tr. 5173-76, *in camera*).

1363. {

}. (Kahwaty, Tr. 5579 – 85, *in camera*).

1364. {

} (Kahwaty, Tr. 5176-77, *in camera*).

1365. {

(Kahwaty, Tr. 5178, *in camera*).

f. Economic testimony supports the view that the acquisition would produce no anticompetitive unilateral affects.

1366. {

} (Kahwaty, Tr. 5256, *in camera*).

1367. {

}

(Kahwaty, Tr. 5556-57, *in camera*).

1368. {

} (Kahwaty,

Tr. 5181-82, *in camera*).

1369. {

} (Kahwaty, Tr. 5182-83, *in camera*).

1370. {

} (Kahwaty, Tr. 5183-84, *in camera*).

1371. {

} (Kahwaty, Tr. 5184-86, *in camera*).

1372. {

}

(Kahwaty, Tr. 5186-87, *in camera*).

g. No evidence of post-acquisition price increases

1373. {



} (Kahwaty, Tr.

5187-88, *in camera*).

1374. {

}

(Kahwaty, Tr. 5188-90, *in camera*). {

} (Kahwaty, Tr. 5190-92, 5207, *in camera*).

1375. {

} (Kahwaty, Tr. 5206-07, *in camera*).

1376. {

}

(Kahwaty, Tr. 5559, *in camera*). {

} (Kahwaty, Tr. 5202-04, *in camera*).

1377. {

} (Kahwaty, Tr. 5204-05, 5557-58, *in camera*).

h. Ease of entry

1378. {

}

(Kahwaty, Tr. 5209-15, *in camera*).

1379. {

} (Kahwaty, Tr. 5209-11, *in camera*).

1380. {

} (Kahwaty, Tr. 5211-12, *in camera*).

1381. {

} (Kahwaty,

Tr. 5209-10, *in camera*).

1382. {

} (Kahwaty, Tr.

5213-14, *in camera*).

1383. {

} (Kahwaty, Tr. 5532, *in*

*camera*).

i. Efficiencies

1384. {

} (Kahwaty, Tr. 5215-5218, *in camera*).

1385. {

} (Kahwaty Tr. 5215-5218, *in camera*).

j. Monopoly power

1386. {

} (Kahwaty, Tr. 5223-5224, *in camera*).

1387. {

} (Kahwaty, Tr. 5225-5229, *in camera*).

1388. {

} (Kahwaty, Tr. 5229-

5230, *in camera*).

1389. {

} (Kahwaty, Tr.

5230-5231, *in camera*).

1390. {

} (Kahwaty, Tr. 5231-5232, *in camera*).

k. Customer contracts

1391. {

} (Kahwaty, Tr.

5224-5225, *in camera*). {

} (Kahwaty, Tr. 5225-5232, *in camera*).

1392. {

} (Kahwaty, Tr. 5225-5226, 5232, *in*

*camera*).

1393. {

} (Kahwaty, Tr. 5233, *in camera*; Douglas, Tr.

4066-4067, *in camera*; Balcerzak, Tr. 4112-4114, *in camera*).

1394. {

} (Kahwaty,

Tr. 5233-5234, *in camera*).

l. The Daramic/H&V agreement

1395. {

} (Kahwaty, Tr. 5234, *in camera*).

1396. {

} (Kahwaty, Tr. 5234-5235, *in*

*camera*).

1397. {

} (Kahwaty, Tr. 5536-37, *in*

*camera*).

1398. {

} (Kahwaty, Tr. 5537-38, *in*

*camera*).

m. Remedies

1399. {

} (Kahwaty, Tr. 5075,

5236, *in camera*).

1400. {

} (Kahwaty, Tr. 5236-37,

*in camera*).

1401. {

} (Kahwaty, Tr. 5519,

*in camera*). {

} (Kahwaty, Tr. 5519, *in camera*). {

(Kahwaty, Tr. 5523, *in camera*). {

} (Kahwaty, Tr. 5555, *in camera*).

1402. {



1406. {

} (Kahwaty, Tr. 5570 – 72, *in camera*).

1407. {

} (Kahwaty, Tr. 5572 – 73, *in camera*).

1408. {

} (Kahwaty, Tr. 5272, *in camera*). {

} (Kahwaty, Tr. 5273,

*in camera*).

1409. {

} (Kahwaty, Tr. 5240, *in camera*).

1410. {

} (Kahwaty, Tr. 5240, *in camera*).

1411. {

(Kahwaty, Tr. 5274).

} (Kahwaty, Tr. 5275-76, *in camera*).

1412. {

} (Kahwaty Tr.

5546-49, *in camera*).

1413. {

} (Kahwaty, Tr. 5547-48, *in camera*).

1414. {

} (Kahwaty, Tr. 5548-49, *in camera*).

## CONCLUSIONS OF LAW

### XI. COMPLAINT COUNSEL BEAR THE BURDEN OF PERSUASION ON ALL ELEMENTS OF A SECTION 7 VIOLATION.

1415. Section 7 of the Clayton Act prohibits mergers/acquisitions “where in any line of commerce . . . in any section of the country, the effect of such acquisition may be substantially to lessen competition, or to tend to create a monopoly.” 15 U.S.C. § 18.

1416. Complaint Counsel bear the burden of proving every element of the claim that the merger or acquisition violates Section 7. Complaint Counsel retain the ultimate burden of persuasion at all times and on all components of the Section 7 claim. *FTC v. Arch Coal, Inc.*, 329 F. Supp.2d 109, 116-17 (D.D.C. 2004); *FTC v. H.J. Heinz Co.*, 246 F.3d 708, 715 (D.C. Cir. 2001); *FTC v. Univ. Health, Inc.*, 937 F.2d 1206, 1218 (11<sup>th</sup> Cir. 1991); *United States v. Oracle Corp.*, 331 F. Supp.2d 1098, 1110 (N.D. Cal. 2004).

1417. The legality of a particular merger or acquisition should be determined based on the conditions prevailing at the time of the trial or administrative hearing. *United States v. E.I. duPont de Nemours & Co.*, 353 U.S. 586, 597-98 (1957). Post-acquisition evidence may be introduced to show that a merger or acquisition did not violate Section 7 so long as the events shown by the evidence were not controlled by the acquiring firm. *United States v. Gen. Dynamics Corp.*, 415 U.S. 485, 506 (1974); *Lektro-Vend Corp. v. Vendo Co.*, 660 F.2d 255, 276 (7<sup>th</sup> Cir. 1981); *United States v. Int’l Harvester Co.*, 564 F.2d 769, 777-80 (7<sup>th</sup> Cir. 1977).

A. MERGER CHALLENGES HAVE GENERALLY OCCURRED IN INDUSTRIES WHERE THE CONCENTRATION LEVELS SPECIFIED BY THE GUIDELINES HAVE BEEN EXCEEDED SUBSTANTIALLY.

