

Complaint

103 F.T.C.

IN THE MATTER OF  
CHAMPION SPARK PLUG COMPANY

DISMISSAL ORDER, ETC., IN REGARD TO ALLEGED VIOLATIONS OF  
SEC. 5 OF THE FEDERAL TRADE COMMISSION ACT AND  
SEC. 7 OF THE CLAYTON ACT

*Docket 9141. Complaint, July 29, 1980—Final Order, June 20, 1984*

In this Final Order, the Commission denied appeals of respondent and complaint counsel, accepted the ALJ's Initial Decision and Order as its own, and dismissed the complaint charging a spark plug manufacturer with antitrust violations through its acquisition of The Anderson Company, the nation's largest manufacturer of replacement windshield wiper products.

*Appearances*

For the Commission: *Robert C. Jones*

For the respondent: *Alan Malasky, Arent, Fox, Kintner, Plotkin and Kahn*, Wash., D.C. and *Richard Kerger, Marshall, Melhorn, Cole, Hummer and Spitzer*, Toledo, Ohio.

COMPLAINT

The Federal Trade Commission, having reason to believe that Champion Spark Plug Company ("Champion"), a corporation subject to the jurisdiction of the Commission, has violated Section 7 of the Clayton Act, as amended (15 U.S.C. 18), and Section 5 of the Federal Trade Commission Act, as amended (15 U.S.C. 45(a)(1)), through the acquisition of the stock of The Anderson Company ("Anco"), and that a proceeding by it in respect thereof is in the public interest, hereby issues its Complaint, pursuant to Section 11 of the Clayton Act (15 U.S.C. 21) and Section 5(b) of the Federal Trade Commission Act (15 U.S.C. 45(b)), stating its charges as follows:

I. DEFINITIONS

1. For the purposes of this Complaint, the following definitions shall apply:

(a) *Windshield wiper products* include all windshield wiper arms, blades and refills for application on automobiles, trucks and buses.

(b) The *replacement market* consists of all sales by manufacturers of motor vehicle parts for use in replacement of original equipment parts or previously replaced parts.

## II. CHAMPION SPARK PLUG COMPANY

2. Respondent Champion is a corporation organized and doing business under the laws of the State of Delaware, with its principal executive office at 900 Upton Avenue, Toledo, Ohio.

3. Champion is the domestic and worldwide leader in the manufacture and distribution of automotive spark plugs for replacement use. [2]

4. In 1977, Champion's net sales were \$569,430,356, and its net income was \$49,632,517. As of December 31, 1977, Champion had total assets of \$476,909,079.

5. A major portion of Champion's United States automotive spark plug replacement sales are made to warehouse distributors and jobbers.

6. In February 1977, Champion entered into the manufacture and sale of windshield wiper products through its acquisition of Arman S.p.A. of Turin, Italy. In 1977, Arman had total net sales of \$16,997,100. The major portion of such sales was from the sale of windshield wiper products sold mostly in Europe, where Arman is a leading producer.

7. At all times relevant hereto, Champion sold and shipped products throughout the United States, engaged in commerce within the meaning of the Clayton Act, as amended, and engaged in or affected commerce within the meaning of the Federal Trade Commission Act, as amended.

## III. THE ANDERSON COMPANY

8. Anco is a corporation organized and existing under the laws of the State of Indiana, with its principal executive office at 1075 Grant Street, Gary, Indiana.

9. Anco's business consists primarily of the manufacture and distribution of windshield wiper products for virtually all domestic and foreign passenger automobiles.

10. In 1977, Anco's net sales were \$54,247,130, and its net income was \$2,255,977. As of December 31, 1977, Anco had total assets of \$30,088,395.

11. A major portion of Anco's United States windshield wiper product replacement sales are made to warehouse distributors and jobbers.

12. At all times relevant hereto, Anco sold and shipped its products throughout the United States, engaged in commerce within the meaning of the Clayton Act, as amended, and engaged in or affected commerce within the meaning of the Federal Trade Commission Act, as amended.

## IV. THE ACQUISITION

13. On May 17, 1978, by agreement dated May 15, 1978, with The John W. Anderson Foundation, Champion acquired approximately 94.4 percent of Anco's stock from the Foundation for \$35,652,000 in cash. Thereafter, Champion acquired the remaining Anco stock from minority shareholders and all outstanding Anco stock options, bringing the total purchase price paid by Champion for Anco to \$38,110,000. [3]

## V. TRADE AND COMMERCE

14. The relevant geographic market is the United States as a whole.

15. The relevant product market is the manufacture and sale of windshield wiper products for the United States replacement market.

16. In 1977 and 1978, sales of windshield wiper products for the United States replacement market totalled approximately \$47 and \$62 million, respectively.

17. At the time of the acquisition, Anco was the leading firm in the manufacture and sale of windshield wiper products for the United States replacement market. In 1977 and 1978, Anco was the number one firm in sales of windshield wiper products for the United States replacement market, with approximately 43 and 40 percent, respectively, of total sales for that market.

18. Concentration in the manufacture and sale of windshield wiper products to the United States replacement market is substantial. At the time of the acquisition, the two largest sellers accounted for more than 78 percent of sales in the market; the four largest sellers accounted for more than 92 percent of such sales.

19. Barriers to entry into and to effective competition in the manufacture and sale of windshield wiper products for the United States replacement market are high.

## VI. ACTUAL POTENTIAL COMPETITION

20. There is a reasonable probability that, but for the acquisition of Anco, Champion would have entered into the manufacture and sale of windshield wiper products to the United States replacement market either *de novo* or by acquisition of a toehold company, *i.e.*, a company with a relatively small share of the relevant product market.

## VII. EFFECTS OF THE ACQUISITION

21. The effect of the acquisition of Anco by Champion may be substantially to lessen competition or to tend to create a monopoly in the manufacture or sale of windshield wiper products for the United

States replacement market, or any submarket thereof, throughout the United States in violation of Section 7 of the Clayton Act, as amended (15 U.S.C. 18), and constitutes an unfair method of competition in or affecting commerce in violation of Section 5 of the Federal Trade Commission Act, as amended (15 U.S.C. 45), in the following ways, among others: [4]

(a) Potential competition between Champion and Anco and between Champion and other firms that manufacture and sell windshield wiper products for the replacement market has been eliminated;

(b) The potential for substantial deconcentration of the relevant market as a result of Champion's *de novo* or toehold entry has been eliminated; and

(c) Barriers to entry into or to effective competition in the relevant market may be raised.

#### VII. VIOLATIONS CHARGED

22. The acquisition of Anco by Champion constitutes a violation of Section 7 of the Clayton Act, as amended (15 U.S.C. 18), and Section 5 of the Federal Trade Commission Act, as amended (15 U.S.C. 45).

#### INITIAL DECISION BY

JAMES P. TIMONY, ADMINISTRATIVE LAW JUDGE

MAY 10, 1983

#### PRELIMINARY STATEMENT

The complaint in this matter, issued on July 29, 1980, alleged that Champion Spark Plug Company ("Champion") has violated Section 7 of the Clayton Act and Section 5 of the Federal Trade Commission Act through the acquisition of The Anderson Company ("Anco"). The theory of the complaint is that, since Champion was already producing windshield wipers in Europe, there is a reasonable probability that, but for the acquisition of Anco, Champion would have entered into the manufacture and sale of windshield wiper products to the United States replacement market either *de novo* or by acquisition of a company with a relatively small market share. The effects of the acquisition are alleged in the following ways:

a. Potential competition between Champion and Anco and between Champion and other firms that manufacture and sell windshield wiper products for the replacement market has been eliminated;

b. The potential for substantial deconcentration of the relevant

market as a result of Champion's *de novo* or toehold entry has been eliminated; and

c. Barriers to entry into or to effective competition in the relevant market may be raised.

Respondent generally denied the allegations of the complaint and specifically denied that the relevant product market is the manufacture and sale of windshield wiper products for the United States replacement market. Respondent argues that the product market should not include the sale of arms, nor sales to car manufacturers for resale to their dealers—known as the original equipment service ("OES") market.

After oral argument on the record, by order of October 5, 1981, I granted respondent's motion for a cut-off date of December 31, 1980 for discovery and record evidence.

After substantial discovery and pretrial motion practice, the administrative trial commenced on February 8, 1982 and, with several interruptions, concluded on September 24, 1982. The record includes 7419 pages of transcript containing the [2] testimony of 38 witnesses and 1,702 exhibits, including 24 depositions consisting of about 4,500 additional pages of transcript.

The findings of fact include references to supporting evidentiary items in the record. These references are intended to serve as guides to the testimony and the exhibits supporting the findings of fact. They do not necessarily represent complete summaries of the evidence supporting each finding.

#### Abbreviations

- |                  |                                                                                                                                                                          |
|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| (Abston 152)     | - References to the transcript are designated by the name of the witness and followed by the page number.                                                                |
| (Oshei RX 4003J) | - References to depositions are designated by the name of the witness and followed by the exhibit number of the transcript of the deposition and the referenced page(s). |
| (CX)             | - Complaint counsel's exhibit, followed by its number and the referenced page(s).                                                                                        |
| (RX)             | - Respondent's exhibit, followed by its number and the referenced page(s).                                                                                               |
| (DIY)            | - Do It Yourself—installation of product by consumer.                                                                                                                    |
| (OE)             | - Original Equipment.                                                                                                                                                    |
| (OES)            | - Sale of wipers to car manufacturers for resale to their dealers.                                                                                                       |
| (OEM)            | - Original Equipment Manufacturer.                                                                                                                                       |

- (WDs)                    - Warehouse Distributors.  
(F.)                    - Finding. [3]

## I. FINDINGS OF FACT

### A. *The Champion Spark Plug Company*

1. The Champion Spark Plug Company ("Champion") is a Delaware corporation with its principal offices in Toledo, Ohio. It is the leading manufacturer of automotive spark plugs for replacement use in the United States and world-wide. (Complaint ¶ 2; Answer ¶ 2).

2. In 1978 Champion had net sales of \$692,611,371, net income of \$55,293,642, and total assets of \$580,133,169. (CX 979V, X).

3. The Champion Spark Plug Company was founded in Boston in 1907 by two brothers, Frank D. Stranahan and Robert A. Stranahan, and began manufacturing spark plugs in 1909 in a rented room above a laundry. (CX 610).

4. Responsibility for the day-to-day operation of Champion has been vested since 1971 in the executive committee consisting of Robert A. Stranahan, Jr., president and chairman of Champion, Robert J. Brotje, Jr., executive vice president and director of finance, and Richard E. Surface, executive vice president and director of operations. (Brotje CX 3011-I; Brotje 4450). However, final decisions are those of Mr. Stranahan. (Brotje CX 3011-O-P).

5. Until 1977 Champion's primary subsidiaries were the Baron Drawn Steel Company and the DeVilbiss Company. The Baron Drawn Steel Company was acquired by Champion in 1964. It is a supplier of cold-drawn steel bars and coils used by Champion in the manufacture of its spark plug shells, the portion of the spark plug which screws into the engine. (CX 610; Surface CX 3006Z-19). Its manufacturing facilities are located in Toledo, Ohio. (CX 985F).

6. The DeVilbiss Company was acquired by Champion in 1967. (Brotje 4553-54). It makes spray painting equipment (including guns, compressors, pumps, and ovens), painting robots, rubber hose for use in connection with compressors and spray guns, and certain medical equipment. (Surface CX 3006Z-22 - Z-23; Surface CX 3006Z-25 - Z-26; CX 66B-C).

7. In February 1977, Champion acquired Arman S.p.A. ("Arman") located in Durento, a suburb of Turin, Italy where it manufactures windshield wiper blades, refills and arms, and steering locks for sale primarily in Europe. (CX 20A-F; CX 129B). [4]

8. Shortly after the Arman acquisition, Champion began construction of a second wiper facility in Latour, Belgium (Cocchiglia 3987) that more than doubled Champion's overall wiper capacity. (CX

979M; CX 1337S-T). Champion broke ground for the Latour plant in late 1977 (Senez RX 4004Z-122) and, by the beginning of 1979, had begun producing wipers at Latour. (CX 721). Champion established the Latour plant as a separate corporation known as Archambel S.A. (Emrick RX 4000Z-6).

9. At all times relevant hereto, Champion sold and shipped products throughout the United States, engaged in commerce within the meaning of the Clayton Act, as amended, and engaged in or affected commerce within the meaning of the Federal Trade Commission Act, as amended. (Complaint ¶ 7; Answer ¶ 7).

#### B. *The Anderson Company*

10. The Anderson Company ("Anco") is a Delaware corporation with its principal executive offices in Gary, Indiana. Its business consists primarily of manufacturing wipers for domestic and foreign passenger automobiles. (Complaint ¶ 8-9; Answer ¶ 8-9). The windshield products sold by Anco includes blades, refills, arms, washers, washer pumps, chemical windshield washer antifreeze and solvent and tubing for washer pumps. (CX 399D).

11. Anco is one of the two leading manufacturers of wipers both for OE and for replacement use in the United States (CX 2509A-B; CX 236A-B), and is the leading firm in the United States wiper replacement market. (CX 2509A-B; RX 5003A). In 1977, Anco's net sales were \$54,274,130, its net income was \$2,255,977, and it had total assets of \$30,088,395. (Complaint ¶ 10; Answer ¶ 10).

12. Sales to the replacement wiper market accounted for 72% of Anco's 1977 sales. (CX 399D).

13. In 1977, about 80% of Anco's sales to the replacement market were to warehouse distributors ("WDs"). Anco also made replacement sales to oil companies, tire companies and mass merchants. (CX 399D).

14. In 1980, Anco's net sales of wiper products to the replacement market were \$22.3 million and 19.6 million units. Anco's market share was 34.3% in units. (RX 5003A).

15. Prior to the acquisition, Anco's wiper products were sold to the automotive after-market through 70 salesman and 16 manufacturers representatives. (CX 399D). [5]

16. Anco's main production facility is in Gary, Indiana. It has 191,000 square feet. The other manufacturing location is in Valparaiso, Indiana. It has approximately 151,000 square feet for both manufacturing and research and development. (CX 399L-N).

17. Ownership of Anco was largely in the hands of the John W. Anderson Foundation, a trust established upon the death of the company founder in 1967 for charitable, education and related purposes.

The trustees were all directors of Anco. The trust owned 94% of the outstanding shares. (CX 399I).

18. At all times relevant hereto, Anco sold and shipped its products throughout the United States, engaged in commerce within the meaning of the Clayton Act, as amended, and engaged in or affected commerce within the meaning of the Federal Trade Commission Act, as amended. (Complaint ¶ 12; Answer ¶ 12).

### *C. The Acquisition*

19. In 1972, Mr. Surface wrote to Anco stating that Champion was interested in the company. Nothing occurred. (Surface CX 3005Z-65 - Z-66).

20. Early in 1977, Mr. Surface again wrote to Anco expressing interest in buying it. Mr. Surface was invited to a meeting with The Anderson Foundation about April or May 1977. Champion continued to study Anco through the summer and fall of 1977. (CX 70; CX 78-80; CX 84; CX 93-94; CX 115; Surface CX 3006Z-179 - Z-184).

21. In December 1977, Champion was told by the trustees of The Anderson Foundation that the foundation's stock would have to be sold to the highest bidder and that the bid would have to exceed net worth. (Surface CX 3005Z-165 - Z-166, Z-170; CX 138).

22. The decision of the trustees to sell the company was based upon changes in the tax laws which made a sale necessary. (CX 138A; CX 401A).

23. In January, 1978, Mr. Surface prepared a memorandum to Mr. Stranahan which compared the benefits to Champion of acquiring Anco versus entering the United States windshield wiper market, and urged that Champion should pay a "premium" price for Anco. He sent a copy of the memorandum to Mr. Brotje. (CX 157). [6]

24. A team of Champion personnel went to Anco in January of 1978. Based on their review Champion proceeded with a more detailed evaluation. (CX 169).

25. Champion's board of directors authorized Mr. Surface to bid \$35 million for the Anco stock. The book value of Anco's assets was about \$23 million. (CX 157A; CX 160A; Brotje CX 3011Z-103 - Z-104; CX 172A).

26. The Echlin Corporation and Neiman Industries, Inc. of France also bid for Anco. (Surface CX 3005Z-42 - Z-43; Surface CX 3006Z-171 - Z-175).

27. In the final round of bidding, Mr. Surface obtained permission from Champion's executive committee to exceed the board of directors' limit on the allowable bid by 2% to defeat a competing bid. The final bid by Champion was successful. (Brotje 4481-82).

28. On May 17, 1978, by agreement dated May 15, 1978 with the

John W. Anderson Foundation, Champion acquired approximately 94.4% of Anco's stock from the Foundation for \$35,652,000 in cash. Thereafter, Champion acquired the remaining Anco stock from minority shareholders and all outstanding Anco stock options, bringing the total purchase price paid by Champion for Anco to \$38,110,000. (Complaint ¶ 13; Answer ¶ 13).

*D. Arman S.p.A.*

29. In late 1974, Stefano Cocchiglia, then director of marketing for Champion's European operations, learned that an Italian windshield wiper company named Arman S.p.A. ("Arman") might be available for sale. (Cocchiglia 3969-70). Mr. Cocchiglia was told to pursue the possible acquisition. (Cocchiglia CX 3002Z-78 - Z-115).

30. Negotiations for Arman lasted off and on over a two year period. At three different times, the negotiations fell apart. (Brotje 4453-54; Surface CX 3006Z-14 - Z-15).

31. In the early part of 1976, Champion proposed to acquire Arman for approximately \$6.1 million. The offer was refused and the negotiations broke down. (Surface CX 3006Z-93 - Z-95).

32. During 1976 Champion learned that the Paul Journee Company of France ("P.J.") was interested in the possibility of Champion's acquiring it. P.J. is the largest manufacturer of wipers in France. (Senez RX 4004Z-98). Mr. Surface was interested in acquiring both Arman and P.J. and using P.J.'s plant for export. (CX 40D). [7]

33. Mr. Surface and Mr. Senez, Champion's manager of European operations, studied the acquisition of P.J. (CX 40-42). In October of 1976, Mr. Surface visited P.J.'s plant in France. (CX 40A). Mr. Senez continued to urge the acquisition of P.J. after Champion acquired Arman, stating among other results that acquiring P.J. would eliminate a price competitor. (CX 72; CX 77). Champion continued its interest in acquiring P.J. until Champion acquired Anco. (CX 65C; CX 125).

34. In September 1976, Champion resumed negotiations with Arman. In a memorandum to Mr. Stranahan, Mr. Surface recounted the history of the negotiations noting that the price previously discussed by Champion had dropped from \$9,400,000 to \$4,000,000 with a variety of additional terms. (CX 44).

35. On February 16, 1977 the executive committee authorized Mr. Surface to make the acquisition of Arman for an amount not to exceed \$5,000,000; on March 18, 1977 the board of directors approved the acquisition for a final price paid of \$4,500,000. (Surface CX 3006Z-107; CX 57).

### E. *The Latour Plant*

36. By September 1977, Arman was faced with a large volume of back orders and was operating at full capacity. (CX 96).

37. On May 16, 1977, Mr. Surface wrote to Mr. Stranahan and noted that Arman's production would fall short of Champion's estimated needs in Europe by 3,000,000 windshield wiper blades and that there was no room to increase production at Arman. (CX 65B-C).

38. In September, 1977, Mr. Surface reported to Mr. Stranahan that incoming business was about 76% ahead of the previous year at Arman, and that there were back orders for 5,000,000 blades and refills. (CX 96A; Surface CX 3006Z-117 - Z-119).

39. Champion personnel visited Ireland, Scotland, England and France to find potential plant sites. (CX 71A).

40. In return for Champion's agreement to employ about 450 persons in the depressed Latour area, the Province of Luxembourg in Belgium agreed to provide Champion with the land, the cost of the building, and the cost of the machinery for a new windshield wiper plant. The total amount of the grants was approximately \$14,000,000. (Surface CX 3006Z-119 - Z-120). [8]

41. The decision to construct the windshield wiper facility at Latour was made by Champion on September 16, 1977. The resolution passed by the executive committee allowed formation of a company known as "Archambel," which would run the Belgian windshield wiper operations. (CX 99; Brotje 4466-67).

42. Ground was broken for the plant in November of 1977. (Surface CX 3006X - Y). The plant was constructed within the \$14,000,000 subsidy provided by the Belgian government. (Surface CX 3006Z-141 to Z-144). It began production in January 1979. (CX 609D, CX 597D).

### F. *Windshield Wiper System*

43. A windshield wiper system<sup>1</sup> includes wiper blades and refills, wiper arms, the wiper motor, and the transmission and pivots ("linkage") (Oshei RX 4003H): [9]

<sup>1</sup> On many vehicles, the system also may include a windshield washer pump, water bottle, and hose. (Wilsterman 795-96).

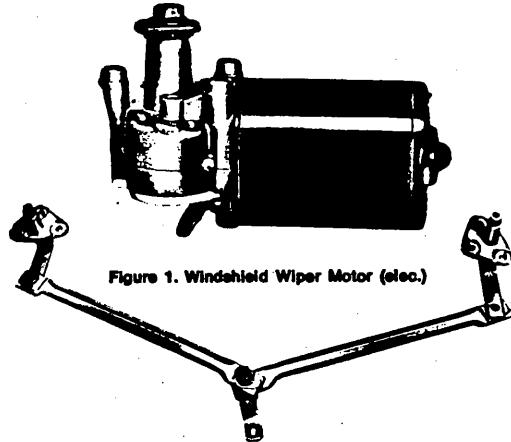
**DESCRIPTION OF TERMS USED**

Figure 1. Windshield Wiper Motor (elec.)



Figure 2. Windshield Wiper Transmission



Figure 3. Wiper Blade Refill



Figure 4.  
Wiper Blade



Figure 5.  
Wiper Arm



Figure 6.  
Windshield  
Washer Jet

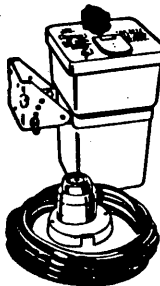


Figure 7.  
Windshield Washer Reservoir

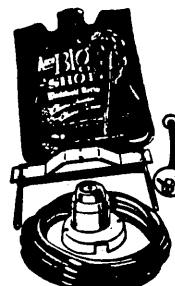
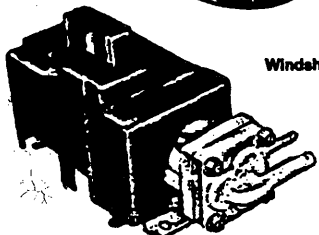


Figure 8.  
Windshield  
Washer Pump



[10] 44. The basic function of the windshield wiper system is to remove water from and to clean the exterior surface of the windshield. (CX 454Z-126; Stroh 54).

45. The windshield wiper blade is composed of the metal or plastic superstructure and the squeegee. On some blades, the squeegee is permanently set and not refillable. (CX 454Z-57, Z-65).

46. The "squeegee" or "element" is the rubber part of the windshield wiper system that directly touches the windshield. (Williams 872).