1418. The Horizontal Merger Guidelines (hereinafter, “Merger Guidelines” or “Guidelines”) were issued in 1992 by the Federal Trade Commission and the United States Department of Justice Antitrust Division. These Guidelines use, and define, the Herfindahl-Hirschman Index (“HHI”) as the method of measuring pre-merger and post-merger market concentration.

1419. The Merger Guidelines provide that where the post-merger HHI exceeds certain levels, it will be presumed that mergers producing a certain increase in the HHI are likely to create or enhance market power or facilitate its exercise. Sec. 1.51(c). The Guidelines also provide, however, that this “presumption may be overcome by a showing that factors set forth in Sections 2-5 of the Guidelines make it unlikely that the merger will create or enhance market power or facilitate its exercise, in light of market concentration and market shares.” Sec. 1.51(c).

1420. According to data issued jointly by the FTC and the Antitrust Division in 2003, which was a study of merger challenges that had occurred during 1999 to 2003, the actual merger challenges involved post-merger HHIs that were substantially higher than the level stated in the Merger Guidelines as triggering a presumption of market power. Federal Trade Commission & U.S. Department of Justice, Merger Challenges Data, Fiscal Years 1999-2003 (Dec. 18, 2003).

B. THE GUIDELINES IDENTIFY A FIVE-STEP APPROACH TO THE ANALYSIS OF A MERGER OR ACQUISITION.

1421. The Merger Guidelines set up a five-step approach to the assessment of a merger or acquisition under Section 7: (1) defining the relevant market or markets and assessing concentration in that market or markets; (2) determining whether the acquisition would trigger concerns about impact on competition; (3) assessing entry conditions and whether new entry would moderate or eliminate any concerns regarding impact on competition; (4) considering whether the acquisition would result in efficiencies; and (5) determining whether the acquired company was a failing firm. Guidelines Sections 1 - 5.

C. COMPLAINT COUNSEL MUST PROVE THE RELEVANT PRODUCT MARKET OR MARKETS AND THEY HAVE FAILED TO DO SO.

1422. Complaint Counsel must establish the relevant product market or markets and the geographic territory for each of them as a precondition to any Section 7 claim. “Determination of a relevant market is the necessary predicate” to a claimed violation of Section 7. *United*

*States v. E.I. duPont de Nemours & Co.*, 353 U.S. 586, 593 (1957). The Merger Guidelines require definition of the relevant product and geographic markets in order to determine whether there has been a violation. “A merger is unlikely to create or enhance market power or facilitate its exercise unless it significantly increases concentration and results in a concentrated market, properly defined and measured.” Sec. 1.0.

1423. A relevant market must be defined even though the agency or the court relies on direct evidence of market power or competitive effects. Proof of an effect on competition “is virtually meaningless if it is entirely unmoored from at least a rough definition of a product and geographic market.” *Republic Tobacco Co. v. N. Atl. Trading Co.*, 381 F.3d 717, 737 (7<sup>th</sup> Cir. 2004).

1424. In several cases, challenges to mergers were rejected where the plaintiff failed to establish the relevant market. *FTC v. Freeman Hosp.*, 69 F.3d 260 (8<sup>th</sup> Cir. 1995); *California v. Sutter Health Sys.*, 84 F. Supp.2d 1057 (N.D. Cal. 2000).

1425. For purposes of determining both the product or products and the geographic area of the relevant market or markets, the Guidelines apply the “‘smallest market’ principle.” Section. 1.21.

1426. To define the product market, the Guidelines “begin with each product . . . produced or sold by each merging firm and ask what would happen if a hypothetical monopolist of that product imposed at least a ‘small but significant and nontransitory’ increase in price (“SSNIP”), but the terms of sale of all other products remained constant.” Sec. 1.11. If the result of that price increase were that the hypothetical monopolist would not find the price increase profitable, then it would be necessary to add to the relevant product market the product(s) to which purchasers shifted. The process would then be repeated until a product or group of products is identified for which the SSNIP is profitable. Sec. 1.11.

1427. Complaint Counsel in this case have not used the hypothetical monopolist (SSNIP) system as the basis for identifying the relevant product markets they allege. The only use of the SSNIP system made by Complaint Counsel is for the purpose of contending that non-PE battery separators are not included in their relevant product markets. Complaint Counsel's Pre-Trial Brief at 8 – 13. Instead they rely upon a claim that battery separators used in certain applications cannot be used in other applications. Complaint, ¶ 14. In doing so, Complaint Counsel apply an erroneous principle and one that is not supported by the facts. This Court concludes that ACE-SIL® and FLEX-SIL® are separate markets and that an all PE separator market exists.

1428. Based on the Court's foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that Complaint Counsel has failed to prove the relevant product market or markets.

D. COMPLAINT COUNSEL MUST PROVE THE RELEVANT GEOGRAPHIC MARKET OR MARKETS AND THEY HAVE FAILED TO DO SO.

1429. To define the geographic market, the Guidelines “delineate the geographic market to be a region such that a hypothetical monopolist that was the only present or future producer of the relevant product at locations in that region would profitably impose at least a ‘small but significant and nontransitory’ increase in price (“SSNIP”), holding constant the terms of sale for all products produced elsewhere.” Sec. 1.21. If purchasers, in response to the SSNIP, shifted to suppliers outside the initial area, then it would necessary to add to the geographic market the areas to which these purchasers switched. Sec. 1.21.

1430. Similarly, for purposes of defining the relevant geographic market, Complaint Counsel do not use the “smallest market principle” incorporated in the Merger Guidelines and they do not use the SSNIP system promulgated by the Guidelines. Complaint Counsel claim that “[a] monopolist of all North American separator production could profitably increase prices *to North*

*American customers* for each relevant product by a SSNIP.” Complaint Counsel’s Pre-Trial Brief at 13 (emphasis added). The Guidelines, however, contain no requirement that the profitability of the price increase be limited to customers actually located within the initial territory. The Guidelines simply ask whether the “hypothetical monopolist . . . [could] profitably impose a [SSNIP], holding constant the terms of sale for all products produced elsewhere.” The Guidelines then inquire as to the responses of “buyers,” without reference to their location.

1431. Based on the Court’s foregoing findings of fact and the applicable legal standards and principles set forth here, the Court concludes that Complaint Counsel has failed to prove the relevant geographic market or markets.

E. COMPLAINT COUNSEL FAIL PROPERLY TO TAKE ACCOUNT OF ALL MARKET PARTICIPANTS FOR PURPOSES OF CALCULATING MARKET CONCENTRATION EVEN IN THE IMPROPER MARKETS THEY ALLEGE.

1432. In order to calculate market concentration in each relevant market, the Guidelines direct that market participants be identified. Market participants include firms that produce or sell the products in the relevant market, including vertically integrated firms “to the extent that such inclusion accurately reflects their competitive significance in the relevant market prior to the merger.” Sec. 1.31.

1433. According to the Guidelines, other firms will also be included as market participants even though they are not currently producing or selling products in the relevant market. These firms are referred to as “uncommitted entrants.” They are counted if production or sales by them in the market are “likely to occur within one year and without the expenditure of significant sunk costs of entry and exit, in response to a [SSNIP].” Sec. 1.32. The category of uncommitted entrants includes firms that can within the timeframe specified and without incurring significant sunk costs shift production from the production of other products to the production of products in the relevant market (“production substitution”). Sec. 1.321. Complaint Counsel’s concentration

calculations for their alleged motive, UPS and deep cycle markets are defective because of their failure to include Entek, a significant uncommitted entrant, in their calculations for these markets.

1434. Based on the Court's foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that Complaint Counsel has failed to take account of all market participants for purposes of calculating market concentration, even in the improper market(s) they allege.

F. MARKET SHARES ALONE MAY NOT BE SUFFICIENT TO PREDICT THE COMPETITIVE EFFECTS OF A MERGER OR ACQUISITION.

1435. Market shares are calculated for all firms determined to be market participants and, for purposes of gauging the level of market concentration, the HHI is then calculated using the market shares. Secs. 1.4 and 1.5.

1436. Courts and the FTC cannot rely on market shares and concentration alone to determine whether a violation of Section 7 has occurred. Such information alone does not "as a matter of logic, necessarily give a proper picture of a company's future ability to compete." *United States v. Gen. Dynamics Corp.*, 415 U.S. 486, 501 (1974). Courts must also assess the "structure, history and probable future" of the relevant product market. *Id.* at 501-02. The court in *Baker Hughes* said that "[t]he Supreme Court has adopted a totality-of-the-circumstances approach to [Section 7], weighing a variety of factors to determine the effects of particular transactions on competition." *United States v. Baker Hughes, Inc.*, 908 F.2d 981, 984 (D.C. Cir. 1990). The Merger Guidelines provide that "market share and concentration data provide only the starting point for analyzing the competitive impact of a merger" (Sec. 2.0) and that "market share and market concentration data may either understate or overstate the likely future competitive significance of a firm or firms in the market or the impact of a merger." Sec. 1.52.



1437. In this case, however, the very low market share of Microporous before the acquisition demonstrates that it had no ability to increase output sufficiently to affect market prices in the PE separator market, even in North America alone. “The smaller the percentage of total supply that a firm controls, the more severely it must restrict its own output in order to produce a given price increase, and the less likely it is that an output restriction will be profitable.” Merger Guidelines Sec. 2.0.

1438. In the Boeing/McDonnell Douglas merger (1997), the FTC itself decided, even though the two companies were two of three market competitors and Boeing had 60% of the market, that the merger should not be challenged because McDonnell Douglas was “no longer in a position to influence significantly the competitive dynamics of the commercial aircraft market” and that it was “no longer an effective competitor.” The Commission decided that McDonnell Douglas was “no longer a competitive constraint on the pricing of Boeing and Airbus.” See Statement of Chairman Robert Pitofsky and Comm’rs Janet D. Steiger, Roscoe B. Staret III, and Christine A. Varney, Boeing Co., FTC File No. 971-0051 (July 1, 1997), available at <http://www.ftc.gov/opa/1997/07/boeingsta.shtm>. Federal Trade Commission & U.S. Department of Justice, Commentary on the Horizontal Merger Guidelines (2006) at 16.

1439. Based on the Court’s foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that the evidence adduced by Complaint Counsel with respect to Daramic’s so-called “market shares” is insufficient to predict the competitive effects of Polypore’s acquisition of Microporous.

G. COMPLAINT COUNSEL HAVE BEEN UNABLE TO SHOW THAT THE ACQUISITION WOULD HARM COMPETITION BECAUSE OF COORDINATED INTERACTION.

1440. The Merger Guidelines outline the two principal methods of assessing the possibility of an anticompetitive effect resulting from a merger, coordinated interaction and unilateral effects.

Secs. 2.1 and 2.2. “Successful coordination typically requires rivals (1) to reach terms of coordination that are profitable to each of the participants in the coordinating group, (2) to have a means to detect deviations that would undermine the coordinated interaction, and (3) to have the ability to punish deviating firms, so as to restore the coordinated status quo and diminish the risk of deviations. . . . It may be relatively more difficult for firms to coordinate on multiple dimensions of competition in markets with complex product characteristics or terms of trade.”

Commentary on the Horizontal Merger Guidelines at 18-19.

1441. In addition, the presence of sophisticated customers (“power buyers”) in markets involving infrequent purchases, long-term contracts and bidding can be a substantial factor in promoting a competitive market. In *United States v. Baker Hughes Inc.*, 908 F.2d 981, 986 (D.C. cir. 1990) the court in affirming the lower court pointed to the fact of sophisticated buyers purchasing expensive equipment using “multiple, confidential bids for each order.” The court said that “[t]his sophistication . . . was likely to promote competition even in a highly concentrated market.” 908 F.2d at 986. ABA Section of Antitrust Law, Mergers and Acquisitions at 159-60 (3d ed. 2008) (hereinafter, “ABA, Mergers and Acquisitions”) (“Courts have recognized that evidence that a small number of buyers purchase most of the product in the market indicates that sellers may not have a great deal of freedom in establishing prices and thus may be less likely to adhere to a collusive agreement. Sophisticated buyers are more likely to detect collusion and offer sellers large orders to induce defections from the agreement or to vertically integrate”); *FTC v. Elders Grain*, 868 F.2d 901, 905 (7<sup>th</sup> Cir. 1989)(sophisticated buyers may cause sellers to cheat on any price agreement); *FTC v. R.R. Donnelley & Sons Co.*, Civ. No. 90-1619 SSH, 1990 U.S. Dist. LEXIS 11361, at 10 (D.D.C. 1990)(“[T]he sophistication and bargaining power of buyers play a significant role in assessing the effects of a proposed transaction”).

1442. Complaint Counsel have been unable to prove sufficient facts to support the coordinated interaction theory. The problem for their case is the aggressiveness of Daramic's two largest customers in moving purchases away from Daramic in favor of its largest rival, Entek. Entek has taken over Daramic's second largest customer, JCI, and has been negotiating with Exide (Daramic's largest customer) to acquire its business. Entek also competes aggressively with Daramic for East Penn's business. In this competitive climate, coordinated interaction will not occur.

1443. Past efforts of the FTC to apply the coordinated effects theory to nonprice coordination have been unsuccessful. *E.g., FTC v. Arch Coal, Inc.*, 329 F. Supp.2d 109 (D.D.C. 2004)(court rejected the FTC's theory that the sellers would use tacit coordination to restrict output).

1444. Respondent's economist expert, Dr. Henry Kahwaty, concluded that anticompetitive coordinated effects were not likely to result from the Daramic acquisition of Microporous. (Kahwaty, Tr. 5072). {

(Kahwaty, Tr. 5181-812),

(Kahwaty, Tr. 5182-83),

(Kahwaty, Tr. 5182-83),

} (Kahwaty, Tr. 5183-84, *in*

*camera*). This Court credits and accepts the opinions of Dr. Kahwaty.