47. A windshield wiper refill is the combination of a wiper blade squeegee and the metal or plastic "flexor" or "vertebra" which backs the rubber element so that it may be attached to the wiper blade links. (Stroh 58-59).

48. The windshield wiper arm attaches the wiper blade to the drive system of the wiper motor via the linkage and applies pressure to the blade. (Stroh 54).

49. The windshield wiper transmission or linkage transmits the rotary motion of the electric wiper motor into the arc motion of the wiper arm. In 1980, only Trico and General Motors manufactured wiper linkage in the United States. (Stroh 50; Oshei RX 4003L-N; CPX 4).

50. The windshield wiper pivots tie together the linkage and the wiper arm. (Oshei RX 4003-J).

51. There are three basic types of connections for the arm to attach to the wiperblade. These are the pin-type, bayonet-type and the shepherd's crook. The shepherd's crook connector is commonly used on imported automobiles. (Stroh 97-98; CX 454Z-74, Z-78).

52. It is usually possible through use of adaptors to make the same blade attachable to each of the varieties of arms. (Stroh 98-99).

53. A windshield wiper blade bridge is affixed directly to the connector at the bridge's center. Each end of the bridge is attached to a link. The links attach to the flexor which holds the rubber windshield wiping element. The arm is attached to the connector and a spring system applies pressure downward on the blade. (Harbison 3527-28).

54. Many WDs carry windshield wiper linkage. (Campbell 1121; Peterson 954; Sullivan 311-12; Abston 167). [11]

55. Almost all cars now use electric wiper motors. No domestic windshield wiper producer manufactures wiper motors. (Sullivan 316; CX 454Z-49 - Z-50).

56. Wiper motors and linkage seldom need repair or replacement and generally are original equipment and crash parts. (CX 454Z-50).

57. The "universal" refill is made also to fit blades made by other manufacturers and usually comes in only a few sizes, like 15", 16", and 18". (CX 454Z-86).

58. A "universal" blade will fit a variety of cars, foreign and domestic. (Sullivan 322-24).

59. A "short line" of wipers has about three to eight sizes that will fit most cars. (CX 1543Q).

#### *G. The Relevant Market*

60. The relevant geographic market is the United States. (Complaint ¶ 14; Answer ¶ 14).

61. The parties agree that the relevant product market includes the sale of wiper blades and refills ("wipers") to the replacement market and does not include sales of wipers to automobile manufacturers for installation in vehicles as OE. The parties also agree that imported products should be included and exports should be excluded from the market.

62. Anco and Trico make and sell arms. (CX 993; CX 1753E). In 1980 Robert Bosch started to sell arms. (CX 1495B). While it sold wipers, Gates sold arms. (Williams 878). The other companies in the windshield wiper industry have not carried arms. Nefco, Tridon, Fram and Ideal have all sold wipers to WDs without carrying arms. (Nelson 6492-93). In 1980, Tridon was planning to assemble and sell arms for two models of an OE customer. (CX 1887E).

63. In 1977, Nefco considered distributing arms made by a Brazilian manufacturer. (CX 373). Tridon has considered assembling arms from parts made by other companies. (CX 1990C). AMC Jeep buys arms from Trico and blades from Tridon. (CX 631B).

64. In 1980 Trico's sales of blades and refills to seven national oil companies were about \$2.5 million; its sales of arms to those companies were \$715. (Nelson 6492-95). [12]

65. Atlas, representing 25,000 service stations, is one of the largest customers for, and is the third largest seller, behind Anco and Trico, of replacement wipers. In 1979, Atlas discontinued sale of the last arm in its line, since it felt that sales of arms in service stations had limited potential. (CX 825C; CX 1014Z-17; CX 801).

66. Anco manufactures arms primarily to fulfill the OE demand rather than for their sales potential in the aftermarket. (CX 650J).

67. The price of arms does not necessarily follow the price for blades and refills. (RX 125A, RX 132C, RX 149B, RX 213).

68. The equipment and tooling used to make wiper arms is different from that used to produce blades and refills. (CX 283G).

69. Most WDs and jobbers carry arms, although in diminishing numbers, and it is not necessary for them to do so. (CX 1054B; Abston 165, 181-82). Replacement arms are usually installed by a car dealer who is supplied with OES arms by the car manufacturer. (Abston 181).

Mass merchants do not carry wiper arms. (Abston 165, 212-13; Sullivan 310-11; Frank 2575).

70. In 1980, about 4% of total net unit sales of arms in the United States went to the replacement market and 96% went to OE (RX 5002); arms were about 2% of total units of wipers sold in the aftermarket. (RX 5000-02; CX 2510A).

71. Most windshield wiper arms sold in the automotive aftermarket are for crash or theft replacement. (Abston 181, 278; Lindeen 2741; Schwalbe 4379). They do not wear out like a windshield wiper blade or refill. (Sullivan 416). Windshield wiper arms are designed to last the life of the automobile. (George 789; Stroh 105; Campbell 1143). The sale of arms to the replacement market has been steadily dropping for many years. (CX 1014H).

72. The sale by wiper manufacturers of replacement wipers to car manufacturers for resale to their dealers is known as original equipment service ("OES"). (CX 1003Z-85).

73. A wiper manufacturer must be approved as an OE supplier before car manufacturers will buy its OES wipers for resale to dealers. (Singleton 3480; Longman 687-88). [13]

74. The supplier of wipers for OE will generally sell OES to the same OEM. (CX 1003Z-85). If a car manufacturer has approved two windshield wiper manufacturers as OE suppliers, either may supply OES. (Nelson 6453-54).

75. Consumers sometimes have replacement wipers installed by car dealers. (Schwalbe 4436).

76. Anco internal planning documents refer to OES sales as being in the "replacement" market, and separate from OE sales. (CX 935D-E; CX 870C-E; CX 454H-I; CX 399D).

77. A General Motors automobile dealer sells for OES the same blade that was tested by Fisher Body as OE. (Wilstermann 824).

78. Ford-brand wipers, which must meet the same standards as blades used by Ford as OE installation, are sold only to Ford dealers. Ford products sold to the aftermarket, branded as Motorcraft, do not have to meet OE standards. (Mitzel 450, 474-77).

79. Ford Motor Company dealers purchased Ford-branded OES wipers primarily for warranty applications. (Mitzel 453).

80. Wiper sales by new car dealers often occur while the car is in the shop for warranty repair. (Abston 216; Cohn 2407-08).

81. Since the OES blade is the same as the OE blade and is normally a different blade than blades sold to the replacement market, its price is based on the OE price obtained by the wiper manufacturer, rather than the price of replacement blades sold to WDs. (CX 755A; CX 901; CX 938A; Surface CX 3005Z-166).

82. Anco maintains a separate sales staff to sell wipers to automomo-

bile manufacturers for both OE installation and for OES. The OE sales office is located in Detroit. (Regan CX 3008Z).

83. Anco's OE sales force is separate from both Champion's OE spark plug sales force and the aftermarket sales force for wipers and spark plugs. (Regan CX 3008Z-3).

84. The director of aftermarket sales for the Trico Products Corporation is responsible for Trico's sales to the entire aftermarket. (Sullivan RX 4005L-M). Trico's sales of windshield wipers for OES and OE installation are handled through a separate Trico sales office in Detroit, and Trico's director of aftermarket sales is not responsible for those sales. (Sullivan 409-10; Sullivan RX 4005-O-P). [14]

85. Trico's OE installation and service salesmen in Detroit do not sell Trico products to any aftermarket accounts. (Oshei CX 3013Z-9).

86. Different departments in the Robert Bosch Sales Corporation sell automotive products to the independent replacement market and for OES. (Heinemann CX 3003Z-21 - Z-23).

87. The A.C. Delco Division of General Motors sells automotive products to the aftermarket. A different organization, General Motors Parts Division, sells parts to dealers for OES. Only the A.C. Delco Division sells parts to WDs. (George 744, 746).

88. New car dealers are often also in the used car business. If a General Motors dealer has a Chrysler taken in trade, which needs replacement wipers, the dealer will probably go to a jobber to get those parts. (Sullivan 340).

89. In 1980, total OES sales of windshield wiper blades and refills were 5.8% of total net unit replacement sales of windshield wiper blades and refills in the United States. (RX 5000-01).

90. The relevant product market is the manufacture and sale of windshield wipers to the U.S. replacement market. The relevant product market does not include arms or OES wiper sales.

#### H. *Windshield Wiper Manufacturers*

##### 1. Trico Products Corporation

91. The Trico Products Corporation ("Trico"), headquartered in Buffalo, New York, manufactures windshield wiper motors, arms, blades, refills, linkage mechanisms, washers and cleaning solutions and related products. Trico sells its products to OEM and to the aftermarket through WDs, jobbers, and retail outlets, including oil companies, tire companies and other chain accounts in the United States and Canada. (RX 1020B).

92. In 1978, Trico had sales from domestic operations of about \$133 million, with income of about \$10 million. (CX 1754S). In 1979, Trico had about 4,400 employees. (CX 1754C).

93. Trico was founded in 1917 by a group of investors, including the father of Trico's present chairman. Trico's original windshield wiper had to be manually operated by the vehicle driver. In 1922, Trico developed and produced a vacuum [15] wiper motor. Later, Trico introduced the windshield washer system that became standard equipment on motor vehicles. (Oshei CX 3013N-P).

94. Trico's Buffalo facilities include three manufacturing plants with floor space of 1.8 million square feet and an engineering building of 70,000 square feet. In addition, Trico has sales office space in Detroit and assembly facilities in Fort Eire, Ontario. (RX 1020C).

95. Trico's net sales of wipers to the replacement market in 1980 were \$14.2 million and 14.2 million units. Trico is the number two firm in the domestic wiper replacement market. In 1980, Trico's market share was 24.8% in units. (RX 5003A; RX 5004).

96. Trico has been the leading seller of wipers for the OE market. (CX 236A; CX 238A; CX 669A). In 1978 about 78% of its unit wiper sales were for OE. (CX 1712E-G).

97. In the first ten months of 1980, 43.1% of Trico's replacement sales were to WDs, 22.2% to one program distributor, National Automotive Parts Association ("NAPA"), 16.8% to oil companies and 17.9% to mass merchants. (CX 1789U).

98. Before 1980 Trico had a direct aftermarket sales force of 17 zone managers and 35 area managers who called on jobbers on a regular basis. (Sullivan RX 4005H-I; CX 1712J). At the end of 1980, Trico began to change from a salaried direct sales force to manufacturers representatives due to the high expense of its salaried sales force. (Oshei RX 4003Z-88; CX 1789K-L; Sullivan RX 4005H, Z-170).

99. About half of Trico's wiper sales to the replacement market are private brand. (CX 1789U).

## 2. Tridon, Ltd.

100. Tridon, Ltd. ("Tridon") is a Canadian corporation founded in 1924 and makes hoses, windshield wipers, clamps, flashers and other products for automobiles. (CX 2043S, V).

101. Tridon had sales of about \$44 million in 1978. (CX 1873D). Tridon employed 1600 people in that year. (CX 2043F).

102. Tridon was the first producer of a plastic windshield wiper blade which it started to sell in Canada in 1970. (CX 2043B; CX 264C; CX 3012Z-203; CX 1899B). A new plant in Oakville, Ontario was officially opened in October 1980 for the [16] production of wiper blades. It is a technologically sophisticated wiper blade plant giving Tridon a cost advantage. (Shelton CX 3012W-X).

103. Tridon's wipers are sold in Canada, the United States, Japan,

Australia, Austria, England, France, Denmark and Sweden. (Sheldon CX 3012).

104. Tridon opened a plant in Smyrna, Tennessee in 1978 where it assembles wipers. The components are made in the Oakville plant and shipped to Smyrna for assembly. (Sheldon CX 3012Z-204; CX 2043V). Tridon's wiper blade and refill capacity in 1980 was 21.6 million units. (CX 2011-I).

105. Tridon sells wipers to OEM and the automobile aftermarket. (CX 3012X-Y).

106. For the first nine months of 1980, 37% of Tridon's wiper dollar sales in the United States were to WDs and about 35% were sold through mass merchants. (CX 1894A; CX 2011H).

107. About 1971, Tridon manufactured wiper blades and refills for sale in the United States by the Gates Rubber Company under the Gates brand to WDs. Tridon also started selling its own wipers in the United States under the brand name Storm Chasers to mass marketers, using manufacturers representatives. After quality problems, sales efforts in the United States by both Gates and Tridon ceased about 1975. During 1976 and until 1977, Tridon did not actively attempt to sell wiper products in the United States. (Shelton CX 3012N-P, Z-199 - Z-200). In 1976, Tridon's total wiper sales were \$38,867. (RX 5022).

108. In 1977, after a three year research program, Tridon again entered the U.S. wiper market, gained OE approval at Ford, and started selling its short line, plastic blade in the replacement market. (CX 2001C; Shelton CX 3012N-P).

109. By 1981, Tridon OE wipers were to be used for almost all of the production of passenger cars by Ford (CX 2103A, CX 2043B, CX 1887A), 100% of Volkswagen of America, American Motors/JEEP and International Harvester, two models of GM cars, and 30% of the OE business of Toyota, Subaru and Fiat. (CX 2103A). Tridon forecast its OEM volume at over 5 million blades for 1981. (CX 1887A).

110. In 1980, Tridon was planning to start assembling windshield wiper arms for two models of an OE customer. Tridon had requested quotations from various vendors to supply parts, [17] with final assembly of the arms to be done in-house. (CX 1887E).

111. The Tridon blade was the first plastic windshield wiper approved for OE. (CX 2043B). It is a short line of wipers, only 6 blades fitting virtually every car. (CX 2043B; CX 2104; CX 2124A). The Tridon plastic is a fiberglass polyester. The plastic blades made by Fram, Roberk and Nefco are made of polyimide, a different molecular structure. (Shelton CX 3012Z-213 - Z-214).

112. Tridon spent \$126,000 for promotion and advertising to the

U.S. replacement market in 1973; \$23,000 in 1974; less than \$5,000 annually in 1975-78; and \$60,000 in 1979. (CX 1873C-D).

113. By 1980 Tridon was selling wipers in the U.S. through about 15 manufacturer representative agencies. (Shelton CX 3012Z-38).

114. In 1980, Tridon's replacement market net sales of wipers were \$830,000 and 1.1 million units with a market share of 2% in units. (RX 5003A; RX 5004).

### 3. Pylon Manufacturing Corporation

115. Pylon Manufacturing Corporation was established by the founders of Lee Filters in 1968 and sold to STP in 1969. (Longman 503-04). In 1974, Rodney Longman acquired the stock of Pylon from STP for \$550,000, a part of which came from a loan to Mr. Longman from the Small Business Administration. (Longman 486, 690). Pylon sells windshield wiper blades, refills, washer pumps, tubing, and wiper delays. (CX 1646-B).

116. Pylon's sales effort has been directed primarily to the mass merchant channel of the replacement market. (Longman 535). Pylon uses manufacturers representatives to market its replacement wiper line. (Longman 520-22, 617). Pylon has never sold wipers for the OE market. (Longman 605-06).

117. Pylon's net sales of wipers in 1980 were \$3.5 million and 6.2 million units. Pylon has been the number four firm in the market since at least 1975, with a 1980 market share of 10.9% in units. (RX 5003A; RX 5004).

118. Pylon is a light assembler, owning tools and dyes and having some parts made by outside sources. (Longman 489, 607). [18]

119. In 1978, 38% of Pylon's sales were to automotive chain stores, 39% to discount chains, 12% to feeders, 7% to jobbers and 3% to oil companies. In 1979, 23% of Pylon's sales were to automotive chain stores, 41% to discount chains, 11% to feeders, 9% to jobbers, and 7% to oil companies. In 1980, 15% of Pylon's sales were to automotive chain stores, 61% to discount stores, 10% to feeders, 8% to jobbers, and 1% to oil companies. (CX 1634E; CX 1637C).

### 4. Parker-Hannifin Corporation

120. Roberk is a division of Parker-Hannifin Corporation's ("Parker-Hannifin") Automotive Aftermarket Group. The Ideal Corporation is a Parker-Hannifin subsidiary. Both Roberk and Ideal make and sell wiper products. (Lopez CX 3000D).

121. Parker-Hannifin is a large diversified corporation. (RX 873B). Parker-Hannifin employed over 20,000 people in 1979. (RX 873G).

122. Parker-Hannifin's net sales in fiscal 1979 were \$846 million. (RX 873D). Approximately 20% of Parker-Hannifin's net sales are

automotive. (RX 873B). The total assets of Parker-Hannifin at the end of June 1979 were \$562 million. (RX 873D)

#### 5. Roberk

123. In the 1960's Roberk was a manufacturer of mirrors for the automotive aftermarket. It purchased or subcontracted the manufacture of many parts. Its basic equipment was for stamping, drilling, tapping, bending, finishing and assembly and packaging. (Lopez CX 3000F-K).

124. Roberk developed an automotive safety belt, a hazard light warning switch, a line of small truck mirrors and a line of antennas. (Lopez CX 3000K-N).

125. Late in 1969, Roberk decided to start manufacturing wipers and by the end of 1970 it had produced its first refill. (Lopez CX 3000-O).

126. The capital cost to Roberk to start assembling wiper refills was about \$100,000. (Lopez CX 3000P).

127. Roberk's entry into the windshield wiper market by selling to mass merchants was successful from the beginning. (Lopez CX 3000Z-4 - Z-5).

128. When Roberk entered the windshield wiper business, it did so as an assembler, not as a basic manufacturer. (Longman 492-93). [19]

129. Roberk added a line of blades about 1972. (Longman 511).

130. When Roberk started selling refills to mass merchants, Anco did not sell to mass merchants, except Sears and Penneys which it sold to under fair trade resale price maintenance contracts. (CX 1014J, N; Longman 501).

131. Roberk's sales effort resulted in sales to virtually every mass merchant except Sears and almost every red front. (Longman 516-17). (A "red front" is a retail auto parts store like Pep Boys.) (Longman 497).

132. In 1971, Roberk attempted to sell refills to WDs but failed, primarily because of quality problems. The universal line concept was well accepted. (CX 1544A; CX 1543Q).

133. In 1975, Roberk again tried to sell refills to the WDs but failed primarily because of the poor quality reputation of the Roberk product. Price discounting by Anco and Nefco was also a factor. (CX 1543U, Q; CX 1554A; Frank 2579, 2611).

134. In 1972, Roberk was acquired by Parker-Hannifin and Roberk is now a division of that company. (CX 1570D) Roberk uses manufacturers representatives to market its replacement wiper. (Lopez CX 3000Z-4). Roberk has never sold wipers for the OE market. (Lopez CX 3000Z-68).

135. Roberk's net sales of wipers in 1980 were \$5.3 million and 10.8

million units. Roberk is the number three firm in the replacement market. Roberk's 1980 market share was 18.8% in units. (RX 5003A; RX 5004).

#### 6. Ideal Corporation

136. Ideal Corporation ("Ideal") was acquired by Parker-Hannifin during the early 1970's. (CX 1563G). Ideal manufactured hose clamps, flashers and thermostats. (RX 698C).

137. In 1977, Ideal began to plan entry into the windshield wiper business. It perceived an opportunity in selling a secondary line of wipers offered to the traditional market to complement an existing line. (CX 1542B).

138. Ideal felt that there were two markets for replacement sales, traditional and mass merchants; that each market had primary lines which were Anco and Trico; and that there was room [20] for a secondary or promotional line in each market. Roberk had been successful in taking the mass merchant market from the primary lines, and Ideal wanted to do the same in the traditional market. (CX 1542).

139. Ideal concluded that its initial entry into the windshield wiper market would entail promotion by free goods and discounts. (CX 1542H). Its total budget for advertising and promotional expenditures in 1979 for wipers was \$73,200. (CX 1554B).

140. Ideal began selling refills in 1979. It suffered \$24,000 in losses which it believed were attributable to short-term start-up costs. (CX 1532A; CX 1542B). In 1979 Ideal spent about \$20,000 to advertise its refills. (CX 1532B; RX 688F). In 1980 Ideal did no advertising. (CX 2098Z-31; CX 1572E).

141. Ideal sells through manufacturers representatives to jobbers. (CX 1532B; CX 1573A). It does not sell wipers to the OE market. (CX 1531A).

142. Although it fit 88% of all registered cars, the Ideal "universal" refill with its steel flexor, would not fit plastic blades sold by Roberk, Fram, Pylon and Tridon and some of the OE blades sold by Anco and Trico. (CX 1573).

143. As a result of a confusing array of blades being sold in 1980, some of which were not refillable, jobbers and dealers were replacing blades entirely rather than replacing the element in a worn blade with a refill. (CX 1573B).

144. In 1980 Ideal therefore planned to start making blades. (CX 1573Y).

145. Ideal's total investment was \$142,000, which enabled it to acquire slitters, tooling, molds used by outside rubber vendors, pack tables, assembly machines, cutting machines and clip dies. (CX 1572D).

146. In 1980 Ideal sold 966,469 refills for \$482,465. (CX 1542C). Its market share was 1.7% in units. (RX 5003A; RX 5004).

#### 7. Fram Corporation

147. The Fram Corporation ("Fram") is owned by the Bendix Corporation. (Slight 6562). [21]

148. The Bendix Corporation and consolidated subsidiaries, including Fram, had net sales and other operating revenues in 1980 of \$3.9 billion, and net income of \$191.6 million. (RX 270C).

149. The automotive segment of the Bendix Corporation accounted for over half of the corporation's total revenues in 1980 (\$2 billion) and 25.3% of the corporation's net income. (RX 270C).

150. Fram manufactures and sells automotive filters, spark plugs and windshield wipers. Fram manufactures windshield wipers primarily as an assembly process. (Slight 6561).

151. Fram entered the windshield wiper market in 1972 by offering a short line of plastic blades. It offered promotion, advertising, marketing expertise and the same sales force of more than 200 used to market its other automotive replacement products. (Slight 6575, 6582; CX 1445B).

152. Fram sells wipers to WDs, feeder warehouses and mass merchandisers. (Slight 6582; CX 1014L). Fram tried to sell wipers to Chrysler about 1977 but was unsuccessful primarily because its price was too high. (Slight 6581; CX 1193B).

153. Soon after it was introduced Fram had quality problems with its product. The blades broke because its supplier had provided plastic made with an incorrect formula and the design of the blades was deficient. (Slight 6571-79). Also, an employee in Fram's rubber supplier improperly mixed the rubber compound, causing a defect in the rubber elements. (Slight 6576-77).

154. The problems which troubled Fram in the early 1970's were solved before 1978. (Slight 6571-77).

155. Fram's net sales of wipers in 1980 were \$1.2 million and 1.9 million units and Fram's market share was 3.2% in units. (RX 5003A; RX 5004).

#### 8. Robert Bosch, GmbH

156. Robert Bosch, GmbH ("Bosch"), of Stuttgart, West Germany, is a major supplier of automotive parts throughout the world. 1980 worldwide sales of Bosch were over six billion dollars. Over half of that amount was sales in the automotive field. (Fiene CX 3001Z-21 - Z-22; Heinemann CX 3003D-G).