1445. Based on the Court's foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that the evidence adduced by Complaint Counsel

is insufficient to show that Polypore's acquisition of Microporous would harm competition because of coordinated interaction.

H. COMPLAINT COUNSEL HAVE BEEN UNABLE TO SHOW THAT THE ACQUISITION WOULD HARM COMPETITION BECAUSE OF ANTICOMPETITIVE UNILATERAL EFFECTS.

1446. The Merger Guidelines describe the unilateral effects theory as follows: "A merger between firms in a market for differentiated products may diminish competition by enabling the merged firm to profit by unilaterally raising the price of one or both products above the premerger level." Sec. 2.21. Such a price increase is possible only if a significant portion of sales in the market are "accounted for by consumers who regard the products of the merging firms as their first and second choices, and . . . repositioning of the non-parties' product lines to replace the localized competition lost through the merger [is] unlikely." *Id.* The court in *United States v. Oracle Corp.*, 331 F. Supp.2d 1098 (N.D. Cal. 2004) described four factors as preconditions for a unilateral effects claim in such a product setting: (1) the products are differentiated; (2) the products "controlled by the merging firms must be close substitutes;" (3) products produced by other firms in the market "must be sufficiently different" that a SSNIP would be profitable for the merged firm; and (4) "repositioning by the non-merging firms must be unlikely." 331 F. Supp.2d at 1117-18. Applying these principles, the court rejected the government's claim of anticompetitive unilateral effects in *Oracle*, finding that the government failed to prove that the products of the merging companies occupied a "product 'node' alone," i.e., "a 'node' or an area of localized competition." *Id.* at 1170, 1172.

1447. The presence of sophisticated customers ("power buyers") in markets involving infrequent purchases, long-term contracts and bidding can be a substantial factor in promoting a competitive market. In *Baker Hughes*, the court in affirming the lower court pointed to the fact of sophisticated buyers purchasing expensive equipment using "multiple, confidential bids for

each order.” The court said that “[t]his sophistication . . . was likely to promote competition even in a highly concentrated market.” 908 F.2d at 986. The role of such purchasers was also relied upon in *United States v. Country Lake Foods, Inc.*, 754 F. Supp. 669, 673 (D. MN 1990) where the five substantial purchasers of fluid milk in the MSP/MSA, if faced with a threatened price increase, would “negotiate a reduction or . . . seek a substitute or replacement supplier of fluid milk,” if necessary “from outside dairies.” This Court has found substantial evidence in the record that Daramic’s customers are sophisticated buyers, yielding great power in contract negotiations and pricing. This Court concludes that such customers, including JCI, EnerSys and Exide are power buyers.

1448. The FTC itself has recognized that where its focus in a merger case is on the alleged dominance of the merged entity, it must show that the “merger may result in a single firm that so dominates a market that it is able to maintain prices above the level that would prevail if the market were competitive” and it must show that such increased prices are accompanied by “lower output.” *In the Matter of Chicago Bridge & Iron Co.*, Dkt. No. 9300 at 7 (Jan. 6, 2005). *Forsyth v. Humana, Inc.*, 114 F.3d 1467, 1476 (9<sup>th</sup> Cir. 1997).

1449. Complaint Counsel have also been unable to prove sufficient facts to support their unilateral effects theory. As with the coordinated interaction theory, the problem for their case is the aggressiveness of Daramic’s two largest customers in moving purchases away from Daramic in favor of its largest rival, Entek. Entek has taken over Daramic’s second largest customer, JCI, and has been negotiating with Exide (Daramic’s largest customer) to acquire its business. These facts show that Daramic does not have unilateral power in the PE separator market.

1450. Complaint Counsel have been unable to make the necessary showings in this case. They have been unable to show (1) that the alleged price increases were accompanied by lower output; (2) that the alleged price increases were out of line with pre-acquisition increases or that they

were not cost justified; or (3) that the alleged price increases were the result of post-merger enhanced market power as opposed to other, competitively neutral factors.

1451. Respondent's economist expert, Dr. Henry Kahwaty, concluded that anticompetitive unilateral effects were not likely to result from the Daramic acquisition of Microporous. (Kahwaty, Tr. 5072). {

} (Kahwaty, Tr. 5187-5207, 5557-58, *in*

*camera*). This Court credits and accepts the opinions of Dr. Kahwaty, gives no weight to the opinions of Dr. Simpson and concludes that Complaint Counsel has failed to show that the acquisition would harm competition because of anticompetitive unilateral effects.

1452. Based on the Court's foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that the evidence adduced by Complaint Counsel is insufficient to show that Polypore's acquisition of Microporous would harm competition because of anticompetitive unilateral effects.

I. COMPLAINT COUNSEL HAVE BEEN UNABLE TO SHOW THAT THERE ARE SIGNIFICANT BARRIERS TO ENTRY INTO THE PRODUCTION AND SALE OF BATTERY SEPARATORS.

1453. The Merger Guidelines provide that "[a] merger is not likely to create or enhance market power or to facilitate its exercise, if entry into the market is so easy that market participants, after the merger, either collectively or unilaterally could not profitably maintain a price increase above premerger levels. Such entry likely will deter an anticompetitive merger in its incipiency, or deter or counteract the competitive effects of concern." Sec. 3.0. "In the absence of significant

[entry] barriers, a company probably cannot maintain supracompetitive prices for any length of time.” *Baker Hughes*, 908 F.2d at 987. The Guidelines further provide that if entry will be “timely, likely and sufficient in its magnitude,” then “the merger raises no antitrust concern and ordinarily requires no further analysis.” *Id.* The Guidelines consider entry to be timely where it “can be achieved within two years from initial planning to significant market impact.” Sec. 3.2. Entry will be considered likely “if it would be profitable at premerger prices, and if such prices could be secured by the entrant.” Sec. 3.3. Entry is likely to be sufficient whenever it is likely pursuant to Sec. 3.3. Sec. 3.4.

1454. Another form of entry contemplated by the Guidelines occurs if differentiated product markets where “rival sellers likely would replace any localized competition lost through the merger by repositioning their product lines.” Sec. 2.212. The Guidelines note that “where it is costly for buyers to evaluate product quality, buyers who consider purchasing from both merging parties may limit the total number of sellers they consider. If either of the merging firms would be replaced in such buyers’ consideration by an equally competitive seller not formerly considered, then the merger is not likely to lead to a unilateral elevation of prices.” *Id.*

1455. “[L]arge, sophisticated buyers can counteract potentially anticompetitive postmerger behavior by encouraging entry. A ‘power buyer’ may subsidize new entry or incumbent expansion in order to increase market output or lessen the likelihood of seller coordination. The power buyer itself may become a seller via vertical integration with an existing producer.” ABA, *Mergers and Acquisitions* at 196 n.27.