157. In Europe, Bosch manufactures and sells OE to Volkswagen-

Audi, Daimler-Benz, BMW, Ford, Opel, Renault, Citroen, Volvo and Saab. (Gillberg 3933). [22]

158. Among the many automotive parts made by Bosch in Europe are windshield wiper motors, arms, blades, refills and clips. Each of those products is also sold in the United States. (Heinemann CX 3003W).

159. Bosch windshield wiper arms are manufactured in a plant in Germany; its blades and refills are manufactured in Belgium. (Heinemann CX 3003W-X).

160. Bosch's sales subsidiary in the United States is a substantial supplier of automotive parts including spark plugs, ignition parts, filters, fuel injection parts wire and cable, carburetor kits and wipers. Its net sales in 1980 were \$295 million with net income of about \$7 million. (CX 1491G; CX 1502B; CX 1504B; CX 1487-88; CX 1492).

161. Bosch's wiper plant was built in Belgium. It took more than 3 years to build and 6 years before it turned a net operating profit. By 1980 it employed 900 workers, was highly profitable, and had an annual capacity of 32 million blades. (CX 919R; CX 924B; Gillberg 3933).

162. Bosch's wiper line for the U.S. replacement market primarily covers vehicles imported into the U.S. from Europe for which Bosch is the OE supplier. In 1980 Bosch was planning to expand that coverage to include cars imported from Japan. (Heinemann CX 3003Z-136 - Z-137).

163. Bosch's automotive replacement parts sales are directed at WDs and OES (Fiene CX 3001Y) and are handled by 75 salesmen. (Heinemann CX 3003Z-152).

164. Bosch spent no money on advertising or promotions of wipers during 1976 through 1979. (CX 1490B; CX 2097N).

165. Bosch's 1980 net sales of wipers to the U.S. replacement market were \$613,000 and 701,000 units, with a market share of 1.2% in units. (RX 5003A; RX 5004).

166. Bosch is a supplier of automotive parts including spark plugs, filters, fuses and electrical equipment, for OE in the United States. Its customers include General Motors, Ford, Chrysler, and Volkswagen of America. (Fiene CX 3001W, Z-77, Z-28). [23]

#### 9. Nefco

167. Neff-Perkins Company is a precision rubber molder. (Neff 834-5). In 1973 the Nefco division decided to enter the wiper business; it was making refills by 1975 and blades by 1978. (Neff 838).

168. In January 1979 the Nefco division of Neff-Perkins was sold to Neiman Industries. Neiman is the largest windshield wiper manufacturer in France, selling under the name "Paul Journee." (Neff 837,

858-59). Neiman also manufactures automotive horns in the United States. (Neff 837).

169. Neiman has sales over \$100 million and sales of wipers in France of \$15 million to \$18 million. (Neff 853-54).

170. Nefco, now a division of Neiman Industries, is located in Cadillac, Michigan. (RX 902B). On January 1, 1981 Neiman Industries, Inc. was merged into the Signaltone Corporation. (RX 906K).

171. Neff-Perkins molded the rubber for Nefco and continued to do so after the acquisition by Neiman. (Neff 840-41, 836-37). Nefco subcontracted out the manufacture of the wiper superstructures. (Neff 844).

172. Nefco sells primarily to WDs and jobbers, using manufacturers representatives and three direct salesmen. (Neff 848, 851). Former Anco managers run the operation. (CX 1544B).

173. Nefco's net sales of wipers in 1980 were \$1.3 million and 1.7 million units. Its market share was 3% in units. (RX 5003A; RX 5004).

#### 10. Gates Rubber Company

174. Gates Rubber Company ("Gates") is a manufacturer of products for automotive and industrial purposes, such as fan belts, radiator hose, hydraulic hose and V-belts, thermostats, radiator caps, gas caps, hose clamps and hydraulic couplings. (Williams 864-65).

175. Gates sells its automotive products to WDs and vehicle manufacturers and has more than 200 salesmen. (Williams 865-66).

176. Gates began manufacturing rubber squeegees for Tridon starting about 1971. (Williams 872). In 1972, Tridon and Gates entered a joint venture under which Tridon would supply Gates with Gates branded wipers. (CX 1909B). Gates manufactured the [24] squeegees and supplied them to Tridon, which would split the squeegees and put them into the other components, package them and sell them back to Gates for distribution. (Williams 876). Gates wanted eventually to manufacture its own wiper. (Williams 925).

177. Two to three years after Gates entered the windshield wiper market, it had obtained business from several thousand automotive parts dealers. Gates considered that it was at or above its sales target for the product. (Williams 937-38).

178. During the 1960's Anco and Trico limited the number of WD they would sell wipers to. (Williams 873-75). Many of Gates WDs customers asked Gates to supply wipers. (Williams 872-73).

179. Gates sold the wipers to WDs, and then contacted the jobber customers of the WDs, and finally the dealer customers of the jobbers, urging them to buy the Gates wiper. (Williams 881).

180. The Tridon product sold by Gates under the Gates label had a poor fit and its blades broke. The refill clips also broke and the

squeegee fell out of its backing. The refill also did not fit an Anco blade. (Williams 883-84).

181. About 1975, Gates pulled out of the windshield wiper business. There were three reasons for the decision: the poor Tridon product; the failure of Gates' own research and development people to develop an all-plastic product without use of any metal manufacturing; and price competition. (Williams 897-98).

#### 11. Other Entrants

182. Damin Company ("Damin") started marketing universal refills in early 1969 to red fronts and discount houses, but failed shortly thereafter. (CX 263A-B, CX 1003Z-81; CX 1587A; Longman 506). About this time, several others including Camel, Comstock, Yankee and Hastings tried to sell refills and also quickly failed. These refills had quality problems and would not adequately fit in Anco and Trico blades. (CX 1544A; CX 263A-B). IT&T imported SWF wipers in 1976-77 but was driven out by price competition by other imported wipers. (Gillberg 3927-29). [25]

#### I. Sales and Concentration Ratios

183. The following table<sup>2</sup> sets forth, for each wiper manufacturer, the net unit sales of windshield wiper blades and refills to United States aftermarket accounts, from 1975 through 1980, and the percentage of such sales held by each such manufacturer in each of those years: [26]

<sup>2</sup> Other than data for Tridon and Bosch, neither complaint counsel's market share exhibits (CX 2509A-B) nor respondent's corresponding exhibits (RX 5003A; RX 5004A) include unit or dollar sales in the United States of numerous windshield wiper blades and refills manufactured abroad and imported into this country. (Cohn 2398-99). Accordingly, the market shares shown on the exhibits in the record are overstated. (Jacobs 2950-53).

Initial Decision

103 F.T.C.

Net Unit Sales of Windshield Wiper Blades and Refills  
to United States Independent Aftermarket Accounts, By Manufacturer: 1975-80

| Net Unit Sales*                                                                                |            |            |           |            |           |           |         |           |           |            |  |
|------------------------------------------------------------------------------------------------|------------|------------|-----------|------------|-----------|-----------|---------|-----------|-----------|------------|--|
| Year                                                                                           | Anco       | Trico      | Tridon    | Roberk     | Fram      | Pylon     | Ideal   | Nefco     | Bosch     | Total      |  |
| 1975                                                                                           | 22,861,987 | 16,059,958 | 53,305    | 5,557,058  | 1,262,000 | 2,839,221 | —       | 1,822,000 | 292,000   | 50,747,529 |  |
| 1976                                                                                           | 22,228,882 | 15,363,289 | 95,992    | 5,961,845  | 1,716,000 | 3,440,000 | —       | 2,012,160 | 317,000   | 51,136,104 |  |
| 1977                                                                                           | 21,058,802 | 16,543,840 | 155,821   | 6,712,118  | 2,039,000 | 4,142,285 | —       | 2,259,874 | 388,000   | 53,229,740 |  |
| 1978                                                                                           | 28,059,849 | 19,883,259 | 85,125    | 10,553,343 | 2,469,000 | 5,813,675 | —       | 3,049,143 | 1,060,000 | 70,973,394 |  |
| 1979                                                                                           | 23,903,331 | 17,479,471 | 119,020   | 12,091,534 | 2,593,000 | 6,974,555 | 778,000 | 2,563,517 | 957,000   | 67,459,428 |  |
| 1980                                                                                           | 19,574,842 | 14,151,150 | 1,148,700 | 10,773,128 | 1,871,000 | 6,197,650 | 966,496 | 1,687,103 | 701,000   | 57,031,069 |  |
| Percent of Total Net Unit Sales of Windshield Wiper Blades and Refills to Aftermarket Accounts |            |            |           |            |           |           |         |           |           |            |  |
| 1975                                                                                           | 45.1%      | 31.6%      | 0.1%      | 11.0%      | 2.5%      | 5.8%      | —       | 3.6%      | 0.6%      | 100.0%     |  |
| 1976                                                                                           | 43.5       | 30.0       | 0.2       | 11.7       | 3.4       | 6.7       | —       | 3.9       | 0.6       | 100.0      |  |
| 1977                                                                                           | 39.5       | 31.0       | 0.3       | 12.6       | 3.8       | 7.8       | —       | 4.2       | 0.7       | 100.0      |  |
| 1978                                                                                           | 39.5       | 28.0       | 0.1       | 14.9       | 3.5       | 8.2       | —       | 4.3       | 1.5       | 100.0      |  |
| 1979                                                                                           | 35.4       | 25.9       | 0.2       | 17.9       | 3.8       | 10.3      | 1.2%    | 3.8       | 1.6       | 100.0      |  |
| 1980                                                                                           | 34.3       | 24.8       | 2.0       | 18.8       | 3.2       | 10.9      | 1.7     | 3.0       | 1.2       | 100.0      |  |

(RX 5003-A, in camera 5 years)

\* These calculations treat as a unit each refill and each blade. [27]

### *J. Distribution of Replacement Windshield Wipers*

184. For many years, warehouse distributors ("WDs") in the auto parts aftermarket have bought wipers from manufacturers and distributed those parts to jobbers. (Sullivan 311; Peterson 942). Jobbers supply mechanics in gasoline service stations and garages who install the wipers. (Sullivan 311; Peterson 942; Shelton CX 3012Z-107).

185. Wiper manufacturers have traditionally sold directly to some oil companies which handle the distribution to their affiliated gas stations. (CX 1003Z-62; CX 801; CX 482Z-2). Although rubber companies once acted as wholesalers for gasoline stations, by 1970 they were no longer significant distributors of wipers. (CX 1003Z-64).

186. Sales by wiper manufacturers to WDs and oil companies are sometimes referred to as the "traditional" market. (RX 45A).

187. There are about 1,000 WDs and about 35,000 jobber outlets in the United States. (Abston 176).

188. A typical WD carries 40,000 to 65,000 auto part numbers. (Peterson 945; Abston 159-60, 240). Jobbers carry fewer part numbers and rely on the WDs to inventory and deliver slow moving part numbers. (Campbell 1121).

189. Some WDs now sell directly to installers such as muffler shops, car dealers and to retail stores, bypassing the jobber. (Abston 163, 175).

190. Many jobbers now buy wipers directly from the wiper manufacturer, rather than from WDs. (CX 1054H).

191. WDs generally carry either Trico or Anco wipers, or both, and stock from 100 to 250 part numbers of these lines. (CX 1542B; Abston 166; Campbell 1121). They also carry one or more "secondary lines" of wipers such as Roberk, Pylon, Nefco, Ideal or Tridon, which are "short" lines and less expensive than Anco or Trico. (Abston 166, 182-87).

192. Only Trico and Anco offer complete "customized" wiper lines, with sizes from 6" to 26" to fit old U.S. and foreign cars, trucks and buses, as well as snow blades, wiper arms, and windshield washing systems. (CX 1542B, G; CX 454Z-111 - Z-119). [28]

193. In the early 1970's, mass marketers<sup>3</sup> rapidly increased the retail sale of wipers to customers who install the product on the car themselves. (Abston 223-24).

194. A windshield wiper is one of the easiest products to install on an automobile. Little technical knowledge is required, and most peo-

<sup>3</sup> The term "mass marketers" includes chains of department stores (Sears, Penneys, Wards) and discount department stores (K-Mart), and sometimes includes auto parts stores also known as "red fronts" (Trak Auto, Pep Boys, Penn-Jersey) and home and auto stores (Western Auto). (Oshei RX 4003Z-34 - Z-35; Abston 213; Sullivan 302; CX 1003Z-75).

ple are able to replace the wipers based solely on the instructions printed on a wiper package. (Campbell 1138; Peterson 985).

195. About 40,000 gasoline service stations closed between 1972 and 1977. Many of those that remain have cut their hours and sell only gasoline, not accessories. Many customers pump their own gasoline and do not have wipers installed at the gas station as frequently as before. (Frank 2592-93; Sullivan 429-30; RX 999A-B).

196. In May 1978, Trico's director of national account sales told Trico's chairman that "in the interest of increasing our share of the after-market and protecting ourselves against the trend of self-service marketing practices employed by some oil companies, we must strengthen our position in the mass merchandise market." Mr. Oshei, Trico's chairman, agreed with that assessment. (RX 1005B; Oshei RX 4003Z-126).

197. In 1977, Trico marketed a short line, universal blade to meet competitors such as Roberk, Pylon and Nefco. Trico's primary target was the mass merchant and the secondary target was the conventional warehouse where Trico's competitors, selling universal refills at low prices, had reduced purchases of Trico blades and refills. (RX 999A; Oshei RX 4003Z-116 - Z-119).

198. In 1980, Trico attributed part of the cause of a 14.6% drop in its sales to the decline in service stations from 226,000 in 1972 to 158,000 in 1980. More aggressive competition [29] from Anco, Tridon, Roberk and other wiper companies also was blamed, along with Anco's large sales force and general economic distress. (CX 1789).

199. In April 1977, Anco posted a price increase less than it wanted because Roberk, Fram, Pylon and Trico were selling universal refills at discounted prices through traditional, private label and volume retailer distribution and because the number of service stations—the backbone of its business for many years—was declining and the sale of wiper products was shifting to jobber-retailers and volume retailers. (RX 45).

200. Since about 1975, jobbers have reacted to the growth of retail parts sales and the decline of service station outlets by merchandising auto parts more effectively to the retail purchaser. (Abston 225-26; Cohn 2397; Campbell 1138-39).

201. Ten to 15 years ago, the average auto parts jobber would display oil cans and garage equipment in front of his counter and very little else. The jobbers filled orders for garages and service stations. (Frank 2597-99).

202. Jobbers have moved their service counters back in the store and placed more merchandise in front of the counter for the retail trade. There are displays which encourage the consumer to select his

own merchandise off of attractive racks. (Frank 2597; Abston 186; Peterson 950-51; Sullivan 334).

203. Most jobbers are in the retail business and are located in shopping centers. Many do not have delivery to the service station anymore. (Abston 202-03; Sullivan 332; Shelton CX 3012Z-106 - Z-107; Peterson 943; Campbell 1116).

204. WDs have assisted the jobber in making the transition from a wholesale to a retail operation by offering programs for merchandising and display, including advertising. In the past, for example, NAPA jobbers would not sell to consumers. Now, NAPA, an association of about 65 warehouses and their 5000 jobber customers, invites the public into its stores through a national advertising program. (Frank 2597-99; Sullivan RX 4005T-V; CX 1014J).

205. Parts, Inc., with 17 automotive warehouses and 31 jobber stores, has a program called Parts Plus which offers participating jobbers various marketing aids, including signs, fliers and private label merchandise. It is a program similar to NAPA and American Parts System. (Abston 162-63). [30]

206. Bumper-to-Bumper<sup>4</sup> is another marketing and warehouse system designed to assist WDs and their customers in appealing to the retail trade that was being served by K-Mart and Sears-type stores. (Campbell 135).

207. In early 1980, over 40% of jobber sales of wipers were to consumers, 25% were to service stations, 13% to garages, and 6% were to car dealers. (CX 1054F). Jobbers now make about half of their wiper sales to the consumer, with this retail trend still increasing. (Peterson 949-50; Campbell 1118, 1138-39).

208. Recently, it has become necessary for WDs and jobbers to stock wiper lines in addition to Anco or Trico to assist the jobber in merchandising wipers in the front of the store to the DIY trade. If the warehouse did not purchase the shorter lines, the jobber would purchase them from another warehouse. (Abston 182-84).

209. The majority of wipers sold at jobber stores are displayed in front of the store so that customers can make their own selection. (Peterson 951; Campbell 1140).

210. Anco sells a cabinet used to display wipers in the front of jobber stores. Both Anco and Trico products now are sometimes sold in front of the jobbing store with additional stock placed in back of the store. (Campbell 1140; Abston 186-87; Sullivan 334-36).

211. The distributor now wants a short wiper line to sell for DIY customers because it allows wider application with fewer part num-

<sup>4</sup> Warehouses which offer retail programs to their jobbers such as NAPA, Bumper-to-Bumper, and Parts Plus are known as "program distributors." (Campbell 1137).

bers and gives the distributor a greater return on his investment. (Abston 185-86; Cohn 2436; CX 1543Q).

212. Roberk, Tridon, Pylon and Fram wiper products are also, on occasion, sold by jobbers to service stations and garages. The customer can choose whether to purchase a more expensive custom-fit Anco or Trico wiper or a less expensive universal, short-line product, whether the customer is a car owner or the installer. (Abston 185). [31]

213. Service station operators sometimes purchase wiper products from mass merchandisers to take advantage of low prices. (Frank 2590-92).

214. Montgomery Ward, Sears Roebuck, Penneys and other retailers now install wipers on automobiles in direct competition with repair shops, service stations and other installers. (Longman 724-25; Abston 280).

215. Tire company stores such as Firestone and Goodyear also install wipers. (Abston 281).

216. A car serviced in a repair bay at K-Mart would receive a Trico, Pylon or Roberk wiper. At Wards it would be a Pylon wiper. (Longman 707-08, 724-25; CX 1637H). A Sears customer in a service bay would receive a Tridon blade or refill since Sears is a Tridon account. (Sullivan 353).

217. A "mass merchant feeder" is a specialized WD who in addition to selling products to jobbers will also deliver prepriced goods to retail chains. (Williams 923-24; Frank 2617-20; Longman 498). Feeder warehouses generally carry about 15,000 part numbers, with about 50 part numbers of wiper products. (Abston 163-66).

218. Not all WDs fit in a neat category. A "feeder" WD may service mass merchandisers such as G.C. Murphy while also servicing jobbers. Steel City Products, for example, has between 1,000 and 1,500 customers, about 20% of which are categorized by Steel City as mass merchandisers while the remainder perform wholesale and retail jobbing functions. (Frank 2571, 2617-20).

219. Rye Auto, a "feeder" warehouse owned by Parts Industries, does about 60% of its business with auto parts stores and 40% with mass merchandisers. (Abston 220-21).

220. Jobbers, auto parts stores and mass marketers now sell a dual line of wipers to reach both the customer that is looking for a low-price line and the customer who is looking for a higher priced line. (RX 1052B; Sullivan 421; Abston 185; Longman 517).

221. K-Mart now sells both a lower priced line and a higher priced line of wipers to get not only the price conscious buyer but the buyer that would be more inclined to pay more for the quality of a well-known name. (Sullivan 347). [32]

222. In 1980, Trico was selling wipers directly to auto parts chains like Pep Boys and Western auto. (Sullivan 339-43).

223. Jobbers, auto parts stores and mass merchants are trying to sell wipers to the same DIY customers. (Lopez CX 3000Z-106; Abston 266; Campbell 113Z-39; Peterson 983-84; Frank 2599).

224. In analyzing possible entry into the wiper business, the Premier Rubber Company viewed all of the following outlets as part of a single aftermarket: department stores, discount stores, oil companies, retail parts stores, wholesale distributors and service station chains. (RX 323B-C).

225. Since windshield wipers are among the easiest products to replace on an automobile, there is no reason for a technically oriented person to seek wipers at a particular type of retail outlet, even if he might do so to obtain advice concerning more complex parts. (Peterson 985-86).

226. In 1979, more than 65% of blades and refills sold in the U.S. aftermarket were installed by the consumer; less than 25% were installed by professionals at service stations, about 5% at garages and 5% at new car dealers. (RX 190D; CX 1500A-B).

227. Some auto parts stores install wipers. (Cohn 2441-42).

228. In January 1977, Anco changed its marketing program to more vigorously seek mass merchandiser business. (CX 340B). The effort to sell to mass merchandisers required Anco to be aggressive in its consumer advertising and adopt new marketing strategies, particularly in regard to prices, discounts and removal of competitors' products. (RX 27A; RX 42).

229. In 1977, Trico's director of national account sales advised the chairman and president of the company that the conventional warehouses "having been influenced by our competitors offering a universal refill at low prices, have reduced their purchases of Trico blades and refills." (RX 999A).

230. WDs carrying Trico or Anco wipers now add a short, universal line such as Tridon in order to put their jobbers "in a position to compete with retailers of all kinds who have blades and refills." (Abston 254, 290-91).

231. The growth of wiper sales by mass merchants will continue and they will take a greater share of the wiper market. (Lopez CX 3000Z-74, 109-10; Williams 932-33; Bober 4280). [33]

232. By 1980, mass marketers accounted for about 45% of all refill sales. (RX 1035; Oshei RX 4003Z-111 - Z113).

233. Of Trico's total aftermarket sales, its sales to mass merchants increased from 5% in 1977; 10% in 1978; 12.5% in 1979; and 17.9% in 1980. (CX 1789U; RX 1071AAA; Oshei RX 4003Z-156 - Z-58, Z-37).

234. Both Trico and Anco as of the end of 1980 perceived that food,

hardware and drug store chains would become more important factors in the retail sale of wipers. Trico conducted successful experiments selling wiper products in supermarkets and by the end of 1980 had decided to pursue wiper business with grocery and hardware chains. Some of these retailers will buy wipers from WDs while others are large enough to buy directly from the manufacturers. (Sullivan RX 4005Z-146 - Z-48; RX 1059; RX 1062B; Oshei RX 4003Z-137-39; CX 1789M; RX 173G-H).

235. Pylon designed merchandiser units specifically for wiper display at food, drug and hardware stores. (CX 1656B; RX 810Q). Near the end of 1980, Winn-Dixie food stores considered expanding their automotive sections. (CX 1668A). Safeway was expanding its auto parts sections. (Nelson 5835-37).

236. Wipers are now sold in drug stores, food convenience stores, and supermarkets. (Cohn 2406-07).

237. In 1980, design changes in blades sold as OE, and the lack of ability of a refill with a steel flexor to fit a plastic blade had caused a change in the ratio of sales of blades to refills. In 1977, for example, Roberk's sales ratio was 4.5 refills to each blade. In 1980 it was 2 refills to 1 blade. (CX 1573B).

#### *K. Competitive Effect of New Entrants*

238. Until 1967 Anco and Trico were the sole domestic suppliers of wipers. (Nelson 6277-78). In the late 1960's, they had about equal sales in the wiper replacement market. Trico had most of the OE market, Anco had the rest. (CX 1003Z-41; CX 1014K).