1456. Respondent’s economist expert, Dr. Henry Kahwaty, concluded that any anticompetitive effects that might arise from the acquisition of Microporous by Daramic would be dispelled by new entry. (Kahwaty, Tr. 5072-73). {

} (Kahwaty, Tr. 5209-14, 5532, *in*

*camera*). This Court credits and accepts the opinions of Dr. Kahwaty.

1457. Based on the Court's foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that Complaint Counsel has not shown that there are significant barriers to entry into the production of and sale of battery separators.

J. COMPLAINT COUNSEL HAVE BEEN UNABLE TO SHOW THAT MICROPOROUS WAS A VIABLE POTENTIAL ENTRANT INTO SEGMENTS OF THE BATTERY SEPARATOR INDUSTRY OTHER THAN DEEP CYCLE.

1458. The Supreme Court in *United States v. Marine Bancorp.*, 418 U.S. 602 (1974) provided the legal standards relating both to the theory of elimination of actual potential competition and the theory of perceived potential competition. The Court affirmed the district court, which had decided against the government on the ground that extensive state and federal regulation of banks created "legal" barriers to entry preventing National Bank of Commerce ("NBC"), a subsidiary of Marine Bancorp based in Seattle, from entering independently into the Spokane banking market located in the eastern part of the state. The Court identified the elements of the perceived potential competition theory, stating: "[A] market extension merger may be unlawful if the target market is substantially concentrated, if the acquiring firm has the characteristics, capabilities and economic incentive to render it a perceived potential de novo entrant, and if the acquiring firm's premerger presence on the fringe of the target market in fact tempered oligopolistic behavior on the part of existing participants in that market." 418 U.S. at 624-25. The Court found in this case, however, that existing participants in the Spokane banking market were aware of the regulatory barriers preventing NBC from entering that market and, therefore, from exercising any competitive impact in that market.



1459. The Court in *Marine Bancorp* also applied the actual potential competition theory and defined its elements by stating two requirements, in addition to those identified for the perceived potential competition theory: (1) “that in fact NBC has available feasible means for entering the Spokane market other by by acquiring WTB; and (2) that those means offer a substantial likelihood of ultimately producing deconcentration of that market or other significant procompetitive effects.” 418 U.S. at 633. The Court found that this second requirement was not met because legal restrictions would have prevented expansion from an initial toehold acquisition. 418 U.S. at 636-37.

1460. As for the first prong, the FTC itself has required “clear proof” that the firm would have entered the market. *In re B.A.T. Indus.*, 104 F.T.C. 852, 926-28 (1984). In *B.A.T. Industries*, the FTC found that subjective evidence, e.g., capital expenditure plans and internal management studies, were the “best evidence” that the firm would have entered but it also relied on objective evidence, e.g., capabilities, interests and incentives to enter. 104 F.T.C. at 922, 926-28.

1461. Based on the Court’s foregoing findings of fact and the applicable legal standards and principles, Complaint Counsel has not shown that Microporous was a viable potential entrant into segments of the battery separator industry other than the deep cycle.

K. MICROPOROUS WAS IN A PRECARIOUS FINANCIAL CONDITION AS OF THE TIME OF THE ACQUISITION, WHICH SIGNIFICANTLY REDUCED ITS COMPETITIVE SIGNIFICANCE.

1462. The Merger Guidelines recognize that acquisition of a “failing firm” would not be likely to have an adverse effect on competition. Status of a “failing firm” is recognized if (1) the firm “would be unable to meet its financial obligations in the near future;” (2) if it could not reorganize successfully under Ch. 11 of the Bankruptcy Act; (3) if it has attempted in good faith to obtain alternative offers of acquisition of its assets that would retain its assets in the relevant

market “and pose a less severe danger to competition than does the proposed merger;” and (4) if, “absent the acquisition, the assets of the failing firm would exit the relevant market.” Sec. 5.1.

1463. Moreover, no violation of Section 7 has been found in some cases where the court found the acquired firm not to be actually failing but to be for some reason in a sufficiently weak condition that it would not be an effective competitor. *United States v. Int’l Harvester Co.*, 564 F.2d 769 (7<sup>th</sup> Cir. 1977)(impaired financial resources); *United States v. Consolidated Foods Corp.*, 455 F. Supp. 108 (E.D. Pa. 1978)(sales decline to the point that ability to compete was impaired); *FTC v. Nat’l Tea Co.*, 603 F.2d 694 (8<sup>th</sup> Cir. 1979)(acquired company impaired and likely to depart the market). See ABA Mergers and Acquisitions at 285-86.

1464. The Merger Guidelines point out that “recent or ongoing changes in the market may indicate that the current market share of a particular firm either understates or overstates the firm’s future competitive significance” and “The Agency will consider reasonably predictable effects of recent or ongoing changes in market conditions in interpreting market concentration and market share data.” Sec. 1.521. These provisions are based on *United States v. Gen. Dynamics Corp.*, 415 U.S. 486 (1974) where the Court found no violation of Section 7 because the acquired company’s coal reserves were depleted or committed in long term contracts. The analysis did not create a failing company finding but a finding that the acquisition would not produce an adverse effect on competition. An FTC Staff Report concluded that this form of analysis was appropriate. FTC Staff Report, *Anticipating the 21<sup>st</sup> Century: Competition Policy in the New High-Tech, Global Marketplace*, reprinted in 70 *Antitrust & Trade Reg. Rep. (BNA)* No. 1765, S-1 (June 6, 1996). These concepts may have application in this case where the general economic downturn has created substantial excess capacity in the industry and where the economic decline combined with Microporous’ pre-transaction weak financial condition and

poor management raise questions as to whether the firm would have survived the recession as a viable competitive entity.

1465. Based on the Court's foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that Microporous was in precarious financial condition as of the time of the acquisition, such that Microporous was not competitively significant.

L. DARAMIC HAS REALIZED SUBSTANTIAL EFFICIENCIES SINCE THE ACQUISITION AND THESE HAVE GENERATED PROCOMPETITIVE EFFECTS.

1466. The Merger Guidelines recognize that efficiencies may result from mergers and state that “[t]he Agency will not challenge a merger if cognizable efficiencies are of a character and magnitude such that the merger is not likely to be anticompetitive in any relevant market.” Sec. 4. “Cognizable efficiencies” are defined as “merger-specific efficiencies that have been verified and do not arise from anticompetitive reduction in output or service.” *Id.* The Guidelines praise one kind of efficiency that has been realized in this case: “efficiencies resulting from shifting production among facilities formerly owned separately, which enable the merging firms to reduce the marginal cost of production, are more likely to be susceptible to verification, merger-specific, and substantial, and are less likely to result from anticompetitive reductions in output.”

1467. The 8<sup>th</sup> Circuit Court of Appeals held in the *Tenet Health Care* case that “the district court should . . . have considered evidence of enhanced efficiency in the context of the competitive effects of the merger.” It held that there was evidence that the merged hospital could offer better medical care than either of the merging hospitals could alone and that it would “be able to attract more highly qualified physicians and specialists and to offer integrated delivery and some tertiary care.” *United States v. Tenet Health Care Corp.*, 186 F.3d 1045, 1054 (8<sup>th</sup> Cir. 1999).