239. Until recently, Anco and Trico were not very aggressive, and were unimaginative in their marketing. For example, Anco introduced refills in the late 1950's. Trico did not have a competitive refillable blade until 1963. (CX 1014D; Abston 246-47, 290; Longman 574, 704-05; CX 279J; CX 169C). Both were reluctant to push refills at the expense of the more profitable blades. (CX 1014J; CX 1587B). [34]

240. Tridon first decided to enter the windshield wiper market because Trico and Anco were the only competitors in the business at the time. (Shelton CX 3012Q).

241. Since blocking patents expired in the late 1960's there has been entry into the wiper manufacturing business by Tridon, Pylon, Roberk, Nefco, Fram, Bosch and Ideal, as well as increased activity from wipers imported from Italy and Japan. (Shelton CX 3012R; Glassman 4648; RX 5003A; CX 2509).

242. When Roberk introduced its first wiper to mass merchants, it had fast market penetration. (Lopez CX 3000Z-5).

243. Roberk's growth began to slow "as the competition began to come in, Pylon came in, as Anco and Trico who had up to this time

had not paid much attention to this end of the business got around to trying out various approaches . . . and we had Tridon who made an attempt." (Lopez CX 3000Z-60).

244. Gates, which entered the wiper market in the early 1970's with a product made for it by Tridon, encountered marketing problems in part because of competition from Fram, Pylon, Roberk, and others. (Williams 884).

245. The new entrants have had a direct and substantial effect on both Trico and Anco. (Frank 2602).

246. Trico began to feel increasing competition from other manufacturers selling to mass merchants such as Roberk and Pylon beginning in the middle 1970's. (Sullivan RX 4005Z-66 - Z-67). By 1980, Trico was having difficulty competing with price as well as application coverage in the mass merchant market with Pylon and Tridon. (CX 1789H).

247. In 1980 Trico switched from a direct sales force to selling through manufacturers representatives to sell to mass merchants and WDs. (Oshei RX 4003Z-127 - Z-128; RX 1005D).

248. Trico continues to make technical and design changes in its wipers. In part, this is in response to the activities of competitors. (Oshei CX 3013Z-69).

249. Since 1975, Trico has begun to manufacture plastic windshield wiper blades and has improved its metal windshield wiper blades to the point where they produce a superior wipe. It has also simplified the attachment of blades to arms. Trico has undertaken these new improvements to meet competition. (Oshei RX 4003Z-64 - Z-66). [35]

250. Trico began manufacturing plastic windshield wiper blades "to combat the introduction of plastic blades by others being offered at lower pricing than our metal superstructure blade. We were unable to reduce the cost of the metal blade, but we could produce plastic blades at somewhat lower figures, thus returning us to a reasonably competitive position where price was the predominant factor." (Oshei CX 3013Z-135). Trico introduced its plastic blade in direct response to the competition being offered by Tridon. (Oshei CX 3013Z-136).

251. In November 1980, Anco's Long Range Windshield Wiper Development Committee felt that the most pressing need was for a black, plastic short line windshield wiper blade. (RX 209).

252. In November 1980, Anco also felt that blade consolidation was top priority. (RX 210B).

253. As of December 31, 1980, Anco was attempting to develop a compact line. It was doing so because the market was asking for it and the competition had it. (Lindeen 2647).

254. Mr. Longman, the President of Pylon, testified at trial that "the windshield wiper business since I have been in it has been very

competitive. It has been tooth and claw." Mr. Longman also deemed Champion to be an aggressive competitor. (Longman 705).

255. Mr. Lopez, the head of Roberk's windshield wiper operations, testified that the sale of wipers to the automotive aftermarket "has been highly competitive for a long time." (Lopez CX 3000Z-41).

256. Thus, in November 1977, Roberk concluded that although unit sales of windshield wipers would increase, dollar sales would "remain relatively static." Roberk concluded that "this is due largely to the shift to retail from the traditional (and higher priced) distribution." (CX 1580D).

#### *L. Price Competition*

257. Anco and Trico wipers generally have had a reputation for being higher in quality than other wipers, and have higher prices and costs because of the better reputation and the fact that their production runs, for the larger number of types of wipers, tend to be shorter and more customized. (Longman 692-93; Sullivan 427; Oshei CX 3013Z-134; CX 1542G).

258. Anco and Trico have been able to increase their average replacement wiper prices from 1973 to 1978. Anco's [36] average price for blades was \$1.12 in 1973 and \$1.40 in 1978. Trico's was \$1.14 in 1973 and \$1.46 in 1978. Anco's average refill price was \$1.51 a pair in 1973 and \$1.61 in 1978. Trico's average was \$1.11 in 1973 and \$1.42 in 1978. These average prices, however, include more expensive heavy duty blades and refills and snow blades which are sold only by Anco and Trico. (CX 2511A; Winter 1787-89; Jacobs 3110-12).

259. Mr. Lopez testified that the price spread between Roberk's prices and the prices of Anco and Trico for competing wipers was less in 1980 than in earlier years. (Lopez CX 3000Z-42 - Z-43; Lopez CX 3000Z-100 - Z-101, Z-104).

260. Tridon felt that Trico would be "very aggressive in trying to win the K-Mart account" by cutting prices. (CX 2128; Shelton CX 3012Z-173 - Z-175).

261. Acushnet, a major supplier of the rubber used in the manufacture of windshield wiper refills, recently decided not to enter the windshield wiper business believing that it is too competitive, that there are too many competitors for the size of the market, that it is a slow growth business, and that it is price sensitive. (Harrington 1099-1100).

262. The Premier Rubber Company, another supplier of rubber used in the production of wiper refills, receives pressure from wiper manufacturers to hold the level of its prices for the rubber. (Singleton 3481).

263. Mr. Abston, the president of one of the largest WD and jobber

chains in the United States, testified that competition in the windshield wiper business became more intense during the early 1970's due to the new entry into the marketplace and that, while fifteen years ago there was an absence of active competition between Trico and Anco, competition among manufacturers of wiper blades and refills is now comparable with other products carried by his company. (Abston 286, 288; *see also* Frank 2601-02; Cohn 2417).

264. During the latter part of the 1970's windshield wipers were often used as loss leaders by mass merchants such as K-Mart, Penneys, Fay's Drug Store Chain, Two Guys, and Twin Fair. (Harrington 1100; Cohn 2408, 2414, 2418-19).

265. Prices of domestically manufactured blades generally are lower than those of most imports, other than the very cheap Brazilian or Taiwanese blades. Japanese blades are more expensive than U.S. blades. (Cohn 2402). [37]

266. Since the acquisition in 1978, Anco has become a more aggressive competitor offering improved dating terms, free merchandise and more promotion on wiper products to WDs, jobbers, jobber retailers, mass marketers, feeders, oil companies and tire companies. (Lindeen 2632-36; Peterson 976-77; Campbell 1146; Glassman 4791-92).

267. Trico has given price concessions to its large national accounts because Trico might lose the business to one of its competitors, such as Pylon, Tridon, or Anco. (Sullivan 412-14).

268. Trico's costs have been increasing in recent years. In 1979, when Trico attempted to pass these costs on to its customers, it was "rudely told that the higher prices would not be accepted" by accounts such as Atlas and NAPA. (Oshei RX 4003Z-93 - Z-96; RX 1067Q).

269. Trico did not raise prices on the refills it sold to Sears and Ameron when it raised prices to the rest of the aftermarket in 1977 because Roberk and Pylon were selling lower priced windshield wiper refills, and Sears and Ameron wished to be more price competitive with those refills. (Sullivan RX 4005Z-65 - Z-66).

270. After Tridon bid to take the Sears' wiper business away from Trico in 1980, Trico responded to retain that business. Tridon then returned to Sears with a still lower price and won the Sears business. (CX 2127; Shelton CX 3012Z-168 - Z-171; Sullivan 428).

271. In 1973 Pylon had an average net unit price for a blade or two refills for \$1.03. In 1978 that price was 91¢. (CX 2511A).

272. In 1974 Roberk had an average net unit price for a blade or two refills for 92¢. In 1978 that price was 84¢. (CX 2511A).

273. At first, Roberk's wipers were sold at retail for \$2.65, down to \$1.39 on promotion. Anco and Trico wipers were sold at a fair trade retail price printed on the box of \$4.95. (Lopez CX 3000Z-59).

274. In 1977 Anco brand refills had a suggested retail price from

\$3.30 to \$4.90 a pair, depending on the size and type. Roberk, Nefco, Fram, Pylon and Anco Rainy Day refills were selling at retail prices from \$1.99 to \$2.49. (CX 347C).

275. In 1977 different mass merchants sold the same brand of refills at varying prices. (CX 347C). [38]

276. In 1980, Nefco showed traditional market customers that its blades and refills cost less, offered the jobber and WD more profit, and retailed at less than those sold by Anco and Trico. (CX 880A-F).

277. A Fram study of competitive pricing of blades and refills in May 1979 showed Fram's price to WDs at \$1.10, Anco - \$1.50, Trico - \$1.69, Ideal - \$1.20, and Pylon and Roberk both ranging from 84¢ to 96¢. (CX 1445G). Terms of sale also varied. (CX 1446C).

278. A 1980 market study by Bosch noted that list prices for 12 blades sold by four companies showed that each company sold each blade at a different price, and that the mark up for jobbers varied for each company for each blade. (CX 1500Q).

279. In 1977, an Ideal market study showed prices for a pair of 16" refills sold to the traditional aftermarket:

|       | <u>WD</u> | <u>Jobber</u> | <u>Dealer</u> | <u>List</u> |
|-------|-----------|---------------|---------------|-------------|
| Anco  | \$1.78    | \$2.28        | \$3.24        | \$4.90      |
| Trico | 1.66      | 2.13          | -             | 4.90        |
| Nefco | 1.35      | 1.88          | 2.90          | 4.80        |
| Fram  | 1.07      | 1.57          | 2.36          | 3.93        |

The report also noted that Nefco "will throw in an additional 5%"; that both Anco and Trico discount in competitive situations and had prices in different cities varying by 10%; and that jobbers offer refills at discount prices from time to time to increase store traffic. (CX 1542F).

280. From 1973 to 1978, Anco sold a "Rainy Day" line of wipers, directed at mass merchants. (Schwalbe 4384; Lopez CX 3000Z-46 - Z-47; CX 1014P-Q). Anco charged a lower price for this brand than it charged for Anco brand wipers. (CX 935G; CX 438; CX 1634F). The Rainy Day line of wipers was different in quality from the Anco brand. (CX 1544B; CX 1542E).

281. Anco decreased its prices on Rainy Day wipers from 1974 through 1978. (CX 340A-B, G, K; CX 445J; CX 1090A; CX 1093A; CX 1105). Anco dropped its Rainy Day refills from \$1.35 per pair to \$1.05 in 1974. (CX 1014Z-21; CX 1105; CX 1111A). In 1976, Anco decreased the size of order required to obtain the lowest Rainy Day price. (CX 1093A; CX 1096A). On June 1, 1977, [39] Rainy Day refill prices were dropped to \$.99 per pair. (CX 340K; CX 1090A; CX 1093A). Then the price was dropped to 86¢. Pylon met the prices on an account basis.

Roberk dropped prices to all customers, below the Rainy Day price. (Longman 542-43; CX 1634F).

282. Shortly after it acquired Anco in 1978, Champion withdrew the Rainy Day product line and started to sell the higher priced Anco brand wiper to the mass merchant channel. (CX 438; CX 467C; CX 477C; CX 1634-I).

283. In April 1977, Anco deferred a proposed price increase on refills because of Nefco's low prices, as well as competition from Roberk, Fram, Pylon and Trico. (RX 45).

284. Before the acquisition, Mr. Brotje, Champion's executive vice president and chief financial officer, felt that the wiper market "resists price increases." (CX 2070A).

285. In late 1980, Bosch planned to cut prices on its U.S. windshield wiper product line in order to better compete in the United States aftermarket. (CX 1500P).

286. Fram increased its windshield wiper blade prices in 1976 because it was faced with higher costs. (RX 239). Until that increase, Fram "bought their share of the market with promotional pricing." (CX 1542F).

287. In January 1978, Fram reduced the prices of its blades and refills. (RX 243-44).

288. Pylon did not have a price increase on its wiper blades or refills from 1972 until the fall of 1979. (RX 822A).

289. Because its customers keep asking for lower prices Pylon keeps its profits up by reducing costs of its windshield wiper blades by obtaining less expensive materials and reducing the cost of packaging. (CX 1634W).

290. In 1980, Pylon hoped to be able to raise wiper prices 5% "but due to the competitive nature of our business we are unable to." (CX 1638D).

291. Competition has caused Roberk to hold the price for many years on wipers without change, reducing costs to maintain margins. (Lopez, CX 3000Z-22 - Z-25).

292. Both Mr. Oshei, the chairman and president of Trico, and Mr. Sullivan, Trico's manager of aftermarket sales, testified that competition in aftermarket sales of wipers had [40] increased since 1978 because of the acquisition of Anco by Champion. (Oshei RX 4003Z-40 - Z-41; Sullivan 436-37).

293. In 1980, Trico blamed its declining sales of wiper products on four factors: the general economic decline, a reduction in the number of service stations from 226,000 in 1972 to 158,000 in 1980; "more aggressive competition by Anco, Tridon, Roberk and others"; and what was perceived to be an inadequate number of Trico salesmen compared to Anco/Champion salesmen. (CX 1789C).

294. Trico's 1981 Marketing Plan noted the vigorous competition for mass merchant wiper business being offered by companies such as Pylon and Tridon:

Presently, we have difficulty competing with price as well as application coverage with Pylon and Tridon who offer full coverage (short-long frame) refills at prices starting at \$1.04 and as low as \$.91 per pair.

(CX 1789H).

295. In 1980 lower prices to mass merchants by Pylon and Tridon prevented Trico from raising prices on wipers in the aftermarket. (Oshei RX 4003Z-147).

296. In late 1979, or early in 1980, Trico initiated a program aimed at increasing its penetration of the wiper product aftermarket. As part of that effort, Trico decided to replace its sales force with manufacturers representatives. (RX 1067D; Oshei RX 4003Z-83).

297. Trico's program to increase its replacement sales of wipers was directed especially to mass marketing accounts. (Oshei RX 4003Z-84; 4003Z-87-89).

298. In 1980, Trico reduced from 1,500 units to 400 units the amount of purchases required to obtain prepaid shipment because certain "mass marketers who sell low price competitive blades such as Tridon, Roberk, Pylon [were] beginning to show an interest in buying a higher quality national brand line such as Trico." (RX 1052A-B; Oshei RX 4003Z-129 - Z-131).

299. When Trico raised its prices on a variety of items in February, 1977, it specifically excluded passenger car blades and refills, because those products were being sold in a "highly competitive" market. (RX 987; Sullivan RX 4005Z-102 - Z-103). [41]

300. Trico raised its prices for passenger car blades, refills and arms in December 1977, two years after the previous general price increase. (RX 991).

301. As of the end of 1980, Trico was unable to raise its prices to keep up with its cost increases. (RX 1061; Sullivan RX 4005Z-150).

302. Trico explained in its 1980 Annual Report, "selling price increases, due to depressed market conditions and the effects of increased competition, have not kept up with inflation. Management expects this trend to continue until market conditions improve." (RX 1067P; Oshei RX 4003Z-90 - Z-93).

303. In soliciting Walmart's business in 1980, Tridon offered Walmart a 2% "performance rebate," which is not offered by Tridon to other customers. (CX 2118A; Shelton CX 3012Z-153 - Z-154).

304. Walmart received from Tridon a special 2% advertising allow-

ance in 1980 on its purchases of Tridon products. (CX 2121; Shelton CX 3012Z-159 - Z-160).

305. Tridon in 1980 granted a special 5% warehouse allowance to TG&Y in 1980. Such an allowance is normally not granted by Tridon. (CX 2116A; Shelton CX 3012Z-150 - Z-151).

306. Tridon made another exception to its standard practices when in 1980 it agreed to ship wipers to TG&Y with prepaid freight on shipments of just \$250 or more, rather than the standard \$500 minimum. (CX 2116B; Shelton CX 3012Z-151).

307. TG&Y received favorable credit terms of 2%/60 days, terms not normally offered by Tridon. (CX 2116B; Shelton CX 3012Z-152).

308. Tridon did not have any price increase in calendar year 1980 on its aftermarket wiper products, even though its costs for those products increased approximately 10% that year. (Shelton CX 3012Z-71 - Z-72).

309. Tridon initiated a cost reduction program in 1980 which resulted in savings of \$203,950. Tridon had a 1981 savings target of \$500,000. (CX 1887H).

310. In late 1980, an internal Tridon memorandum noted that "buyers were more conscious of price than quality." (CX 1887C). [42]

### M. Profits

311. Windshield wiper manufacturers<sup>5</sup> profits on sales to aftermarket from 1976-80 as follows:

|                     | 1976    | 1977    | 1978    | 1979   | 1980    |
|---------------------|---------|---------|---------|--------|---------|
| Anco                | 9.4%    | 11.5%   | 11.2%   | 10.3%  | 5.0%    |
| Trico               | 11.2%   | 10.1%   | 9.5%    | 3.7%   | (1.6%)  |
| Tridon <sup>6</sup> | (28.9%) | (28.3%) | (7.6%)  | (6.6%) | 3.7%    |
| Pylon               | 12.0%   | 6.7%    | 7.8%    | 9.1%   | 8.4%    |
| Fram                | (43.3%) | (14.8%) | (15.8%) | (6.2%) | (4.7%)  |
| Roberk              | 11.6%   | 7.8%    | 7.9%    | 7.8%   | 10.6%   |
| Nefco               | (0.5%)  | (2.7%)  | 3.0%    | (1.4%) | (20.2%) |

(RX 9510A).<sup>7</sup> [43]

### N. Ease of Entry

#### 1. Capital Costs

312. Mr. Longman and his associates purchased Pylon from the STP

<sup>5</sup> There is no profitability data in the record for Bosch prior to 1978. Bosch's after-tax profit as a percentage of total net sales of windshield wiper replacement products in the United States was 3.7% in 1979 and 4.6% in 1980. (RX 276F; CX 1490A; RX 274F-G; RX 294B).

There is no meaningful profit trend data in the record for Ideal since that company entered the relevant market in 1979. (CX 1554A).

<sup>6</sup> Tridon's sales of wipers in 1976 were less than \$40,000. (RX 5022).

<sup>7</sup> This profit data was after taxes. Complaint counsel's proposed findings on profits before taxes, although limited to five of the companies, show generally the same trend. (CX 8011 revised II).

Corporation in 1974 for \$550,000, assisted by a loan from the Small Business Administration. (Longman 690).

313. In 1969 Pylon's tools, dies and molds cost Pylon \$281,071; machinery and equipment cost \$181,028; and furniture and fixtures cost \$110,821—or a total of \$572,920 in manufacturing assets. (CX 1643).

314. Book value as of September 19, 1980 for the equipment used to manufacture Tridon wiper products was \$1,619,000. Of that amount, \$1,276,000 was allocated to plastic molding and rubber extrusion equipment, processes which some other wiper manufacturers obtain from outside vendors or do not employ at all. (CX 2046B).

315. Fram's total investment in windshield wiper equipment and tooling in 1980, exclusive of equipment used in Canada, was approximately \$415,000. (CX 1477).

316. Roberk was able to enter the windshield wiper business by using manufacturing space and equipment it already had for the manufacture of mirrors or other Roberk products. (Lopez CX 3000Y-Z). The capital cost to Roberk in 1970 to manufacture its first refill was about \$100,000. (Lopez CX 3000P).

317. By 1980, the Ideal Corporation had begun manufacturing refills rather than relying exclusively on Roberk's facilities. Ideal invested a total of \$142,000 to acquire its own slitters, tooling, molds to be used by outside rubber vendors, pack tables, assembly and cutting machines and clip dies. Ideal shared stamping presses. (CX 1572D; RX 686H).

318. Total cost for capital equipment used by Roberk to manufacture wipers from 1971 through 1980, was \$638,773. (CX 1581I). Of that sum, \$170,211 was spent in 1979 for a Monsanto rubber extruder and a salt bath which accompanied the extruder. (CX 1581F).

319. The total cost of all fixed assets sold by Nefco Division of the Neff-Perkins Company in 1979 was \$297,328.15. That included \$178,995.32 for molds, dies and tooling; \$46,960.38 for machinery and equipment and \$64,358.28 for factory fixtures. (CX 1708A).

320. There are no significant "sunk" costs (costs to exit industry) associated with manufacturing windshield wipers. (Glassman 7277). The sales force, whether a factory force or manufacturers representatives, is not a sunk cost. The presses, packaging equipment, injection molding machines and other equipment are standard. The buildings used to make windshield wipers can be used for other purposes. (Glassman 7276-79). [44]

321. There is no capital cost barrier to entry into the windshield wiper aftermarket. (Glassman 4664-66; Nelson 5395).

## 2. Patents

322. Patents do not constitute a barrier to entry into the wiper aftermarket. (Oshei RX 4003Z-51 - Z-52; Harbison 3622; Longman 688; Lopez CX 3000Z - Z-3; Neff 855).

## 3. Suppliers

323. Companies successfully compete in the manufacture and sale of wipers with different levels of manufacturing integration. Tridon, for example, performs all of its own rubber extrusion for the manufacture of wiper elements. Trico extrudes part of its needs for wiper elements itself, and purchases elements from a supplier. Roberk also has recently undertaken to extrude some of the wiper elements it requires while continuing to purchase the remainder of its needs from suppliers. (Singleton 3462-63). No other wiper manufacturers, including Anco, extrude rubber elements. (Nelson 5996).

324. Trico employs 40 to 45 persons in its tool design department and 120 to 130 toolmakers. (Stroh 41; Stroh 40). Trico resorts to outside vendors to manufacture some tooling. (Stroh 118).<sup>8</sup>

325. Anco buys most of its wiper product tooling from outside vendors. (Harbison 3540-41). Anco has five tool designers on its staff and 24 tool and die makers. (McKissack CX 4504E-I).

326. With its present staff, it is not practical for Anco to design or manufacture its own rubber molds. (McKissack CX 4504Z-10).

327. Anco also cannot manufacture progressive dies because it does not have the necessary equipment. (McKissack CX 4504Z-11). [45]

328. Pylon receives all molded or stamped parts from outside vendors. Those parts are then assembled and packaged at the Pylon plant. Pylon does its own slitting and designing. (Longman 229, 489, 532-34, 669-71).

329. In 1979, Trico was molding some of its plastic parts in-house and was relying upon outside vendors for the rest of its supplies. (Oshei CX 3013Z-63 - Z-64).

330. There are many first class tool manufacturing and tool design shops available to Anco in the Chicago area. (McKissack CX 4504Z-21 - Z-22). Anco uses several different vendors for manufacture of its tooling, all in the Chicago-Indiana area. (McKissack CX 4504Z-14 - Z-15).

331. There are custom molders that can produce the natural rubber used for wiper refills even without prior experience. (Lopez CX 3000Z-87 - Z-88).

<sup>8</sup> A "tool" is a device used to produce a part. It can be a stamping die to produce a metal part or a mold to produce a part in plastic or rubber. "Tooling" refers to the process of manufacturing the machine tool to produce the part. (McKissack CX 4504Y; Harbison 3540).