1468. Based on the Court's foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that Daramic has realized substantial efficiencies since the acquisition and those have generated procompetitive effects.

M. CUSTOMER TESTIMONY MAY BE OF LIMITED WEIGHT AND SIGNIFICANCE REGARDING SUBSTANTIVE ISSUES.

1469. The courts treat with great care and caution customer testimony about relevant markets and adverse effects on competition allegedly resulting from mergers and acquisitions. In *United States v. Oracle Corp.*, 331 F. Supp.2d 1098 (N.D.Cal. 2004), the government offered ten witnesses on the product market and competitive effects questions. Their testimony supported the government's position that "high function enterprise resource planning software" was the relevant product market. But the court concluded that the testimony was "largely unhelpful" because the witnesses testified to their preferences and "[t]here was little, if any, testimony by these witnesses about what they would or could do or not do to avoid a price increase from a post-merger Oracle." 331 F. Supp.2d at 1131. The court said that none gave testimony about the costs of alternatives, the cost of outsourcing or "how much it would cost to adapt other vendors' products to the same functionality that the Oracle and PeopleSoft products afford." *Id.* Finally, the court said that "unsubstantiated customer apprehensions do not substitute for hard evidence." *Id.*

1470. Based on a number of factors as discussed in the foregoing findings of fact, the Court has multiple questions about the credibility of customer testimony and concludes that it is of limited utility in this matter.

N. COMPLAINT COUNSEL'S EXPERT LACKED INDEPENDENCE AND FAILED TO PERFORM ANALYSIS NECESSARY TO FORM AND SUBSTANTIATE HIS OPINIONS.

1471. Independent analysis of the issues forming the opinion of a proffered expert witness is critical to a court's receipt of that expert's opinion. *In re TMI Litig.*, 193 F.3d 613, 698 (3<sup>rd</sup> Cir.

1999), opinion amended by *In re TMI Litig.*, 199 F.3d 158 (3<sup>rd</sup> Cir. 2000); *Crowley v. Chait*, 322 F.Supp.2d 530, 542, 546-547 (D.N.J. 2004); *Lyman v. St. Jude Medical S.C., Inc.*, 580 F.Supp.2d 719, 726-727 (E.D.Wis. 2008). “That an expert testifies based on research he has conducted independent of the litigation provides important, objective proof that the research comports with the dictates of good science.” *Daubert v. Merrell Dow Pharm., Inc.*, 43 F.3d 1311, 1317 (9<sup>th</sup> Cir. 1995) citing Peter W. Huber, *Galileo’s Revenge: Junk Science in the Courtroom*, 206-09 (1991). Under Federal Rule of Evidence 702, a testifying expert lacks credibility absent evidence of independence from the party or its advocates. *Trigon Ins. Co. v. United States*, 204 F.R.D. 277, 295 (E.D. Va. 2001); see also Fed.R.Evid. 702 (Expert testimony will be admissible if “scientific, technical, or other specialized knowledge will assist the trier of fact to understand the evidence or determine a fact in issue.”)

1472. Complaint Counsel’s expert, John Simpson, offered little more than a regurgitation of the allegations of the Complaint and certain selected testimony. Simpson ignored key evidence and failed to conduct any quantitative analysis outside of his HHI calculations, which were in any event in error. Much more is required for this Court to accept Dr. Simpson’s opinions. Accordingly, this Court concludes that Dr. Simpson’s opinions failed to meet the relevant legal standard and are unsupported by the record. In addition, Dr. Simpson lacked credibility in his testimony regarding his opinions and the manner in which they were derived. Therefore, this Court will give no weight to Dr. Simpson’s opinions.

O. COMPLAINT COUNSEL FAILED TO PROVE THAT DARAMIC ENGAGED IN “MONOPOLIZATION” THROUGH THE USE OF EXCLUSIONARY CONTRACTS.

1473. The offense of monopolization under Section 2 of the Sherman Act “requires, in addition to the possession of monopoly power in the relevant market, ‘the willful acquisition or maintenance of that power as distinguished from growth or development as a consequence of a

superior product, business acumen, or historic accident.” *Verizon Comm’s Inc. v. Law Offices of Curtis V. Trinko*, 124 S. Ct. 872, 878-79 (2004), quoting *United States v. Grinnell Corp.*, 384 U.S. 563, 570-71 (1966).

1474. Monopoly power is “the power to control prices or exclude competition.” *United States v. E.I. duPont de Nemours & Co.*, 351 U.S. 377, 391 (1956). Daramic had no ability to control prices or exclude competition. Monopoly power that exists for only a short period of time will not support a monopolization claim. “Market power, to be meaningful for antitrust purposes, must be durable.” *Reazin v. Blue Cross & Blue Shield*, 899 F.2d 951, 968 (10<sup>th</sup> Cir. 1990).

1475. Moreover, monopoly power cannot exist where barriers to entry are non-existent or modest. *United States v. Microsoft Corp.*, 253 F.3d 34, 54 (DC Cir. 2001)(“[B]ecause of the possibility of competition from new entrants, looking to market shares alone can be misleading”). Barriers to entry into the production and sale of battery separators are modest. A firm may not have monopoly power if the industry faces “dwindling market demand.” Antitrust L. Dev. at 236. The market for battery separators has been dwindling since before the acquisition occurred.

1476. Respondent’s economist expert, Dr. Henry Kahwaty, concluded that Daramic did not have monopoly power both because it lacked the power to control prices or exclude entry and because its market shares were insufficient to support a finding that it had monopoly power. (Kahwaty, Tr. 5073-74).

1477. For exclusive dealing arrangements to raise antitrust problems, “the competition foreclosed by the contract must be found to constitute a *substantial* share of the relevant market.” *Tampa Elec. Co. v. Nashville Coal Co.*, 365 U.S. 320, 328 (1961). *Jefferson Parish Hospital District No. 2 v. Hyde*, 466 U.S. 2, 45 (1984)(“Exclusive dealing is an unreasonable restraint on trade only when a significant fraction of buyers or sellers are frozen out of a market by the

exclusive deal.”). The plaintiff must prove the degree of market foreclosure and show that it is substantial. *United States v. Microsoft Corp.*, 253 F.3d 34, 69 (D.C. Cir. 2001) (“it is clear that in all cases the plaintiff must both define the relevant market and prove the degree of foreclosure;” “[t]he share of the market foreclosed is important because, for the contract to have an adverse effect upon competition, ‘the opportunities for other traders to enter into or remain in that market must be significantly limited.’” quoting *Tampa Electric*, 365 U.S. at 328. *Roland Mach. Co. v. Dresser Indus., Inc.*, 749 F.2d 380, 394 (7<sup>th</sup> Cir. 1984)(The plaintiff in an exclusive dealing case “must prove . . . that it is likely to keep at least one significant competitor of the defendant from doing business in a relevant market. If there is no exclusion of a significant competitor, the agreement cannot possibly harm competition.”) *United States v. Dentsply Int’l, Inc.*, 399 F.3d 181, 191 (3d Cir. 2005)(“[t]he test is . . . whether the challenged practices bar a substantial number of rivals or severely restrict the market’s ambit”).