332. When Anco began selling plastic wiper blades it relied upon a vendor to manufacture those parts. (McKissack CX 4504Z-78 - Z-80).

333. When the Premier Rubber Company investigated the possibility of assembling refills in 1977, component parts were available from outside vendors at a competitive price. (Singleton 3475).

#### 4. Equipment

334. Manufacture of a windshield wiper blade involves stamping operations, wire forming for springs, and rubber molding for manufacture of the blade element. (Stroh 49-50). Production of the flexor or vertebra of a windshield wiper blade and for the blade superstructure involves stamping operations, use of punch presses, metal roll forming equipment and some screw machine equipment. (Stroh 79; Harbison 3538-39).

335. Manufacture of a wiper arm entails use of a screw machine process, grinding and heat treating to make a pin. A wire drawing operation is used to shape coiled steel into the arm shape. A stamping operation then puts the arm into final shape except for plating and painting. (Stroh 47-49).

336. The equipment used to manufacture wipers is generally commercially available. (Harbison 3539; Glassman 4650; Oshei RX 4003Z-47 - Z-48; CX 3013Z-62). [46]

337. Raw materials necessary to manufacture wipers are generally available on the open market through domestic sources. (RX 1020B).

338. Windshield wiper superstructures are produced by ordinary stamping and are not difficult to design and manufacture. (Neff 844, 855).

339. Wipers are low technology goods that involve manufacturing processes which are well-known and do not require highly specialized equipment. (Danielson 3810; George 788-89).

340. The edge of the windshield wiper elements must be clean and straight with no imperfections to achieve a consistent wipe. (Stroh 69).

341. The term "slitting" means separating a sheet of wiper elements which has been received from the rubber supplier molded into a single rubber sheet. The slitting operation separates the elements into individual squeegees. (Harbison 3542).

342. The term "trimming" means performing the final trim operation on the wiper element after it has been assembled into the refill flexor or, in the case of a blade, into the blade superstructure. (Harbison 3542). The terms "trimming" and "slitting" are often used interchangeably. (Longman 532-33).

343. The equipment necessary to perform the trimming operation, which gives the element a clean, straight edge, is commercially available. (Oshei CX 3013Z-61; Stroh 103).

344. Pylon used a commercially available slitter-trimmer when it first offered a wiper refill. (Longman 533). When Roberk entered the wiper business, it procured elements which had a molded edge and did not have to be slitted or trimmed. (Longman 534).

345. When Roberk bought two slitters in 1977, they cost about \$10,000 each. (CX 1581A, G).

346. Although commercial slitting equipment is available, wiper manufacturers have applied their own improvements to the equipment, for example, to cut longer wiper elements. (Stroh 69-70; Harbison 2542-43).

347. Trico initially used off-the-shelf slitting equipment. (Oshei CX 3013Z-58 - Z-61).

348. General Motors used a piece of cutting equipment that already was in the Delco Products Division plant and modified it to make it a windshield wiper element slitter. (George 766). [47]

349. In the late 1970's, Neiman, the largest manufacturer of wiper products in France, was using a production line of 20 women who slit the rubber elements by hand, using ordinary safety razor blades. (Neff 843-44, 856; CX 42B).

#### 5. Compounding Rubber

350. A good rubber compound is critical to the performance of a wiper. (Singleton 3506). Friction levels, ozone resistance and the basic flexibility of the element all depend on rubber compounding. (Stroh 60-64).

351. "Compounding" means deriving a group of ingredients in a wiper element. Different ingredients go into a dry mixture, which is then vulcanized just as a cake is baked. (Harbison 3558).

352. "Molding" occurs when the rubber compound is put into a mold and pressure and heat are applied. (Harbison 3559).

353. In 1978, all wiper manufacturers were supplied their rubber already mixed by rubber companies or custom rubber molders. Anco has three suppliers who compound and/or mold the rubber elements. (Harbison 3559-60).

354. The Premier Rubber Company formulates and mixes the rubber used in the manufacture of windshield wiper elements. Premier has supplied Anco since 1928 and has sold to Ideal and Roberk. It also molds elements for those companies. (Singleton 3462-63).

355. The Neff-Perkins Company developed the compound but continued to purchase the rubber which it molded into wiper elements. (Neff 838-40). Neff-Perkins continued to supply wiper elements to Nefco after the wiper division was sold to Neiman Industries, Inc. (Neff 836-37).

356. Tridon developed its rubber compound with its rubber supplier

in Akron. Tridon buys the rubber and extrudes it into squeegees. (Shelton CX 3012Z-96; CX 1896B).

357. Pylon receives its rubber elements, already molded, from the Delta Rubber Company and the Roller Rubber Company. (Longman 532).

358. A company with basic manufacturing knowledge of rubber compounds and tolerance molding could create a wiper refill that would be effective in the marketplace. (Neff 856). [48]

359. The Acushnet Rubber Company supplies compression molded wiper elements to both Trico and Fram. (Harrington 1095).

360. Fram evaluated Premier rubber compounds in 1979 and found one to be at least as good as the Acushnet compound Fram was buying. (CX 1448A).

361. Anco does not know the formulas for rubber compounding used in the elements it puts in refills and blades. Anco gives its suppliers specifications that the rubber product must meet. Those specifications were developed by the OEM, not by Anco, and are available to all wiper manufacturers. (Harbison 3560-61; Regan CX 3008Z-182).

362. Acushnet is willing to supply new wiper manufacturers with rubber and would assist in development of a suitable element. (Harrington 1095, 1106).

363. Acushnet, which has been producing rubber for Trico for nearly 40 years, absorbs the cost of developing rubber compounds for Trico. (Oshei CX 3013Z-44, Z-46). Acushnet, not Trico, owns the formula for rubber elements supplied to Trico. (Stroh 99, 100).

364. Trico has been extruding its own rubber elements for part of its needs since 1976. The rubber used in the extrusion process is a blend of synthetic and natural rubber developed by Trico chemists. (Oshei CX 3013Z-51).

365. Rubber companies were willing to share with Trico their information for developing an extrusion process because they also supply extrusion equipment, which they hoped to sell to Trico. (Stroh 74).

366. Trico was able to develop a satisfactory formula at a cost which made in-house extrusion of wiper elements more economical than the purchase of compression-molded elements from Acushnet. (Stroh 71).

367. Trico, Tridon and Roberk extrude their own wiper elements. (Nelson 5996).

368. The Delco Products Division of General Motors developed a satisfactory rubber compound. (George 761-63).

369. Pylon improved its wiper elements by employing a retired rubber chemist on a part-time basis. (Longman 524-25). [49]

370. To improve the formula of its wiper elements cost Pylon \$200,000 over the span of three years. (Longman 526, 725).

371. In the early 1970's, Acushnet mis-mixed the rubber compound

for Fram's initial production run of wiper blades and refills. Once the problem was discovered, it was corrected and Acushnet absorbed the cost of the bad batch, which was about \$100,000. Fram has been satisfied with its element quality supplied by Acushnet ever since. (Slight 6576-78; Harrington 1076).

## 6. Distribution

### a. *Factory Sales Force*

372. Trico dropped its direct sales force in order to reduce sales costs and to increase the number of its salesmen and the penetration by Trico to all customers in the replacement market, with particular emphasis on mass marketing accounts. (Oshei RX 4003Z-83 - Z-84, Z-89; Sullivan RX 4005L).

373. In 1978, Trico dismissed the 12 factory salesmen it had used to service one of the largest traditional aftermarket accounts, NAPA. NAPA then used its own agents to service its warehouses. (Sullivan 357; Sullivan RX 4005Z-170).

374. WDs sometimes help promote wipers by having their own representative visit the jobber. (CX 1543S).

375. There is no need for a wiper manufacturer to have a direct sales force to sell wiper products to oil companies. Oil companies distributing wipers through gas stations have their own sales organizations. (Sullivan 351, 414-15; RX 4005S).

376. Pylon employs 17 manufacturers representatives who employ 80 to 100 salesmen. (Longman 617).

377. Tridon has 13 to 15 manufacturers representatives under contract, each of whom employs up to 10 salesmen. (Shelton CX 3012Z-38).

378. Roberk employs 15 manufacturers agencies to sell wiper products who, in turn employ about 90 salesmen. (CX 1553E).

379. Before the company was sold to Neiman, Nefco employed 28 manufacturers representatives to sell wiper products in addition to four factory-employed sales managers. (CX 1680G-H; RX 877G). [50]

380. Ideal sells its wiper refills through manufacturers representatives. (CX 1532B; RX 688G).

381. Robert Bosch employs a direct factory sales force of about 75 persons. (Heinemann CX 3003Z-35).

382. Fram uses a direct factory sales force. (F. 141).

383. As of the end of 1980, Champion's sales force for spark plugs and windshield wipers numbered about 400. (Lindeen 2689).

384. Neither the president of Tridon, Inc. nor any of the company's regional sales managers had prior experience selling wipers before joining Tridon. (Shelton CX 3012Z-42 - Z-45). Roberk has had no

difficulty recruiting competent manufacturers representatives to sell wipers. (Lopez CX 3000N-O).

b. *Pull-Through Marketing*

385. Champion uses pull-through marketing, which consists of trade and consumer advertising and promotion, to pull merchandise through marketing channels to the user, and calls by a direct sales force on jobbers and retailers as well as distributors. (Stranahan CX 3007Z-50 - Z-51).

386. Prior to its acquisition by Champion, Anco did engage in pull-through marketing with trade advertising (CX 279G), cooperative advertising and promotional expenditures (CX 294G), providing cabinets (CX 291P, Y), publishing catalogs (CX 318H) and supplying sales aids (CX 318F), and by its direct sales force spending most of their time calling on jobbers and dealers. (CX 23A; CX 1003K).

387. Oil companies do not generally require that their wiper suppliers offer premiums or other sales incentives. The oil companies conduct their own promotional programs. (Sullivan 351; Stranahan CX 3007Z-51 - Z-52).

388. Western Auto and Pep Boys types of retail accounts do not want premium promotions. (Sullivan 342).

389. Trico and Anco have regular spring and fall promotion programs in which premiums or special sales terms are offered. (Sullivan 325-28; Peterson 976-77). Roberk, Nefco and Pylon also expend promotional funds for wiper products. (CX 1553B; Neff 850; CX 1619D-F).

390. Pylon makes advertising money available to all of its customers. (Longman 636). Roberk employs cooperative advertising as a promotional device. (Lopex CX 3000Z-31). [51] Ideal does, too. (CX 1554B). Ideal provides advertising slicks for its customers to promote its wiper line. (RX 689Z).

391. Beginning in 1980, Tridon embarked on extensive advertising of its wiper products to the automotive trade. It was actively considering an increase in trade promotions at the end of 1980. (RX 1140I; RX 1139A to E; Shelton CX 3012Z-142).

392. Trico never spent more than \$15,000 annually in advertising wiper products through 1978 and still does very little trade advertising. (Sullivan 337; CX 1712B; RX 954EE). Trico did not offer a cooperative advertising program until January, 1980. (RX 1040). Trico did not rely on pull-through marketing before the acquisition but relied instead on its OEM reputation to provide demand. (CX 1003K).

393. Prior to its acquisition by Champion, Anco's radio and television advertising expenditures peaked in 1976 at \$589,395. (CX 1222B; CX 266).

394. Champion acquired Anco because it believed it was possible to

expand sales in the windshield wiper market. (Brotje CX 3011Z-104 - Z-105). After the acquisition Champion started a national television advertising campaign for Anco brand wipers. (Longman 545).

395. Through its advertising campaign, Champion believed it could demonstrate that, from a safety point of view, windshield wipers should be replaced once a year. Champion believed that the windshield wiper market was undersold. It had data indicating that wipers were changed only once every three years. (Brotje CX 3011Z-97 - Z-98).

396. The way Champion intended to develop Anco was by expanding the size of the market to convince people to change their wiper blades more often. (Stranahan CX 3007Z-122 - Z-123).

#### *c. Consumer Recognition of Brands*

397. Most wiper products consumers do not know the difference between wiper products or care about the brand they buy. (Cohn 2433; Oshei RX 4003Z-153; Hoyt CX 3009Z-133; RX 190C).

398. Nearly half of the total aftermarket sales of Trico are under private label, not under the name Trico. (CX 1789D; Oshei CX 3013Z-31). [52]

399. In 1975, NAPA warehouses asked that its Trico wipers be supplied under a NAPA label and that was done. (Oshei CX 3013Z-15 - Z-16).

#### *d. Quality*

400. It is the reputation of a company for manufacturing quality products that is important to WDs and their customers in selecting a wiper or other auto part, not brand name. Champion and Anco both have a reputation for high quality. (Campbell 1122-232).

401. The surest way of attaining a reputation for quality is to be a supplier of wiper products to automakers for OE installation. (CX 1496A; Shelton CX 3012Z-139 - Z-140; Frank 2580; Sullivan 329; CX 1003K).

402. Tridon used the fact that its products are used as OE on Fords and Volkswagens and approved by other OEMs to become an effective competitor in the windshield wiper market. (Winter 2116-17).

403. There are no distributional barriers to selling wipers for OE installation or OES. (Winter 1360).

404. Being an OE supplier is not as important in the sale of accessories like windshield wipers as it is for products that go under the hood like spark plugs. (Abston 277). A windshield wiper product manufacturer may demonstrate quality by having sold to other WDs. (Abston 172; CX 1646C).

### 7. Short Lines

405. Although WDs and jobbers usually carry broad, customized lines of wipers manufactured by Anco or Trico, new entrants have entered the market with short universal wiper lines. (Frank 2582; CX 1543Q, U).

406. Auto parts distributors are interested in reducing inventory due to high finance costs and a product with few part numbers would be more attractive than one with many part numbers. (Campbell 1141; Cohn 2436; Frank 2581; Abston 234; Lindeen 2649).

407. Nefco, which sold primarily to WDs and jobbers, did not have a line as broad as Anco's or Trico's but once blades were added to the line of refills the line was satisfactory in terms of length. (Neff 849). [53]

408. Both Fram and Gates had initial success selling to WDs despite the fact that they sold short lines. (Slight 6575-76; Williams 877-78).

409. Pylon with a short line of wiper attacks Anco wipers as having "very limited blade coverage for imports" and no refills to fit Tridon blades sold as OE on Fords. (CX 1650B) Pylon claims to offer "the greatest coverage in the industry." (CX 1646E).

410. Nefco advertised to WDs that seven lengths of refills and blades would fill "over 96 percent" of wiper applications. (RX 886E, U-X, Z-2 - Z-12).

411. Bosch advertises "universal wiper blades" with applications for 38 auto makes "with a minimum number of blades." (CX 1487C).

412. Fram claims that its six wiper blades and five refills will fit 99% of all domestic applications and 95% of those for foreign cars. (RX 227A).

413. The standard refill sizes are 13", 15", 16", 18", and 19." The 16" size alone covers 50% of volume and sizes 15", 16" and 18" are 90% of volume. (CX 1542G).

414. Since the acquisition, Champion has used a short line of Anco wipers, of from 6 to 10 part numbers, to enter foreign markets. (CX 677B; CX 582D, CX 545C; CX 592V).

### 8. Economies of Scale

415. Anco has research and development costs for its OE business, while its competitors who do not pursue that business avoid those costs. (Schwalbe 4380).

416. Trico has semi-automated blade manufacturing equipment, but that equipment is not used for low-volume blades because it is not economical. Low volume blades are assembled by hand. (Stroh 89-90).

417. Companies like Roberk which offer a short line of wipers sell

their products at prices considerably lower than Trico and Anco. (Oshei CX 3013Z-134).

418. Roberk realized economies of scale and reduced its wiper product prices in the initial years of its entry. (Lopez CX 3000Z-22). Pylon advertises that it enjoys production economies that allow it to produce a quality product at a low price due to its short line. (CX 1646H; CX 1651K; CX 1650C). [54]

419. It is cheaper to produce a great many of the same kind of wiper part than it is to make many different wiper parts. (Stroh 114).

420. The higher the volume per part, the lower the unit cost due to overhead absorption and the efficiency of longer runs. (Shelton CX 3012Z-202).

421. A manufacturing plant producing wiper blades and refills for the aftermarket has most of the economies of scale with a market share in units of less than 10%. An assembling facility would be efficient with less share of the market. (Glassman 7302-03; Nelson 5999-6001).

#### *O. Potential Expanders*

##### *1. Tridon*

422. Tridon is financially viable and strong. (Shelton CX 3012Z-53).

423. Tridon has expanded its clamp manufacturing facilities in Smyrna, Tennessee and could expand its Smyrna plant to permit manufacture of wiper products. (Shelton CX 3012Z-101).

424. In the late 1970's, Tridon determined to gain the acceptance of U.S. OEM for its wiper products. One of its first steps to that end was construction of a new wiper plant in Oakville, Ontario. The plant opened in October, 1980. (Shelton CX 3012W-Y).

425. One of the reasons for building the Oakville plant in 1980 was "to put together a technologically sophisticated wiper manufacturing plant that gave Tridon a cost advantage, thereby giving it a pricing advantage in the market." (Shelton CX 3012X).

426. Construction of the Oakville plant doubled the space Tridon devotes to the manufacture of windshield wipers and increased capacity by at least 50%. (Shelton CX 3012Z-102 - Z-103). The plant is 80,000 square feet, all but 400 square feet of which is devoted to wiper manufacturing. (Shelton CX 3012Z-96 - Z-97).

427. Tridon's Ontario plant is highly integrated, including a steel silo for the storage of plastic pellets used by the extruding and injection molding machines. (CX 2043I). Tridon purchases its rubber from an outside source and extrudes its own squeegees. (Shelton CX 3012Z-96). [55]

428. The Oakville plant also contains an extensive quality assur-

ance and development laboratory, a large warehouse, a number of injection molding machines to produce wiper blade superstructures and clips, extruder machines to produce the squeegees, and a product assembly and packaging area. The plant also contains its own air conditioned tool room. (CX 2043H-I).

429. Tridon's engineering force at Oakville consists of five engineers and three or four technicians. (Shelton CX 3012Z-105).

430. As of the end of 1980, the Oakville plant was not operating at full capacity. (Shelton CX 3012Z-202).

431. Tridon's initial wiper product sales to OEM in the United States occurred in 1977. The amount of such sales increased substantially in 1978. (CX 1873B).

432. Tridon's initial breakthrough in sales to OEMs was with Ford. Ford worked closely with Tridon's engineering department to develop wiper blade concepts for OE use. (Shelton CX 3012Z-99).

433. At the end of 1980, Tridon wipers were being installed by Ford as OE on 16 different Ford models. Tridon was used exclusively as the windshield wiper product for OE made by Volkswagen of America. Tridon also is OE on Jeep. In addition, Tridon had been approved for OE use, although it was not actually purchased for such use, by General Motors, Chrysler, American Motors and International Harvester. By 1980 Tridon wipers were in use on 30% of Toyota, Subaru and Fiat. They were being tested on additional models made by General Motors, Datsun, Honda, Toyota, Subaru and Fiat. (CX 2103A; Shelton CX 3012Z-6 - Z-11; CX 1887B).

434. By the end of 1980, Tridon was qualified as a supplier for 90% of the windshield wiper applications of Ford. (CX 1887A). In 1980, Tridon presented a new type of blade to Ford for OE approval for 1982 models. (CX 1887A).

435. At the end of 1980, Tridon anticipated receiving additional business from Chrysler (CX 1887C). Tridon also had passed most wiper tests of GM's Fisher Body Division. (CX 1887B).

436. Tridon has received inquiries from OEMs about possibly manufacturing windshield wiper arms and it has considered that possibility. (Shelton CX 3012Z-100; CX 2114A; CX 1887E). Tridon is also planning to produce snow blades. (CX 1887H). [56]

437. Tridon is responsible for a major technological advance in windshield wipers through the development of a plastic superstructure which is resistant to road chemicals and retains its dimensional integrity. (Shelton CX 3012Z-22 - Z-23). Tridon was the first manufacturer of wipers to use a plastic superstructure. By 1980 such superstructures were being made by Anco, Trico, Roberk, Fram and Nefco. (Shelton CX 3012Z-23 - Z-24; Oshei 3013Z-135; RX 4003Z-65).

438. Not long after Tridon secured Ford's OEM business it took

steps to reenter the aftermarket. Tridon began actively distributing windshield wiper blades to the automotive aftermarket again in 1978. (Shelton 3012N-P). Tridon had plans at the end of 1980 to become a significant factor in the aftermarket for wipers. (Shelton CX 3012Y-Z).

439. In 1980, Tridon advertised that its refills fit blades manufactured by Trico, Anco, Nefco, Roberk, Pylon and Fram, and that none of those companies had refills which would fit Tridon blades. (CX 2103A; Shelton CX 3012Z-11).

440. In 1980, Tridon sold wipers both to WDs and to mass merchandisers. (Shelton CX 3012Z-27 - Z-28). Its products were sold to the aftermarket either through manufacturers representatives or, in the case of national accounts, by Tridon's own employees. (Shelton CX 3012Z-30 - Z-31). Tridon has 13 to 15 manufacturers representatives under contract, each of whom employs two to ten salesmen. (Shelton CX 3012Z-38).

441. During 1980 Tridon won the business of several mass merchants including Sears, Walmart and TG&Y, but Pylon won half of the Walmart business later that year. (Shelton CX 3012Z-31 - Z-32; Sullivan 428; Longman 570).

442. In October 1980, Tridon gave Sears buyers a tour of the new Oakville plant. The Sears buyers were impressed. (Shelton CX 3012Z-53 - Z-54). Tridon replaced Trico as Sears' source for wipers. This was about \$1 million in business. (Sullivan 353, 428). Tridon sold the Sears account by emphasizing quality, service and a competitive price. (Shelton CX 3012Z-50).

443. Following up on its OE sales to Ford, Tridon since at least 1978 has attempted to sell Ford its wipers under the Motorcraft label for OES sales. (CX 2114; Shelton CX 3012Z-137 - Z-138). [57]

444. In late 1980 Tridon stepped up its efforts to sell wipers to WDs and program distributors. (Shelton CX 3012, Z-193, Z-142).

445. In 1980, Tridon was trying to obtain the wiper business, with a \$5 million potential, of National Automotive Parts Association. (CX 1894A).

446. Tridon advertises its product as a short line which reduces inventory paperwork and requires less investment. (CX 1882H). Tridon's product fits 96% of imports and 99% of domestic cars. (Shelton CX 3012Z-224).

447. A document prepared by Tridon in April 1979 projected its growth in sales and profitability in the U.S. aftermarket. It projected pre-tax income growing from 5.11% in 1979 to 20.83% in 1983. Sales were expected to increase from 900,000 units in 1979 to 4.7 million units in 1983. (CX 2019I-M; Shelton CX 3012Z-84 - Z-85).

## 2. Pylon

448. Pylon projected a 25% increase in sales in 1981 and it projected that 1985 sales would be two and a half times as great as those in 1980. Pylon also projected that by 1985 the book value of the company would total \$4.6 million, compared to \$1.7 million in 1980. (RX 864).