1478. The allegedly exclusionary contracts pointed to by Complaint Counsel were, in fact, not exclusionary. Microporous was not excluded by these contracts either because it was not being considered by the customers for such contracts or because it lacked capacity at the time to produce the products that were the subject of the contracts. Moreover, Complaint Counsel have failed to make any showing of the extent to which they claim the market was foreclosed by the allegedly exclusionary contracts. {

} (Kahwaty, Tr. 5074, *in camera*). {

} (Kahwaty, Tr. 5224-33, *in camera*). This Court credits and accepts the opinions of Dr. Kahwaty.

1479. Based on the foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that Complaint Counsel failed to prove that Daramic engaged in “monopolization” through the use of exclusory contracts.

**XII. COMPLAINT COUNSEL FAILED TO PROVE THAT THE CROSS AGENCY AGREEMENT BETWEEN DARAMIC AND H&V UNLAWFULLY RESTRAINED TRADE.**

A. The Agreement is Governed by the Ancillary Restraints Doctrine.

1480. The ancillary restraints concept is traced to *Addyston Pipe & Steel Co. v. United States*, 175 U.S. 211 (1899). The doctrine is used in assessing a joint venture or competitor collaboration that has a legitimate business purpose but also has some components that are claimed to adversely affect competition. As explained more recently by the Supreme Court in *Texaco Inc. v. Dagher*, 547 U.S. 1, 7 (2006), the doctrine requires a court to determine whether it confronts “a naked restraint of trade . . . or one that is ancillary to the legitimate and competitive purposes of the business association.”

1481. Ancillary restraint analysis was used by the court in *Polk Bros., Inc. v. Forest City Enter.*, 776 F.2d 185 (7th Cir. 1985). The court found no violation where two potential retail competitors agreed not to sell competing products in order to facilitate joint ownership of a retail outlet. It held that this ancillary restraint was valid because it might “contribute to the success of a cooperative venture that promises greater productivity and output.” 776 F.2d at 189.

B. The FTC’s “Inherently Suspect” Doctrine has not been Accepted by the Supreme Court.

1482. The FTC adopted its “inherently suspect” doctrine in *In re Massachusetts Board of Registration in Optometry*, 110 F.T.C. 549 (1988). That doctrine, particularly its burden shifting component, was challenged in *PolyGram Holding, Inc. v. FTC*, 416 F.3d 29 (D.C. Cir. 2005) and has not been accepted by the Supreme Court. *Texaco Inc. v. Dagher* was a joint sales venture case decided after *Polygram*. In that case, the Court did not recognize the “inherently suspect”



system but endorsed (without applying it) the historical “ancillary restraints” method for assessing collateral restraints in joint ventures.

1483. The FTC’s “inherently suspect” doctrine is subject to significant limitations. In *North Texas Specialty Physicians v. FTC*, 528 F.3d 346 (5th Cir 2008), the court said that before a court or the FTC can shift the burden to the defendant to show procompetitive effects, it must make its “inherently suspect” announcement in more than a “cursory and conclusory manner.” 528 F.3d at 361.

1484. Like the agreement in *Polk Brothers*, the agreement between Daramic and H&V was a legitimate and productive “cooperative venture” which (1) had no effect of limiting or restraining competition between the two companies and/or (2) was reasonably ancillary because it “promote[d] the success of this more extensive cooperation.” 776 F.2d at 189.

1485. Respondent’s economist expert, Dr. Henry Kahwaty, concluded that the agreement between Daramic and H&V did not have any adverse effect on competition. (Kahwaty, Tr. 5074-75). Dr. Kahwaty testified that in the absence of any evidence indicating that Daramic and H&V intended to commence production of products made by the other company, the joint marketing arrangements contemplated by the agreement were procompetitive. This Court credits and accepts the opinions of Dr. Kahwaty.

1486. Based on the Court’s foregoing findings of fact and the applicable legal standards and principles set forth herein, the Court concludes that Complaint Counsel failed to prove that the Cross Agency Agreement between Daramic and H&V unlawfully restrained trade.

**XIII. THE DIVESTITURE AND OTHER RELIEF SOUGHT BY COMPLAINT COUNSEL ARE UNNECESSARILY OVERBROAD TO ADDRESS COMPLAINT COUNSEL’S COMPETITION CONCERNS AND ARE PUNITIVE.**

A. Divestiture of all the Acquired Assets is not Required by Law.

1487. Complete divestiture of all acquired assets is not required unless necessary to restore the competition lost. *RSR Corp. v. FTC*, 602 F.2d 1317, 1325-26 (9th Cir. 1979); *United States v. Waste Mgmt.*, 588 F. Supp. 498, 514 (S.D.N.Y. 1983), *rev'd on other grounds*, 743 F.2d 976 (2d Cir. 1984). There was no competitive overlap between Microporous' ACE-SIL® and FLEX-SIL® products and any products sold by Daramic, and Microporous' plant in Feistritz, Austria, did not sell product in the US. Accordingly, there is no basis for any claim that these production assets should be divested.

1488. Respondent's economist expert, Dr. Henry Kahwaty, concluded that "the remedies that the FTC is seeking in this matter are overbroad and not supported by the record." (Kahwaty, Tr. 5075, 5080).

B. Any Divestiture or other Relief must be Keyed to the Status of the Acquired Company Today if the Acquisition had not Occurred.

1489. The "key" to an antitrust remedy is a determination of the measures needed to effectively restore the competition that was lost and eliminate the effects of the acquisition. *In the Matter of Chicago Bridge & Co.*, Dkt. No. 9300 at 7 (Op. of Comm'n)(Jan. 6, 2005). Relief is intended to "restore competition to the state in which it existed prior to, and would have continued to exist but for, the illegal merger." *In the Matter of B.F. Goodrich Co.*, 110 F.T.C. 207, 345 (1988). Complaint Counsel fail to acknowledge Microporous' weak financial condition at the time of the acquisition and the real likelihood that it might not have survived the current economic downturn or, at a minimum, would have been reduced to the status of an ineffective competitor.

C. Divestiture is an Equitable Remedy the Need for which must be Proved, and Punitive Relief is not Permissible.

1490. Divestiture is "an equitable remedy designed to protect the public interest." *United States v. E.I. duPont de Nemours & Co.*, 366 U.S. 316, 326 (1961). It must be based on facts "and economic theory as applied to such facts." *United States v. Crowell, Collier & MacMillian, Inc.*,

361 F.Supp. 983, 991 (D.C.N.Y. 1973). Courts are not authorized in civil proceedings to punish antitrust violators, and relief must not be punitive.” *E.I. du Pont de Nemours & Co.*, 366 U.S. at 326; *In the Matter of Grand Union Co.*, 102 F.T.C. 812 (1983)(“The Supreme Court . . . has ruled that punitive relief is inappropriate in a civil antitrust proceeding.”). Complaint Counsel has failed to prove facts to support all the claims for relief, in particular the claim that certain Daramic assets that were not part of the acquisition should be divested. Any such divestiture would be punitive.