449. Pylon's net profits after taxes for each of the years from 1976 through 1980 were: \$226,000; \$152,000; \$256,000; \$365,000; and \$327,000. These profits as a percent of sales were 12.0%, 6.7%, 7.8%, 9.1%, and 8.4%. (RX 5026-revised).

450. Late in 1978, Pylon established a profit objective of 15% before taxes with a return on capital investment of 22%. Its long-term objective was to increase its sales 20% per year compounded while maintaining these profits. Pylon had met its long-term objective every year since 1973. (CX 1634D). By 1978, financial institutions were prepared to assist Pylon in achieving its growth objectives. (CX 1634D).

451. Pylon's 1981 pre-tax profit objective was 16.8% of sales. Long-range profit objectives continued to be 15% before taxes, and return on capital was targeted at 15%. Pylon continued to look for sales growth at 20% per year compounded. (CX 1637B).

452. Pylon is in no need of working capital and expects to continue to grow. (RX 827). [58]

453. Pylon's history is one of steadily improving the quality of its product. When it entered the windshield wiper business, Pylon worked with two chemical companies and at least three rubber companies in developing a suitable rubber compound. After three years it had a satisfactory compound. (Longman 522-23). STP spent about \$200,000 over three years to improve the quality of the rubber. (Longman 526, 725).

454. Initially Pylon used a commercially available slitter. (Longman 532-33). Over the next three years Pylon developed its own slitter. (Longman 533-34).

455. As its market position improved, Pylon moved to a new plant in 1979. With a 54% increase in floor space almost doubling capacity, and with a land plan providing for an additional 50% increase in the future. (CX 1634X).

456. Pylon's largest account is K-Mart, which also is supplied by Trico. Pylon also sells to customers which are also supplied by Anco, including Times Square, Strauss R&S, Rose Auto Stores and Target. (Longman 549).

457. Pylon, as well as Tridon, has been gaining customers at the expense of Roberk. (Longman 650).

458. Another major customer of Pylon's is Montgomery Ward, which also carries Trico winter blades. (Longman 724 to 725).

459. Pylon employs 17 manufacturers representatives, which in turn employ 80 to 100 salesmen. (Longman 617). In 1978, Pylon sought new areas of distribution such as oil companies. (CX 1634E).

460. As part of its marketing strategy, Pylon set for itself the goal of introducing a new product every two years. (CX 1634Z-1). In 1980, Pylon advertised that "our wiper is undergoing some major design changes that will further enhance the value of our product." Pylon also expected to experience sales growth for its pumps, tubing kits and its new windshield wiper delay controls. (CX 1638A).

461. Pylon emphasizes that its packaging and displays allow the retailer to stock twice as much as Roberk and 70% more than Anco in the same amount of space. (CX 1650B-C).

462. In order to encourage prospective customers to switch, Pylon offered to stocklift Roberk wiper products at a major automotive feeder in November 1980 and told another potential customer that it would repack its Ideal inventory in Pylon packaging. (CX 1653B; CX 1656A). [59]

463. Pylon also has specially designed a merchandiser unit for use at food stores. (CX 1656B).

464. Pylon has taken numerous red front stores from Roberk and has increased volume from oil company accounts. (Longman 598; CX 1634E). In 1980, Pylon's sales manager stated: "In 1981 our main efforts will be aimed toward the retail segment of the industry. We have set secondary objectives of gaining a larger share of the service market." (CX 1637C). By 1980, at least 9% of Pylon's total sales were to jobbers and oil companies, which Pylon refers to as the "service" sector of the market. (CX 1637C).

### 3. Bosch

465. Bosch has the financial resources to expand in the windshield wiper market. (Shelton CX 3012U-W; Williams 934). The Robert Bosch Sales Corporation has a sales force of approximately 75 people for sale of products in the United States. (Heinemann CX 3003Z-35, Z-164).

466. In the past, Bosch distributed its products through import specialists. Bosch began changing its distribution method about 1978, from selling only to warehouses specializing in import vehicles to servicing full-line warehouses. (Fiene CX 3001Z-50 - Z-51).

467. By 1980, the vast majority of Bosch's WDs were full-line distributors. (Fiene CX 3001Y).

468. Bosch took additional steps to expand its windshield wiper business with OEMs in the United States. At the end of 1980, Bosch was supplying Chrysler with starting motors and hoped to sell Chrysler windshield wipers, spark plugs, a full line of electrical equipment

and a full line of fuel management systems. (Fiene CX 3001Z-27 - Z-28). Bosch supplied Volkswagen of America with a broad line of diesel and gasoline injection components, lamps, horns, blower fans, spark plugs, cranking motors and alternators and had plans to obtain OE acceptance of windshield wipers from VW. (Fiene CX 3001Z-29). By the end of 1980, Robert Bosch had contacted Volkswagen of America and Caterpillar Tractor in an effort to obtain acceptance of Bosch wipers as OE. (Fiene CX 3001Z-11).

469. Late in 1980, Robert Bosch proposed to increase its market share in the traditional channel in the United States by cutting its prices for wipers. (CX 1500P-S).

470. At the end of 1980, Bosch had plans to increase the breadth of its windshield wiper product line in the United [60] States. Its goal was "to expand our line offering and achieve additional penetration of the market." (Fiene CX 3001Z-7; Heinemann CX 3003Z-50 - Z-51). Bosch's planned expansion of its wipers was also to include applications for U.S. vehicle manufacturers. (Fiene CX 3001Z-8).

471. Bosch's plan anticipated that the total market unit sales of windshield wiper blades for import vehicles would increase from 13,650,000 in 1980 to 27,450,000 in 1985. It projected that unit sales of windshield wiper blades for imported cars sold through traditional WDs would increase from 10,323,000 in 1980 to 20,669,000 in 1985. (Heinemann CX 3003Z-91 - Z-95; CX 1500A-B).

472. Bosch's blade part numbers offered in its parts catalog rose from 15 part numbers in 1973 to 23 part numbers in 1979. (CX 1489Z-131; CX 1489H). By 1980, Bosch's wiper products would fit most European cars and also Japanese-built Champs, Colts, Datsuns, Hondas, Mazdas, Subarus and Toyotas. (CX 1493L-M).

473. Bosch originally confined spark plug sales to import applications but has since broadened the line to cover domestic vehicles. (Nelson 6172).

#### 4. Ideal

474. As of 1980, Ideal had begun a program to develop 16-inch and 18-inch plastic windshield wiper blades. (CX 1573D). It also was considering the purchase of extrusion equipment to reduce costs. (CX 1573Y).

475. As of the end of 1980, Ideal planned to expand the Ideal line so that it would cover 95% of all applications and "make Ideal the equal of any competitor in the field." (CX 1573D).

#### 5. Roberk

476. Roberk pioneered the pricing tactic of offering all wiper blades

at one price and pairs of refills at the price of a single blade. (Lopez CX 3000Z-28).

477. At the time of its entry it exploited the shortcomings of the marketing programs of Anco and Trico by offering the universal refill concept. (Lopez CX 3000Z-57).

478. Roberk also innovated the device of color coding refills and blades. It developed charts which enabled the consumer to select the right blade without the assistance of a sales person. (Frank 2586-87). [61]

479. Roberk's growth in sales and market share persisted up to the end of 1980. (RX 5003A; RX 5004). Roberk continues to be profitable and financially strong. (RX 5025).

480. Roberk has been trying to sell its windshield wipers to traditional accounts. (Lopez CX 3000Z-73). Roberk continues to share in the mass merchandisers' growing volume of business. (Lopez CX 3000Z-109 - Z-110).

#### 6. Fram

481. In 1978 Fram had 245 people employed in its direct factory sales force. (CX 1412C).

482. Fram plans to expand its windshield wiper line for the year 1979 included increasing efforts to secure OES business, improving the quality features of the windshield wiper product and expanding Fram's share of the market. (CX 1440B).

483. Fram's long-range plan projected 10% annual growth in its windshield wiper product volume for 1977 through 1985. (CX 1473B). Fram's management was more optimistic about the future of its wipers in 1980 than it was in 1979. (CX 1473A).

484. Late in 1979 Fram was designing new refills to fit Trico, Anco and Tridon windshield wiper blades. That was to entail a capital investment of \$70,250. (CX 1455A).

485. In early 1978 Fram reduced the prices of its wipers. Prices were reduced for both blades and refills (RX 243-44). In April 1979 Fram planned to increase its prices on wipers by 10%, although an increase of 30% to 40% was necessary to bring wiper blade profits in line with the profits of Fram's other products. (RX 257A).

486. Fram had no plans to cease selling wipers as of the end of 1980. (Slight 6581).

#### 7. Nefco

487. In 1978 Nefco's line included blades. (Neff 828, 849).

488. Nefco had plans as of December 31, 1980 to add plastic windshield wiper blades to its product line. (Shelton CX 3012Z-24; Nelson

6217-18). Nefco added windshield washer pumps to its product line in 1980. (Nelson 6219). [62]

*P. Potential Entrants*

1. Acushnet Company

489. Acushnet Company ("Acushnet") is a wholly-owned subsidiary of American Brands. American Brands has experience in consumer marketing. (Harrington 1101-02).

490. The rubber division of Acushnet had sales of about \$50 million in 1980. (Harrington 1063). The customers of Acushnet Company include General Motors, Ford, Chrysler and Caterpillar. (Harrington 1064-65).

491. Acushnet manufactures the rubber elements used in windshield wiper blades and refills for Trico and Fram. That accounted for between five and ten percent of the rubber division's business in 1980. (Harrington 1067).

492. Acushnet develops the rubber compound used in the manufacture of the rubber elements. That is done pursuant to specifications provided by the customer. (Harrington 1071-72).

493. Acushnet has the capacity to slit rubber elements. (Harrington 1077-78). Acushnet also has injection molding and transfer molding capability. The rubber division considered using an extrusion process for the manufacture of rubber elements for wiper blades in 1977. (Harrington 1079).

494. By 1980 Trico was extruding some of its own rubber elements. (Harrington 1095). For that reason, Trico's demands for elements from Acushnet have declined. (Harrington 1096).

495. From 1974 to 1977 Acushnet spent \$750,000 on research in developing a rubber compound to be used in entering the windshield wiper market. (Harrington 1086).

496. In 1977, 1978 and 1980 Acushnet decided against entering the windshield wiper business. Several market studies were done with respect to these decisions. Acushnet relied on one of them, the Yankelovich study, which concluded that there is intense competition among manufacturers of wipers in the United States. (Harrington 1085-99).

497. In 1980 one of the reasons for not entering was "the fact that the wiper sales are down below what they were several years ago." (Harrington 1088). A task force studied the possibilities. Acushnet decided not to enter because it did not wish to alienate current wiper customers, it was not established in distribution channels, and it did not look like a growth market. (Harrington 1089). [63]

## 2. Dana Corporation

498. Dana Corporation ("Dana") manufactures parts for trucks and off-highway motor vehicles and sells to the OE and replacement markets. (RX 302B).

499. Dana's net sales for 1980 were \$2.5 billion. (RX 303N). Dana's aftermarket sales in 1980 were \$800-900 million. (Hirsch 4182).

500. Among the parts sold by Dana to the aftermarket are drive train products, universal joints, clutches, transmission products, axles, engine components of gaskets, piston rings and pistons. In the fall of 1979 Dana acquired Wix filters which had sales in 1980 of about \$150 million. (Hirsch 4182; 4188-89).

501. Dana sells to WDs, to mass merchandisers, and to national accounts. (Hirsch 4184). In 1980 Dana sold to around 2,000 WDs. It sold to about 200 mass merchandisers and national accounts. (Hirsch 4187-88).

502. Dana has experience with the following production processes which are used in the manufacture of wipers: rubber extruding and molding; slitting or trimming of rubber; the use of punch presses for metal stamping; use of thread-rolling equipment; the use of degreasing equipment; and employment of tool and die makers. In its manufacturing processes Dana is involved in light assembly operations. (Hirsch 4185-86).

503. From 1970 through the end of 1980 Dana made 18 to 20 acquisitions of domestic companies, with two companies having sales of less than \$3 million. (Hirsch 4188, 4199-200).

504. As of December 1980, Dana had guidelines for corporate acquisitions, looking towards growth through acquisition of companies in the automotive aftermarket. (Hirsch 4190-93).

505. Dana was interested in Wix Corporation because Wix provided Dana an opportunity to sell in the aftermarket. (Hirsch 4201-02).

506. In the opinion of Dana's vice president for corporate planning, windshield blades and refills would fit the Wix marketing effort because they are distributed through the same markets. (Hirsch 4202).

507. Since acquiring Wix in 1979, Dana is interested in acquiring a windshield wiper manufacturer. (Hirsch 4202-03). [64]

508. One of the factors which Dana would seek in an acquisition candidate is growth potential. (Hirsch 4193). Another factor sought by Dana would be whether the acquisition candidate fit with Dana's operations. (Hirsch 4194).

509. Dana was not a potential entrant at the time of the acquisition. Dana is now a potential entrant. (Hirsch 4203).

### 3. The Echlin Manufacturing Company

510. Echlin's principal products are automotive electrical parts, brake systems parts, and other related automotive products. (RX 464B).

511. Echlin's net sales in 1980 were \$301,000,000. (RX 454C).

512. Echlin's customer accounts in the replacement market include WDs and jobbers, mass merchandisers, and national accounts. (RX 463J).

513. In 1980 Echlin employed 217 sales personnel. In addition, it used 92 manufacturers representatives. (RX 463K).

514. Echlin has experience with most of the processes involved in the manufacture of wipers. For example, it has experience with rubber extruding and molding, thermo-plastic extruding and molding, use of metal stamping punch presses, use of thread-rolling equipment, use of degreasing equipment and light assembly equipment. In addition it employs tool and die makers. (RX 463M).

515. Echlin's principal methods of distribution are through WDs, retailers, oil companies, automotive replacement parts manufacturers and trailer manufacturers. (RX 464B).

516. Echlin has an active corporate acquisition program. Over an extended period of time through the end of 1980 Echlin made approximately 20 corporate acquisitions. Those companies are practically all manufacturers of replacement parts for motor vehicles. (Hancock 3687).

517. Echlin's acquisition program is directed at manufacturers of parts. Echlin looks for parts that have a high incidence of replacement—parts that tend to wear out with the use of the car—as opposed to crash parts. (Hancock 3689).

518. In the early 1970's, Echlin was seriously interested in the acquisition of Roberk, to the point of discussing a sales [65] price with Norman Berke, then the owner of Roberk. The reason for Echlin's interest was that windshield wipers blades fit with Echlin's interest in safety. (Hancock 3697).

519. In the mid-1970's, Echlin seriously considered acquisition of the Arman Company. Echlin sent a number of people to visit Arman, including its vice president of corporate development, Mr. Hancock, on two occasions. It also commissioned a study by Price, Waterhouse of Arman's financial statements, which cost Echlin \$30,000-\$40,000. (Hancock 3706-07).

520. Echlin's objective in considering Arman was to participate in the market outside the United States which was growing at a faster rate than the U.S. replacement market. (Hancock 3708). Echlin of-

ferred to purchase Arman, but its offer was not high enough for Arman's owners. (Hancock 3708-09).

521. Echlin considered acquisition of Anco before 1966, in 1975 and in 1978. (Hancock 3709-10, 3716).

522. In 1975, Echlin conducted a financial study of Anco and believed that it had declining earnings, flat sales volume from 1972 to 1974, negative cash flow, inventory buildup and deterioration of financial ratios. (RX 421A-B).

523. In February 1978, Echlin conducted another review of Anco for possible acquisition. Echlin reviewed a large number of documents supplied by Anco and sent a team consisting of personnel, marketing and engineering employees and top officers to tour Anco's plants and to discuss Anco's business with its managers. (RX 430; Hancock 3716-18).

524. An Echlin report on March 11, 1978, concluded that, except for a dramatic development like Anco's taking NAPA's business from Trico, "the prospects for growing much faster than the market as a whole do not appear bright," and questioned what impact the introduction of plastic blades would have upon metal blades. (RX 434C).

525. Echlin decided that it was not willing to pay more than \$32 million to purchase Anco. Based upon its study of the assets and flow of earnings of Anco, Echlin was unwilling to pay more because that would likely dilute the position of its existing shareholders. (Hancock 3774-75; RX 445A).

526. Starting in 1978 Echlin also considered the possibility of acquiring Pylon. Mr. Hancock, Echlin's vice president for corporate development, visited Pylon's plant, studied documents provided by Pylon and held discussions with [66] Mr. Longman of Pylon. (Hancock 3726-27). Mr. Hancock was favorably impressed by Pylon. Mr. Hancock reacted favorably to Pylon's year-by-year sales growth, which went from \$2 million to \$3 million to \$4 million, successively. (Hancock 3730). Mr. Hancock was told that among Pylon's customers were Wards, K-Mart, Mobil and Getty. (Hancock 3731; RX 445A).

527. By memorandum of May 16, 1979, Mr. Hancock reported to Echlin's chief executive about his study of Pylon. (Hancock 3728-29). Echlin's chairman advised Mr. Hancock that he wanted him to move ahead on the discussions. By letter of May 1, 1979 to Rodney Longman of Pylon, Mr. Hancock advised him that "we are interested in pursuing the possibility of acquiring Pylon." He closed by saying "Rod, we have an honest interest. How can we proceed?" (RX 446). Because of a personal tragedy in Mr. Hancock's family, further discussions with Mr. Longman were neglected and the deal fell through. (Hancock 3749).

#### 4. IC Industries

528. IC Industries ("IC") is a diversified company. IC's 1978 sales were \$2,670,000,462. In 1980, IC had sales of \$4,141,000,000. (RX 678C).

529. A subsidiary, Midas International Corporation, is a large manufacturer and distributor of auto exhaust systems and also franchises exhaust systems stores. (Lawless 3635). In 1980, Midas had 1,360 automotive shops worldwide. In 1980, IC Industries' net sales of automotive parts were \$43,000,000 (RX 680B; RX 678T).

530. Another subsidiary, Abex Corporation, makes tire molds, friction materials for brakes and disc brake pads, and heavy castings (Lawless 3635). Signal-Stat, a division of Abex, makes reflectors, flashers and turn signals. (Lawless 3636).

531. More than \$15,000,000 of IC's automotive parts sales in 1980 were to 373 WDs and jobbers. Another \$7.2 million of automotive parts sales were to one national account. (RX 680C).

532. IC has experience with several of the processes used in windshield wiper manufacturing facilities. It uses thermosetting resin in manufacturing friction material. It uses metal stamping punch presses and employs tool makers and it has light assembly operations. (RX 680D).

533. IC negotiated with the Paul Journee Company to acquire it or to obtain some distribution from it. Those negotiations were unsuccessful. (Lawless 3637). The negotiations were thwarted by the French government. (Glassman 7349). [67]

534. IC was interested in acquiring Anco in the early 1970's. During the period 1976-1978, IC's interest in acquiring Anco was renewed. (Lawless 3637).

535. By letter of October 9, 1975, IC's director of corporate development proposed an acquisition of The Anderson Company. (RX 633). By letter of February 27, 1976, the president and chief operating officer of IC, Stanley Hillman, offered to buy all the shares of Anco owned by The Anderson Foundation. (RX 645). On April 14, 1976, Anco's president, Edward Larson, advised IC that the trustees of The Anderson Foundation had determined instead to undertake an examination of the potential of Anco for growth and improved profitability. (RX 649). By letter of April 28, 1976, Mr. Hillman responded to Mr. Larson's letter with a new, higher offer, 125% of net worth, for the purchase of the shares of Anco. (RX 650). In a letter dated May 6, 1976, Mr. Larson advised Mr. Hillman that the trustees were undertaking a study concerning the potential of Anco and that when the study was completed they would be glad to talk with IC and other companies. (RX 651).

536. During the 1970's IC looked at over 200 automotive company acquisitions. (Lawless 3674). Mr. Hillman made offers to purchase only a few of those companies. (Lawless 3676, 3681).

537. Among companies acquired by IC was at least one whose annual sales were in the \$5-6 million range. (Lawless 3664-65).

538. IC's interest in wipers was not confined to acquisition of a leading firm. It pursued Paul Journee and it pursued companies with sales in the \$5-6 million range in other markets. (Lawless 3665, 67).

## 5. IT&T

539. IT&T is a diversified company with total sales in 1980 of \$23.8 billion and sales of automotive products of \$1.7 billion. (RX 712E).

540. IT&T manufactures automotive products including brake systems, suspension systems, body and chassis components and electromechanical and electronic components. It is an original equipment market supplier to automotive manufacturers worldwide, and it is also a manufacturer and distributor in the aftermarket. (RX 712F-G). [68]

541. IT&T has several automotive organizations active in the United States aftermarket. One is a group called ADD, an automotive distributor organization. (Gillberg 3915-16). IT&T also sells to an organization of program jobbers called Auto-Wize. (Gillberg 3916). WAWD, which stands for Western Automotive Warehouse Distributors, is engaged in importing parts for U.S. imported cars. Aimco makes brake parts. (Gillberg 3917). Hancock Corporation makes a variety of metal frames such as seat frames and seat adjustments. Lester Industries, acquired in 1979, is engaged in aluminum diecasting for cars. IT&T's suspension division makes suspension parts for automobiles in the United States. (Gillberg 3918).

542. IT&T subsidiaries in Europe manufacture automotive parts: Alfred Teves, the world's largest manufacturer of brake parts, had sales in 1980 of \$800 million. (Gillberg 3919-20). IT&T's Dutch subsidiary, Koni, manufactures high performance shock absorbers with annual sales of about \$70-75 million. The IT&T Automotive Italian Organization manufactures shock absorbers, mufflers and plastic parts such as steering wheels, seats, dashboards with sales in 1980 of \$250 million. IT&T also owns 1-2-3 Auto Service, a muffler franchise company in Germany. (Gillberg 3921-22).

543. Another IT&T subsidiary is SWF, a German company, which had sales in 1980 of \$250 million. SWF manufactures wipers systems, including electrical motors, linkage, arms and blades. In 1980 SWF sold to Volkswagen-Audi, Mercedes Benz, BMW, Ford, General Motors in small amounts, Renault, Volvo and Opel. (Gillberg 3923-24)

544. SWF imported its wipers into the United States in 1976-1977

for replacement of wipers on imported cars like Volkswagen. SWF sold through the WAWD organization, but was unsuccessful. SWF priced the wipers to compete with OES blades, but it could not compete with lower priced blades from Brazil and Taiwan. (Gillberg 3927-29).

545. Prior to the end of 1980, IT&T Automotive was considering manufacturing wiper systems in North America. There were operations review meetings in IT&T where that was discussed. (Gillberg 3931).

#### 6. Premier Rubber Company

546. Premier Rubber Company ("Premier") is a division of Eagle-Picher Industries ("Eagle-Picher") which had net sales in 1978 of \$526.5 million and net income of \$27.8 million. Eagle-Picher is divided into groups. In 1978, sales by the automotive group were \$161.3 million, earning \$19.3 million before taxes. [69] Automotive group sales nearly doubled from 1974 to 1978. (RX 378C; RX 378-I).

547. The Eagle-Picher automotive group manufactures vibration dampening assemblies and other precision machine parts such as steering gear components, adjustable steering wheel parts and power steering pump housings. (RX 378S).

548. Premier manufactures rubber products, including components for shock absorbers, windshield wiper elements, oil industry products and rubber products for appliances, heavy trucks and agricultural equipment. (Singleton 3460).

549. Premier is a fully integrated rubber company which purchases basic raw ingredients and processes them into a completed product. It has Banburys, mills, calendars, extruders and presses for rubber processing. (Singleton 3461).

550. Premier formulates the rubber compounds used in the manufacture of windshield wiper elements. (Singleton 3463). Premier has been supplying rubber elements to Anco since 1928, to the Ideal Corporation since 1979, and to Roberk since 1977. (Singleton 3462). About 35% of Premier's sales of rubber elements is to Anco. (Singleton 3513).

551. In addition to buying from Premier by 1980, the Roberk Division of Parker-Hannifin had begun to produce some of its own rubber elements. (Singleton 3462-63).

552. Premier develops its rubber compound to meet the specifications of its customers and uses different rubber compounds for the wiper elements manufactured for Anco, Roberk and Ideal. (Singleton 3463-64).

553. About 1976, Premier considered manufacturing windshield wiper refills. It did so because it had excess capacity after Anco start-

ed buying part of its rubber elements from Jordan Products Company. (Singleton 3468, 3479).

554. In the course of its investigation, Premier concluded that its entry into the windshield wiper aftermarket was feasible. But Premier decided not to enter the wiper business because Premier started to sell to Roberk which solved its problem of overcapacity without actually entering the windshield wiper business. (Singleton 3469).

555. Premier perceived that, by providing refills in three different sizes, it could cover 95% of the total market for passenger cars operating in the United States. (RX 322E). [70]

556. In deciding whether to enter the windshield wiper business, Premier considered refill designs, analyzed the pressure patterns of existing wiper blade products, developed a schedule of manufacturing processes, and surveyed retail prices of competitors. (RX 322Z - Z-10).

557. Premier developed detailed drawings of assembly and individual components for the manufacture of wiper products. (Singleton 3472; RX 322B).

558. Premier sent letters to various outside companies asking them to quote to supply windshield wiper refill parts. (RX 347A - Z-14; Singleton 3473-74). The responses led Premier to conclude that it could have obtained a source for the component parts needed to manufacture and sell windshield wiper refills at a competitive price. (Singleton 3475).

#### 7. Purolator, Inc.

559. Purolator, Inc. ("Purolator") is a diversified company with revenues in 1980 of \$561,000,000. Purolator's Products Group manufactures automotive products, principally filters and closure caps for automotive vehicles which it sells to original equipment manufacturers and to the automotive aftermarket. (RX 793B, I).

560. Purolator's subsidiary, Stant, Inc., is a manufacturer and marketer of fuel tank caps, radiator caps and oil filter caps for use on automobiles which it sells to original equipment manufacturers and in the automotive aftermarket. (RX 793J).

561. Purolator has been interested in acquiring a windshield wiper company for more than 20 years, and contacted Anco in 1967 about a possible acquisition. (Bober 4218).

562. In 1976 Purolator marketed a windshield wiper product purchased from Pylon under the Purolator brand name. (Bober 4218-19). Under that agreement, refills were shipped to Purolator already packaged in individual boxes bearing Purolator colors and the Purolator brand name. (RX 745). The program was not a success. (RX 762).

563. In April of 1978, when Purolator learned that Anco was for sale it sent a check for \$1 million to The Anderson Foundation to make

Purolator eligible to receive information with regard to Anderson and to become a potential bidder. (Bober 4227; RX 766-70). Purolator's evaluation of Anco for possible acquisition was approved by the Purolator board. (RX 771). Purolator eventually dropped out of the bidding for Anco because it thought that the price was too high. (Bober 4232). The \$1 million was returned, with interest. (Bober 4261). [71]

564. In 1979 Purolator was contacted by a broker who wanted to license plastic wiper blades for sale to OEM. (RX 775; Bober 4235). Purolator was interested but found that the car manufacturers were not. (RX 776-78; Bober 4241).

565. In 1980, the chief executive of Pylon, Mr. Longman, asked Mr. Landow, the senior vice president of the Purolator Filter Division, to consider another wiper blade promotion and they also discussed the possible acquisition of Pylon. (Bober 4242). Mr. Landow was not authorized to make acquisitions. (Bober 4244, 4267).

566. Mr. Longman sent a secrecy agreement which would have required Purolator to make royalty payments over a number of years in the event that it subsequently entered the windshield wiper business. Purolator refused to execute the agreement. (Bober 4243-45; 4269).

567. In 1980, to assist it in deciding whether to again buy and sell wiper products under the Purolator name, the Purolator Filter Division sent a questionnaire to some of its customers (RX 784; RX 789; Bober 4243-45) and requested a trade association to prepare a market study of the windshield wiper business. (RX 761; Bober 4250).

#### 8. Sprague Devices, Inc.

568. Sprague Devices, Inc. ("Sprague") and its predecessors manufactured air pressure wiper motors and controls for trucks and buses for forty years. About 1978 Sprague began selling heavy duty wiper arms and blades which are manufactured by Anco for trucks and buses. (CX 238B, CX 775A; Oshei RX 4003Z-162 - Z-165).

569. Premier Rubber Corporation perceived Sprague as a manufacturer of wiper blades for original equipment use when Premier studied entry into the wiper aftermarket. (RX 322P-Q; Danielson 3831, 3833).

570. Stewart-Warner Corporation considered acquiring Sprague which it perceived as a wiper system producer. (Danielson 3831, 3833).

571. Sprague is not a potential entrant. [72]

#### 9. Stewart-Warner Corporation

572. The Stewart-Warner Corporation ("Stewart-Warner") makes and sells various automotive products, including radiators, heaters,

switches, meters and gauges, which it sells in the aftermarket to program distributors, oil companies, jobbers and mass merchants. It had sales in 1980 of about \$336 million. (Davidson 3804-05, 3819-21).

573. Some of Stewart-Warner's automotive products have been developed by internal expansion including its lubrication systems and instrument systems. (Danielson 3836-37).

574. In 1978, Stewart-Warner acquired Icknield Instruments Limited, a manufacturer of automotive instruments, including speedometers, tachometers and gauges. Stewart-Warner acquired the Thor Division in 1973. Cincinnati Rubber was a part of the Thor acquisition. (Danielson 3827-28).

575. The Cincinnati Rubber Company was engaged in rubber molding. Other manufacturing processes used by wiper manufacturers and also employed by Stewart-Warner are metal stamping plastic molding, and light assembly. (Danielson 3807).

576. Since at least 1977, Stewart-Warner has been interested in acquiring among others, automotive parts companies with a net worth of at least \$2 million. (Davidson 3826).

577. Around 1978, the Cincinnati Rubber Company investigated entry into the windshield wiper business and concluded that they could manufacture a windshield wiper product comparable to those already on the market. (Danielson 3808).

578. Two prototypes of blades were developed and tested in the laboratory. (Davidson 3831-32). While no patents blocked Stewart-Warner from getting into the business (Davidson 3837-38) they concluded that they needed a patentable wiper because Cincinnati Rubber Company's technology was low volume specialty and they needed something different to get a price that would cover their costs. (Danielson 3833).

579. Stewart-Warner had several meetings concerning acquisition of Sprague Devices, which makes wiper systems. It discussed possible acquisition prices with the merger broker, but not with Sprague officers. (Danielson 3838). Sprague decided that it was not interested in the acquisition. (Danielson 3814-15, 3838-39).

580. Stewart-Warner discussed participating with an English company, Lucas Industries, in the sale of automotive parts, including wipers, in the U.S. (Danielson 3814-15). It had two meetings with Lucas executives in 1978 and 1979 to discuss an [73] association under which Lucas could sell its automotive products, but no deal was ever reached. (Danielson 3815, 3830).

581. Stewart-Warner sold Cincinnati Rubber to a private individual in August 1979, and no longer has any interest in manufacturing wipers. (Danielson 3833-35).

582. At the time of the acquisition, Stewart-Warner was a potential

entrant. After 1979, Stewart-Warner was no longer a potential entrant.

#### 10. Tenneco, Inc.

583. Tenneco, Inc. ("Tenneco") is a diversified corporation which includes an automotive parts business. (RX 949-C). Tenneco's net revenues in 1980 amounted to \$13.2 billion. Sales of its automotive parts operations, Tenneco Automotive, which includes the Walker Manufacturing Division, Monroe Auto Equipment Company, and Speedy King Muffler (RX 950H), amounted to \$795 million. (RX 949D).

584. The Walker Division manufactured automotive exhaust systems and parts, emission control devices and jacks and 80% of its sales are to the automotive aftermarket. (RX 949T). The Monroe Auto Equipment Company manufactures shock absorbers and 80% of its sales are to the automotive aftermarket. (RX 949U).

585. Monroe has experience in many of the processes used in manufacturing wipers. It uses metal stamping punch presses, thread rolling equipment, cold heading equipment, degreasing equipment and light assembly equipment. Monroe also employs tooling, die and mold makers. (Nelson 6103-04).

586. In 1980, Monroe employed over 200 sales people and used 18 independent manufacturers representatives (RX 951H; RX 953C).

587. Walker had manufacturing experience with each of the following processes: rubber extruding, thermo-plastic extruding, slitting or trimming of rubber, as well as the use of punch presses, thread-rolling, cold heading and degreasing equipment, tool, die or mold makers and light assembly operations. (RX 921G-H; RX 953C).

588. In 1969 Monroe, then an independent company, and Anco formed a Belgian joint venture company to manufacture and sell wipers throughout Europe. That venture continued until about 1978. (Lipford 3872-73). [74]

589. In 1972, Monroe offered to purchase the stock of Anco held by The Anderson Foundation for \$23 per share. (RX 926A; Lipford 3874). Monroe's offer was not accepted. (Lipford 3875).

590. In 1974, Monroe again considered Anco as an acquisition candidate. (RX 933A; Lipford 3877-78). As a result of Monroe's study of the technological aspects of windshield wipers production, it concluded that wipers are not a technically sophisticated product, the manufacturing processes involved are not technically sophisticated, and the product is not subject to easy obsolescence by new technology. (Lipford 3878).

591. The Monroe Auto Equipment Company was acquired by Tenneco, Inc. in 1977. (Lipford 3871).

592. In 1978, Tenneco was invited to bid to purchase Anco. It concluded that it could not pay book value (\$22 million) or more without a diluting effect on Tenneco earnings per share. (RX 939). Tenneco did not bid. (Lipford 3882).

593. In May 1978, the director of corporate development at Tenneco Automotive reviewed the financial operations of the Trico Products Corporation. (Acuff 3895; RX 941).

594. In 1979, a market survey of the windshield wiper industry was done at the request of the director of corporate development for the automotive parts division, Tenneco Automotive. (Acuff 3892-93).

595. Tenneco employs in its own plants most of the manufacturing processes used by wiper manufacturers. (Nelson 6103-04).

#### 11. Auto Manufacturers

596. Delco Products Division of General Motors Corporation ("Delco") sells wiper motors and washer pumps to the car divisions of General Motors and to the General Motors Parts Department for resale to dealers as original equipment service. (George 744).

597. A.C. Delco Division of General Motors and its predecessor organizations ("A.C. Delco") have sold automotive products to the aftermarket through WDs. (George 746). A.C. Delco purchases the wipers which it sells. (George 747).

598. General Motors has integrated backwards into many products installed in cars, including cruise control, tire [75] pressure sensing systems, catalytic converters, temperature sensors, citizen band units, tape players, air conditioning systems, and electronic engine controls. (Nelson 6476-78).

599. Delco began working on development of a windshield wiper blade about 1956 and continued up to 1965. (George 755, 761).

600. General Motors developed a windshield wiper product which was tested on cars. The pilot program consisted of about 10,000 blades, used on 1958 or 1959 model Chevrolets. (George 755).

601. Delco tested its prototype windshield wiper blade in the laboratory and concluded that it was superior to the Trico and Anco blades then being purchased for original equipment use. It had superior wipe and durability. (George 758-59).

602. The research group at Delco compounded a rubber formula which, based on tests, was superior to the wiper element used by Anco and Trico. (George 761-63).

603. General Motors developed its own slitter from existing equipment which was commercially available. (George 766). When the work was completed Delco felt that its blades had a better edge than those of existing suppliers. (George 767).

604. General Motors conducted a cost study of the prototype wind-

shield wiper blade which it had developed and decided in 1965 not to produce it because it cost more than the blades they could buy from Anco and Trico. (George 760-61).

605. Between 1969 and 1972, Delco looked for a second time at the possibility of manufacturing windshield wiper arms and blades and refills for sale to the O.E. and replacement markets. (George 749, 770-74).

606. A.C. Delco felt that it could get a 20% share of the wiper aftermarket in two years selling to WDs and that it could cover 98.93% of U.S. and foreign passenger cars with 19 sizes. (CX 1514A-B, CX 1516A). Because several patents were expiring Delco thought it had the opportunity to modify its design to reduce costs. (George 769-70).

607. Delco concluded in 1972 that while its blade was superior to the blades General Motors was buying from Anco and Trico it cost too much to make and should not be produced. (George 773-74). [76]

608. Ford Motor Company sells parts to Ford and Lincoln-Mercury dealers under the "Ford" and "Motorcraft" brands, and to aftermarket customers, including WDs, national accounts, hardware stores, drug chains and mass merchandising chains, under the "Motorcraft" brand. (Mitzel 450-52).

609. Ford sells Ford-branded wipers to its dealers. Ford dealers primarily purchase Ford branded wiper products for warranty repairs. (Mitzel 451-52).

610. Ford has more than 200 sales people. It sells to about 800 WDs. (Mitzel 453). It operates about 17 parts distribution centers. (Mitzel 454).

611. In 1979, Ford analyzed the possibility of selling wipers to the aftermarket as a Motorcraft brand. (Mitzel 455, 458-59). This private label line would be made by Tridon. (Mitzel CX 2020C).

612. The line of six blades and six refills under the Motorcraft label would fit all domestic car and light trucks and most imported vehicles. Each blade was to be supplied with adaptor clips to fit various arms. (CX 2022B-C). The line of wipers would not have met Ford's own original equipment specifications. (Mitzel 474-77).

613. Ford decided not to proceed with the analysis of the Motorcraft branded wiper product for the independent aftermarket because other products offered greater sales potential. (Mitzel 463-64).

614. Ford is not a potential entrant.

*Q. Likelihood of Champion Entering The U.S.  
Wiper Replacement Market in 1978*

1. Champion's Expansion History

615. From a single spark plug plant established in the United States in the early 1900's (CX 988H; Stranahan CX 3007H), Champion has grown to become the worldwide leader in spark plug sales, with fourteen spark plug plants and nine ceramic plants distributing spark plugs in more than 150 countries around the world. (Hoyt CX 3009Z-122; Surface CX 3005Z-83). [77]

616. Champion's expansion in spark plugs was accomplished entirely through internal expansion. (Surface CX 3005Z-84; Brotje 4493; CX 3011Z-14 - Z-15; Emrick RX 4000Z-23 - Z-24; Senez RX 4004Z-49; Stranahan CX 3007F-R).

617. Champion starts out in some markets by sales and service companies to handle the importation and distribution of its products. (CX 610A; CX 972G; Stranahan CX 3007Z-15; CX 975G; Senez RX 4004Z-24).

618. Champion built spark plug plants in anticipation of future growth. It generally would import into a market until demand would justify construction of a plant. Plants then were built with the expectation that they would not reach full capacity utilization for up to 15 years. (Stranahan CX 3007W-X, Z-4, Z-13).

619. Champion built plants in Mexico, Venezuela, South Africa and New Zealand because those countries would not permit imported spark plugs. (Brotje 4495).

620. As it had in spark plugs, Champion pursued a policy of internal expansion with its two subsidiaries involved in lines of business other than spark plugs or wipers. (CX 971K; CX 972H).

2. Champion's Incentive to Enter the Wiper Market

621. In the early 1970's Champion's top corporate management believed that spark plug sales would grow at a slower rate in the future. (Surface CX 3005Z-73 - Z-14, Z-79; Stranahan CX 3007Z-2; Emrick RX 4000Z-16 - Z-18).

622. Champion's top management thought that Champion should diversify. (Surface CX 3005Z-73 - Z-74; Senez RX 4004Z-79 - Z-87; CX 12A).

623. Prior to the Anco acquisition, Champion was optimistic about the growth potential of the U.S. wiper replacement market. (CX 157A, D; CX 147A; CX 111A-B; CX 22A-C). [78]

624. Champion was aware of that growth potential and of the low level of consumer advertising of wipers. Champion research in the mid-1970's indicated that consumers replaced wiper blades only once

every three years rather than annually as recommended. (CX 22A-C; CX 23A; CX 111M; CX 159; CX 169J; CX 494).

625. Champion viewed the United States wiper replacement market as having more growth potential than the replacement spark plug market, either in the U.S. or in Europe. (CX 111A; Brotje CX 3011Z-113 - Z-114; CX 157A). In 1971, wipers were projected to have the second highest growth rate of 31 automotive parts lines, with an annual growth rate of 9.9%, more than double the predicted spark plug sales of 4.5%. (CX 23B).

626. Champion's top management recognized that wipers and spark plugs are compatible lines of business. (CX 44B-C; CX 12A; CX 41B; 171A).

627. Spark plugs and wipers are amenable to the same promotion, merchandising and advertising techniques. (CX 111A; CX 454Z-154; CX 497B; CX 713-I).

628. After the acquisition, the Champion and Anco sales forces merged, and the sales persons now carry both product lines. (Hoyt CX 3009Z-125; Lindeen 2722-23).

### 3. Champion's Interest in Wipers

629. In 1967, Anco was one of seven companies Champion was interested in acquiring but discussions were not active. In the previous several years Champion had examined twenty-three other companies including Trico, for possible acquisition but had abandoned the effort. (CX 1A-D; CX 16B-C).

630. In 1972, Richard E. Surface, Champion's vice president and director of organizational planning and a member of the executive committee contacted Anco to determine if it was available for acquisition. Anco was not then available. (Surface CX 3005Z-66 - Z-67).

631. In 1973, Champion's broker approached Trico about a possible acquisition but Trico was not interested. (CX 8A-F; CX 9A-C; CX 1814-18; Surface CX 3005Z-67 - Z-69).

632. Arman first came to Champion's attention in late 1974. Stephano Cocchiglia, then Champion's assistant managing director for Europe, suggested that preliminary contacts be initiated with Arman. (CX 12A-B). [79]

633. Throughout 1975, Champion pursued the Arman acquisition. (CX 14B; CX 15A-B; CX 17A-B; CX 19B; CX 20A-0; CX 24A-C; CX 26A-C; CX 30A).

634. In September 1975 Mr. Brotje, Champion's executive vice president and director of finance, advised Mr. Stranahan about the factors to be considered in deciding whether to acquire Arman:

Another consideration is what plans, if any, do we have for manufacturing and selling

windshield wipers in the U.S.? If none, can it be said that Arman has enough potential that it is a good investment even if it is never brought into the U.S.? If there is any thought of introducing windshield wipers into the U.S. market, we should know the present size of the U.S. market and its growth potential. Perhaps we should ask Champion's sales department what they know about this market.

(CX 26C).

635. In August 1975, at Mr. Surface's direction (Surface CX 3006Z-79 - Z-80), a memorandum was prepared discussing the size of the United States wiper replacement market, the channels of distribution, the percentage of self installation versus professional installation, and the occasion and timing of purchase. The report also discussed Anco's leading position in the replacement market, its apparent average sales price per blade and the frequency of replacement of blades. (CX 22A-C). Shortly thereafter, Champion had a service station mail panel survey conducted in the United States for information on inventory and sales of two products—wipers and spark plugs. (CX 34A-C; Hoyt CX 3009Z-75 - Z-76).

636. Mr. Stranahan declined to purchase Arman in May of 1976 because of the unstable political and economic situation in Italy. (CX 36).

637. Champion then considered acquiring Paul Journee ("P.J."), the leading French wiper manufacturer. (CX 37A; CX 39A-O; CX 40A-D). Mr. Senez, then Champion's managing director of European operations, met with representatives of Paul Journee and its parent, the Neiman Group, in mid-1976. (CX 39A). [80]

638. Mr. Senez visited Paul Journee's facilities and found them to be unimpressive. (CX 42B, D). Mr. Surface provided to Mr. Stranahan a preliminary report on Paul Journee concerning its sales, customers and manufacturing facilities. (CX 40B-D). He also reported to Mr. Stranahan that Paul Journee, the fourth largest firm in Europe behind Trico, Bosch and Arman, wanted to sell to Champion "because of fear we would be a competitor." (CX 44B).

639. While negotiations with Paul Journee were continuing, Arman advised Champion that they would be willing to talk again about the possible acquisition. Mr. Surface suggested to Mr. Stranahan that negotiations with Arman be resumed. (CX 44A-C). He noted that Champion's top level international management officials were "still positive on adding wiper blades" and that other international managers in South Africa, Venezuela, Mexico and Japan "all expressed disappointment in losing Arman and want the product in their countries if possible." (CX 44B). He also observed that Arman was an "excellent marketing fit, [and] with our OE and oil company contacts it could generate additional business rapidly." (CX 44B).

640. Before any acquisition was completed, Champion began to

discuss construction of another wiper plant. (CX 47B; CX 44B). Mr. Surface concluded that Arman should be expanded quickly:

We would have to develop plans quickly to protect our investment. This would dictate another plant outside of Italy which would be necessary to handle growth.

(CX 44B). Mr. Brotje agreed. (*See* CX 47B).

641. At the same time, Champion also began to plan its worldwide expansion in the wiper business, including "further expansion into [the] O.E. and replacement markets." (CX 52). Mr. Surface suggested that surveys "concerning demand for our product [wipers], duty rates, governmental controls and regulations" be conducted outside Italy in various other countries "such as Venezuela and Mexico." (CX 52).

642. Champion completed the acquisition of Arman on February 25, 1977. (CX 60A-Z-7; CX 57A-B).

643. Shortly after it acquired Arman, Champion began to search for a site for a second wiper plant in Europe (CX 65C; CX 609B) and was developing a wiper marketing survey. (CX 65C). The second plant's capacity was to more than double Champion's overall wiper capacity. (CX 978M; CX 77A). [81]

644. On August 25, 1977, Champion's executive committee authorized Mr. Surface to enter into negotiations for a new wiper plant to be located in Belgium. (CX 85-86). In September, 1977, Champion planned to construct its second wiper facility, capable of producing 18 million wiper blades per year, in Latour, Belgium. (CX 96A). The plant was to be the most modern in the world. (CX 609C; CX 713H).

645. In August, 1977, Mr. Surface asked George Galster, Champion's vice president and director of international sales, in preparation for turning over wiper sales to the Champion sales organization, to make "a determination of what areas outside of Europe that you believe it would be desirable to start a marketing and/or a manufacturing program." (CX 73A).