D. Relief, including Divestiture, in a Consummated Merger Case Should be Fashioned Giving Consideration to Post-Transaction Developments and Market Conditions at the Time the Relief is Ordered.

1491. In *Evanston Nw. Healthcare Corp.*, FTC Docket No. 9315 (Aug. 6, 2007) the Commission considered relief to be ordered in a case where the merger had occurred some seven years earlier. In light of various costs and risks associated with divestiture and since certain improvements that had been made by the merged entity might be adversely affected if divestiture were ordered, the Commission adopted instead a conduct remedy that required separate negotiating teams for the formerly separate hospitals. The Commission said, “A long time has elapsed between the closing of the merger and the conclusion of the litigation. This does not preclude the Commission from ordering divestiture, but it would make a divestiture much more difficult, with a greater risk of unforeseen costs and failure.” FTC Docket No. 9315 at 89.

1492. Similarly, in *Chicago Bridge & Iron Co.*, FTC Docket No. 9300 (January 6, 2005), the Commission ordered certain “water tank assets” to be included in divestiture even though those assets were not involved in production of the relevant products. The Commission believed that inclusion of the water tank assets was appropriate since revenue from those assets had helped stabilize the relevant market businesses. However, in order “to ensure that narrower relief is available if it is warranted by market conditions,” the Commission also “included a provision

that allows the exclusion of the water tank assets if the acquirer and monitor trustee both find them unnecessary and agree to exclude them.” FTC Docket No. 9300 at 95. Reflecting this tailoring of the divestiture order in light of conditions existing at the time of the divestiture, the 5<sup>th</sup> Circuit Court of Appeals in affirming the Commission noted that “CB&I and the monitor are required to divest to the new separate entity *no more* nor less of the former PDM assets as are necessary for the new separate entity to compete with CB&I in the relevant markets on an equal footing.” *Chicago Bridge & Iron Co. v. FTC*, 534 F.3d 410, 442 (5<sup>th</sup> Cir. 2008)(emphasis added).

E. COMPLAINT COUNSEL HAS FAILED TO SHOW THAT RECISSION OF DARAMIC’S CONTRACTS IS WARRANTED OR NECESSARY.

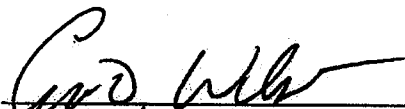
1493. Complaint Counsel seeks rescission of Daramic’s contracts entered into subsequent to the acquisition. *See* Complaint, XIV. Based on the evidence, this Court concludes that such relief is neither warranted nor necessary. Complaint Counsel has failed to prove its conduct claims and therefore, no relief is required. In addition, to the extent Complaint Counsel seeks rescission of contracts entered into prior to the acquisition, which is not part of the relief sought in the Complaint, such relief, for the reasons stated above, is also not required, necessary or warranted.

#### **XIV. CONCLUSION**

For the reasons stated above, the Court finds that Complaint Counsel have not proven their claims and the acquisition between Polypore and Microporous Products has not, and will not, cause competitive harm in the worldwide PE separator market. Accordingly, the Court dismisses the FTC’s claims with prejudice.

Dated: July 17, 2009

Respectfully Submitted,



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*Attorneys for Respondent*

**CERTIFICATE OF SERVICE**

I hereby certify that on July 17, 2009, I caused to be filed via hand delivery and electronic mail delivery an original and two copies of the foregoing *Respondent's Proposed Findings of Fact and Conclusions of Law [PUBLIC RECORD]*, and that the electronic copy is a true and correct copy of the paper original and that a paper copy with an original signature is being filed with:

Donald S. Clark, Secretary  
Office of the Secretary  
Federal Trade Commission  
600 Pennsylvania Avenue, NW, Rm. H-135  
Washington, DC 20580  
[secretary@ftc.gov](mailto:secretary@ftc.gov)

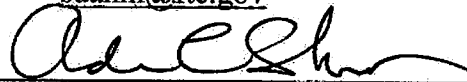
I hereby certify that on July 17, 2009, I caused to be served one copy via electronic mail delivery and four copies via hand delivery of the foregoing *Respondent's Proposed Findings of Fact and Conclusions of Law [PUBLIC RECORD]* upon:

The Honorable D. Michael Chappell  
Administrative Law Judge  
Federal Trade Commission  
600 Pennsylvania Avenue, NW  
Washington, DC 20580  
[oalj@ftc.gov](mailto:oalj@ftc.gov)

I hereby certify that on July 17, 2009, I caused to be served via first-class mail delivery and electronic mail delivery a copy of the foregoing *Respondent's Proposed Findings of Fact and Conclusions of Law [PUBLIC RECORD]* upon:

J. Robert Robertson, Esq.  
Federal Trade Commission  
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Exhibit A

**EXHIBIT A**

**INDEX OF EXHIBITS OFFERED BY RESPONDENT AND RECEIVED IN EVIDENCE**

**(IN CAMERA)**



Exhibit B

## EXHIBIT B

### INDEX OF WITNESSES CALLED BY RESPONDENT

<u>WITNESS</u>	<u>IDENTIFICATION</u>	<u>TRANSCRIPT PAGES</u>	<u>IN CAMERA PORTION</u>
Larry Trevathan	VP of Operations of Daramic	3566-3776	
Steven McDonald	Sales Manager – Americas of Daramic	3778-3965	3850-3899
Dale Leister	Director Procurement Strategy & Supplier Development, East Penn Manufacturing	3967-4046	3997-4006
James Douglas	Executive VP of Douglas Battery Mfg. Co.	4047-4088	4065-4074
Arthur Balcerzak	Director of Purchasing for Crown Battery (as consultant)	4089-4139	4103-4119
Harry Seibert	VP and Business Director of Daramic	4140-4316	4152-4227 4234-4312
Christophe Thuet	Business Director Asia-Pacific of Daramic	4317-4448	4350-4370 4408-4441
Daniel Weerts	VP of Sales and Marketing of Entek Holding Company	4450-4527	4453-4527
Hans-Peter Gaugl	Managing Director Austrian Facility for Daramic Austria GmbH	4529-4646	
Kevin Whear	VP of Technology of Daramic	4658-4846	4716-4717 4728-4759 4809-4841

Michael Graff	Managing Director of Warburg Pincus (also Chairman of the Board of Directors of Polypore)	4847-4906	4859-4904
Tim Riney	VP of Finance of Daramic	4907-5060	4923-5059
Henry Kahwaty, Ph.D.	Director of LECG (Respondent's expert witness)	5061-5585	5069-5193 5201-5455 5471-5524 5528-5585