646. On August 29, 1977, Mr. Galster wrote to Mr. Stranahan, proposing a meeting of Champion's Toledo and European senior managers to discuss wiper blade marketing and "major marketing trends in U.S.A. with emphasis on resulting marketing decisions." (CX 89D).

647. At a meeting of officials of Champion's European sales department held on September 27, 1977, Mr. Cocchialia announced that Champion sales representatives would carry out surveys in the U.S.A. and Europe of market information of wipers, including market potential consumer buying habits, places of purchase and frequency of blade change. (CX 101B).

648. On October 17, 1977, Champion planned patent searches for wiper blades and arms in Europe, Japan and the U.S.A. (CX 119D).

649. On November 30, 1977, Mr. Galster sent to Messrs. Stranahan and Surface a forecast of sales of wiper blades, under the Champion logo, for 1979 and 1980, in the Middle East, Africa, Latin America, Japan, the Far East and Canada. (CX 131A-B).

650. On September 8, 1977, Walter Hadden, president of Champion's Canadian subsidiary advised Messrs. Surface and Stranahan that he was "quietly assembling information" concerning the Canadian wiper industry:

It could be useful to corporate management in the development of a world marketing plan or a program for North America only. Possibly Canada would prove a good entry point where valuable [82] experience could be gained with reasonable investment and technology refined before embarking upon the big U.S. market.

(CX 92A).

651. On October 3, 1977, Mr. Hadden presented the study of the wiper replacement market in Canada, urging Messrs. Stranahan and Surface to enter the North American wiper blade market by entering Canada initially and expanding into the U.S.A.:

Canada is a miniature of the U.S., 1/10 the size. Champion has a strongly entrenched distribution network in each segment of the Canadian market. Initial investment required in Canada would be reasonable, the risks of waste and errors minimized, and much could be learned on this limited scale therefore launching operations in the huge U.S. market.

(CX 111A).

652. On December 7, 1977, Mr. Galster reported to Mr. Surface that the Canada wiper market was an "early target market." (CX 136).

653. On September 14, 1977, Mr. Surface reported to Mr. Stranahan the status of the Arman and Latour plants and said:

Our major problem is to gain knowledge, first in Europe, and then elsewhere throughout the world. I cannot see any expansion outside of Europe with our present facilities and planned facilities before 1979.

(CX 96B).

654. On December 13, 1977, Mr. Surface reported to Mr. Stranahan about a meeting with the principals of Anco. The purpose of the meeting was to lay the ground work for the acquisition of Anco by Champion. (CX 138A-B).

655. On December 16, 1977, Mr. Stranahan wrote to Mr. Galster postponing the meeting proposed by Mr. Galster of key marketing people in Toledo and Europe for the purpose of establishing market-

ing plans for wiper blades, because: "We are in the process of negotiating another program which may completely change our marketing strategy." (CX 137B). [83]

#### 4. Champion's Capability of Entering U.S. Wiper Market in 1978

656. On January 13, 1977, Mr. Surface wrote to Mr. Stranahan comparing the advantages of acquiring Anco versus "attacking the U.S. market with Arman products." He assumed that a Champion wiper plant would be built in the U.S.A. by 1980 and compared costs and market penetration if that occurred with the position which would result in the acquisition, and he concluded by recommending that Champion "should be willing to pay a premium for Anco." (CX 157A-C).

657. As of 1978, Arman had a maximum annual capacity of about 7 million blades, 3.5 million arms and 7.5 million refills. (CX 529). At the end of 1980, Champion's Arman facility had production capacity of 8 million blades and 3 million arms per year and its Latour facility had capacity of 13 million blades and 2 million arms. (CX 1337S-T). Champion's European wiper operations in 1980 had a total capacity of 21 million blades and 5 million arms.

658. Champion's projected wiper blade sales for Europe in 1980 were 11.4 million units. (CX 868B).

659. Champion had incentive to use excess capacity at Latour. Its labor costs had become a fixed expense and it would incur substantial penalties if it did not achieve a certain level of employment at Latour. (CX 887D; CX 436A, B; CX 919P).

660. In 1980, Anco considered use of the Champion's Arman line "as a possible replacement to the SSJ [import] line in the United States." (CX 877B; CX 839B; CX 875B).

661. The Champion "bow tie" is one of the best known trademarks in the United States and around the world. (CX 977B, F).

662. Champion is the spark plug that most domestic customers ask for by name and has the highest customer acceptance. (CX 334Z-2; CX 980H; CX 2075A). More than 50% of spark plugs are sold to consumer-installers. The overwhelming majority of these DIYs specify a brand, and Champion remains the preferred brand. (CX 980H; CX 981F; CX 1036C; CX 2075A).

663. Shortly after it acquired Arman, Champion began to standardize the packaging for its wipers, using the same red, white and black colors as it used for spark plugs. (CX 641B-C; CX 667A, L). By mid-1978, new packaging and logo had been [84] developed for Arman wipers that included the use of the Champion "bow tie" logo. (CX 551F).

664. In July 1979, Champion investigated whether it could use the

name "Champion" on wiper blades sold in the U.S.A., among other places, and concluded that it could not under the trade mark laws. (RX 126C; Surface CX 3005Z-279).

665. In 1978 Champion sold spark plugs in the U.S. to WDs, mass marketers, oil and rubber tire companies and repackagers. Its WD's resold to jobbers, and both the WD's and jobbers resold to fleet operators, dealers, service stations, and end-users. The oil and rubber companies sold primarily to jobbers and dealers, and the mass marketer accounts resold to end-users. Champion also sold spark plugs to automobile manufacturers for resale as replacement parts and for OE installation. Champion sold spark plugs to almost all the leading WDs that were part of a programmed distribution group. (CX 990C; CX 221C; CX 783F-G, R).

666. After acquiring Anco, Champion's advertising campaign for replacement wipers was directed at the consumer. It featured Laurel & Hardy and included prime time television advertising, and advertising at special events such as the Super Bowl, car races, and prize fights. (Longman 545-46).

667. Champion's basic marketing philosophy is to create consumer demand and provide pull-through selling at every level of distribution to assure the movement of its products to the ultimate user. (CX 856A).

668. Prior to acquiring Anco, Champion had experience in the design of packaging that would effectively promote the sale of replacement automotive parts. (CX 1221M-N; CX 1340P).

669. Prior to the Anco acquisition, Champion had sales aids necessary to sell wipers in the United States. (CX 775E).

670. With more than thirty years of experience in the wiper business, Arman has developed considerable technological expertise. (CX 63B; CX 190A).

671. Arman has numerous patents registered in "all the leading countries in the world" including the United States, Canada, Argentina and Brazil, as well as Russia and Japan. (CX 17B; CX 51A-G).

672. Arman compounds and molds the rubber for its wipers based on a natural rubber formula it developed in-house. Arman also designs its own molds and possesses an accurate rotary [85] cutting machine to produce the edge on its rubber elements. (Surface CX 3005Z-105 - Z-106; CX 387A-C).

673. Champion began construction of Latour in November, 1977, and the facility was inaugurated in May 1979. The Latour plant more than doubled Champion's overall wiper capacity. (CX 979M).

674. After Champion's acquisition of Anco, Anco's technical and engineering officials commented favorably on Latour's expertise and technology. (CX 562A; CX 751A-B; CX 727A).

675. Arman produced high quality wipers prior to Champion's 1978 acquisition of Anco. (CX 63B; CX 240C; Surface CX 3005Z-103 - Z-104, Z-112, Z-118, Z-279).

676. Anco considered making Arman blades for imports in the U.S. in 1979 because Arman was better than Anco's Slim Jim line. (CX 810A).

677. By early 1978, Champion had revised its European blade designs to comply with European Economic Community norms and standards. (CX 208C). Those standards were the same as U.S. standards. (CX 615A-I).

678. Anco has obtained components for the Anco Super Slim Jim line from Latour. (CX 525A-U; CX 635A-C; CX 1198A). Super Slim Jim blades were being manufactured at Latour as well as in the United States until around the end of 1980. (Regan CX 3008Z-147).

679. By 1978, Champion's wipers manufactured at Arman were being used as OE by car makers in Europe: Fiat, Volvo, Chrysler U.K., Ford U.K., Alfa Romeo and Lancia. (Cocchiglia 3993; Marnetto RX 4001Z-2, Z-50 - Z-52; Schwyn CX 3010Z-108; CX 1337Z-621).

680. Champion's Arman operation also supplied private label wipers to Ford for distribution to Ford dealers in Europe. (Cocchiglia CX 3002Z-144 - Z-145; Marnetto RX 4001Z-6; CX 143C).

681. Before it acquired Anco, Champion, through its European wiper operations, produced a line of wipers for most of the popular European and Japanese automobiles and for certain American automobiles, including many automobiles produced by American manufacturers for the European market and some American automobiles popular in the United States. (CX 183A-Z-65; CX 17A; CX 117A-G; CX 218A; CX 208C; CX 217A). [86]

682. In 1964 U.S. factories sold 9,292,275 new motor vehicles. In 1980 they sold 8,067,133 units. U.S. factory unit sales of new motor vehicles declined continuously from 1978 through 1980. (RX 5009; Jacobs 2931-33).

683. The sale of wipers for imported cars has been a growing percentage of total domestic replacement market sales. (CX 633I; CX 856F-I; CX 111P). In 1964, imports of new motor vehicles (cars, trucks and buses) were 5.7% of new motor vehicles sold in the United States; imports of new passenger cars were 6.6% of new passenger cars sold in the United States. In 1978, the percentages were 21.9 and 26.1. In 1980, they were 30.6 and 34.9. (RX 5010A).

684. Around the time of its acquisition, Arman manufactured four basic lines of wipers (CX 256-I, Cocchiglia 4014, 4016-17), with 29 blade designs (CX 256Z-18 - Z-19) and 22 different arm designs. (CX 256Z-27).

685. In 1977 Champion planned to have available by the end of 1978

designs of wipers that would cover "a reasonable potential share of the replacement market throughout the world." (CX 109A).

686. By the end of 1977, Champion, through the use of interchangeable fittings with eight wiper blades, serviced applications formerly requiring 122 different blades (CX 978M) and were able to cover virtually all European manufactured cars. (Cocchiglia 4017).

687. In early 1979 the rubber quality of Champion's European wiper operations was the equivalent of Anco's except ozone resistance. (CX 554C-G; CX 562B-F; Surface CX 3005Z-112, Z-118 - Z-120). Champion undertook further improvement of its rubber formula. (CX 554A-G; CX 562A-K; CX 655).

688. Champion was successful in recompounding Arman's rubber formula to achieve a superior rubber formula. (CX 980I; CX 928B; CX 845).

689. The new rubber compound developed by Champion's European wiper operations was envisioned for use not only at its two European plants but also at Anco in the United States. (CX 858F; CX 928B).

690. Champion's European operations had success in rubber injection molding (Schwyn 4097-98), extrusion of rubber elements and on electroplating of wipers (CX 858D-E, L-M) and research on wiper windlift. (CX 959A-J). [87]

691. By the end of 1978, Champion had an extensive line of wipers which it had developed or inherited as a result of the Arman acquisition. (CX 262A-Z-49; CX 980-I; CX 259E, Z-52 - Z-53).

692. By June 1979 Champion's Latour plant was producing a complete line for import requirements in the U.S. (CX 633C; CX 980-I).

693. In May 1980 Anco advised Volkswagen of America that their request for a wiper would be handled based on a Latour design and, as soon as it was production tooled, it would be available from Latour, Belgium, Arman in Italy and the United States. (CX 872A-B).

694. As of the end of 1980, Champion's Arman facility had production capacity of 8 million blades per year and its Latour facility had capacity of 13 million blades. (CX 1337S-T).

695. Champion's European wiper operations had sales, in 1980, of 5.9 billion blades and 1.3 million refills. (CX 1337Z-4 - Z-5).

696. About 66% of blade capacity (13.8 million blades) for Champion's European wiper operations was not being used at the end of 1980.

697. Before the acquisition, Arman sold wiper products to customers in countries in the Middle East, Africa and Southeast Asia. (CX 129A; Marnetto RX 4001U-W).

698. For several years, starting before 1975,<sup>9</sup> Arman sold wiper

<sup>9</sup> Arman's export sales manager, Romana Marnetto, testified in a deposition that she knew that Warshanky was a customer of Arman before she came to Arman. She started as a secretary to Arman's owner in 1969 and became export sales manager in 1975. (Marnetto RX 4001E, F, Z-52).

blades to Warshansky Company, a distributor of foreign car parts in Chicago. Mr. Warshansky visited Arman at the Turin automobile show and gave Arman an order for blades to be used as replacement blades on Fiats imported into the United States. Every year or two thereafter he ordered one or two thousand blades. (Marnetto RX 4001T, Z-50, Z-52; CX 129A-B). In 1977, Warshansky's purchase of wiper products from Arman amounted to about \$8400. (He purchased .06% of Arman's total sales of \$14 million.) (CX 96A; CX 129A). [88]

699. Mr. Arman, the majority owner of Arman before the acquisition, and Mr. Nanni the minority owner and general manager, tried to sell wiper products in the United States and they had traveled to the United States for that purpose at least once. (Marnetto RX 4001Z-50, Z-52).

700. Arman blades have a higher superstructure than a comparable Anco blade so that the wind can pass through it and not lift the blade off the vehicle. That is necessary in Europe where there are no speed limits and high speed operation is more common than in the United States. U.S. cars can be fitted with lower profile blades, which auto manufacturers find aesthetically pleasing. (Harbison 3530-31; RX 1201A and C).

701. The element in the European blade is also smaller and thinner because the wiper system on European automobiles is usually smaller than those sold in the United States. (Harbison 3531-32, 3537-38; Regan CX 3008Z-123 - Z-124, Z-134 - Z-135).

702. In Europe wiper blades generally are not refillable. (Harbison 3530).

703. Wiper design is more art than science at Arman, with very little written down which could be transported elsewhere to assist a new wiper plant. (Schwyn 4151-59).

704. Latour is a standardized, normalized, rigorous, delineated, reproduceable manufacturing plant. The advantage of such a system is that it is easily duplicated and moved to another location. (Schwyn 4116, 4158).

705. Mr. Longman, president of Pylon, perceived Champion as a potential entrant into the U.S. aftermarket after it acquired Arman. (Longman 701).

706. In 1977, Anco's president also perceived Champion as a potential entrant into the U.S. market after the acquisition of Arman. (CX 359C). [89]

#### DISCUSSION

The following discussion summarizes and supplements the findings of fact and presents conclusions of law:

## I. INTRODUCTION

Until 1968, windshield wipers were made and sold in this country only by Anco and Trico. (F. 238). They had about equal sales in the replacement market. (F. 239). Anco strongly adhered to resale price maintenance policies, had no private label product or sales to discount mass merchants, and sold primarily to selected distributors. (CX 1014N; Frank 2603). Trico had most of the OE market. (F. 238).

Wipers for replacement typically were installed on the car by a worker at a gasoline station or garage. The wipers were distributed through WDs and jobbers, and by oil and tire companies. (F. 184, 185).

In the late 1960's and early 1970's, Pylon, Roberk, Tridon and other new companies started to make wipers, attracted by the expiration of blocking patents. They sold directly to chains of department stores and auto parts stores, as well as traditional distributors, appealing to the do-it-yourself consumer with low prices, pushing the use of refills rather than the replacement of the entire wiper blade. (CX 1014J; RX 45; F. 240-42).

Consumers found that they could easily install wipers. (F. 194). The market changed rapidly. Wiper sales by professional installers dropped. (F. 195, 226). Jobbers started selling at retail. (F. 200, 207). Price competition flourished. (F. 263, 271, 272). Nefco, Fram, Ideal and Bosch came into the market, and, after a temporary withdrawal, Tridon wipers were vigorously reintroduced. (F. 167, 151, 137, 108, 161). Anco and Trico joined the fray, competing on price and selling to the mass market. (F. 281, 267-70, 259).

In 1977, Champion Spark Plug Company bought Arman, a major wiper manufacturer in Italy, and Champion started building another wiper plant in Latour, Belgium. (F. 35, 42). Then, in May 1978, Champion acquired Anco. (F. 28). [90]

## II. RELEVANT MARKET

The relevant market is the manufacture<sup>10</sup> and sale of windshield wiper blades and refills ("wipers") to the United States aftermarket. (F. 60, 61).

Wiper arms are not part of the relevant product market. Almost all arms are sold as original equipment. (F. 70). Anco and Trico have been the only wiper arm suppliers to the U.S. OE market. (F. 62; CX 1032Z-4). Bosch supplies arms as OE in Europe. (F. 157). Since these firms have supplied arms as OE they have had arms to supply the aftermarket. (F. 62). There is, however, little demand in the replacement market for arms. (Abston 182). Unlike wipers which wear out, arms are

<sup>10</sup> Excluded from the relevant market are resellers such as Atlas (F. 65), Sprague (F. 568), and Purolator (F. 562), and, as a potential reseller, Ford Motor Company (F. 611). *United States v. Black & Decker Mfg. Co.*, 430 F.Supp. 729, 737 (D. Md. 1976).

almost always replaced only when stolen or damaged in a crash. The sales of arms to the replacement market have been dropping steadily for many years. (F. 71).

While blades and refills are generally substitutable for each other, arms are not substitutable for wipers. (F. 45-48). There is no production flexibility between arms and wipers; that is, the same equipment cannot be used to produce either product. (F. 68). Arms and wipers are only the last part of the mechanical system used to clean windshields, with the motor and transmission essential parts of that mechanism and the washer parts also playing a role. (F. 43). Mass merchants who carry wipers do not carry arms (F. 69), and Atlas, the largest organization of gas stations, does not carry arms. (F. 65).

The most appealing argument for a "cluster" approach which would include arms in the relevant market is that both Anco and Trico have long sold arms to WDs.<sup>11</sup> However, both Anco and Trico sell other wiper products like windshield washer parts and supplies to WDs and there is no argument that those products are in the relevant market. (F. 10, 91). Other wiper manufacturers [91] have successfully sold to WDs without supplying arms. (F. 152, 172, 137, 106). Not all WDs carry arms, and those that do are carrying fewer part numbers. (F. 69). Furthermore, most WDs carry wiper motors and linkage, yet no wiper company makes motors and Trico is the only wiper company making linkage. (F. 49, 54-55).

Since the purpose of delineating a line of commerce is to provide an adequate basis for measuring the effects of an acquisition, its contours must conform with competitive reality. *United States v. Black and Decker Mfg. Co.*, 430 F.Supp. 729, 737 (D. Md. 1976). The "meaningful competition" in this product market includes refills and blades, not arms.

Nor does the relevant replacement market include sales of wipers to auto manufacturers for resale to their new car dealer customers. In *Tenneco, Inc.*, 98 F.T.C. 464, 581, *rev'd on other grounds*, 689 F.2d 346 (2d. Cir. 1982), and *SKF Industries, Inc.*, 94 F.T.C. 6, 78 n. 2 (1979), the Commission recognized such original equipment service ("OES") sales of automobile parts as distinct from the replacement market.

OES wipers are sold to car manufacturers by separate wiper company salesmen who do not sell to the replacement market. (F. 82-86). OES wipers are a different quality and are sold at different prices than wipers sold in the replacement market. (F. 78, 81). Only OE wiper manufacturers also sell OES wipers. (F. 73).

New car dealers often use OES wipers in performing warranty work on cars (F. 80), and when they do, the wipers are part of the OE market

<sup>11</sup> Another factor supporting the argument is that Anco itself includes arms with wipers in analyzing the market (e.g., CX 1054B, D).

rather than the replacement market. Since new car dealers usually have garages where they do non-warranty repair work, and also often have used cars, taken as trade-ins, for sale (F. 88), they may use OES wipers for non-warranty replacement.<sup>12</sup> Such wiper sales by dealers would compete with sales by other replacement wiper retailers and installers. In the absence of proof, however, of what percentage of OES wiper sales are for non-warranty replacement and because OES wipers [92] are different from replacement wipers in kind and price and are sold by different salesmen to different customers, they should be excluded from the relevant market.

### III. LEGAL ANALYSIS OF THE MERITS

#### A. Section 7 of the Clayton Act<sup>13</sup>

The theory of the Complaint is that if Champion's acquisition of Anco were proscribed, Champion would enter the wiper market and increase competition. The Complaint is based solely on the actual potential competition theory. Respondent urges that the theory should be abandoned.

Section 7 of the Clayton Act prohibits acquisitions whose effect "may be" substantially to lessen competition. The statute "look[s] not merely to the actual present effect of a merger but instead to its effect upon future competition." *United States v. Von's Grocery Co.*, 384 U.S. 270, 277 (1966). Section 7 prohibits the elimination of potential competition as well as of actual competition. *FTC v. Proctor & Gamble Co.*, 386 U.S. 568, 580-81 (1967); *United States v. Phillips Petroleum Co.*, 367 F.Supp. 1226 (C.D. Cal. 1973), *aff'd mem.*, 418 U.S. 906 (1974). The acquisition of a probable future entrant, even without proof or present competitive effect, may violate Section 7. *Yamaha Motor Co., Ltd. v. FTC*, 657 F.2d 971 (8th Cir. 1981); *Heublein, Inc.*, 96 F.T.C. 385, 583 (1980).

#### B. Actual Potential Competition

To prove that the acquisition violates Section 7 under the actual potential competition theory requires the following [93] findings: (1) the wiper market was concentrated,<sup>14</sup> (2) Champion had the capacity, interest and economic incentive to enter the market, (3) Champion's entry into the U.S. wiper market was likely to produce deconcentra-

<sup>12</sup> While there is little evidence in the record that this occurs, Anco internal documents include OES sales in the replacement market. (F. 76).

<sup>13</sup> The Complaint alleges that the acquisition violates Section 5 of the FTC Act, as well as Section 7 of the Clayton Act. Section 5 includes but is not limited to violations of the Clayton Act. *Yamaha Motor Co., Ltd. v. FTC*, 657 F.2d, 971, 981 at n. 14 (8th Cir. 1981); *Beatrice Foods Company*, 67 F.T.C. 473, 724-27 (1965). Here, however, complaint counsel pursued the same theory of violation under both statutes.

<sup>14</sup> Even if the market was concentrated there would be no need for concern for the prospects of long-term deconcentration of a market which is in fact genuinely competitive. *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602, 630 (1974).

tion or other procompetitive effects, and (4) that Champion was one of the few most likely entrants or expanders and that its elimination as a result of the acquisition would be reasonably probable to substantially lessen competition. *United States v. Marine Bancorporation, Inc.*, 418 U.S. 602, 630, 633 (1974); *BOC Int'l Ltd. v. FTC*, 557 F.2d 24, 29 (2d Cir. 1977); *Heublein, Inc.*, 96 F.T.C. 385, 584 (1980).

### 1. Concentrated Market—Market Share

The relevant market at the time of the acquisition was concentrated, with the top two companies having a market share of 67% in units produced.<sup>15</sup> (F. 183). This ratio indicates [94] an oligopoly subject to the actual potential entrant doctrine. *Heublein, Inc.*, 96 F.T.C. 385, 585 (1980).

### 2. Champion's Feasible Entry But For the Acquisition

In 1978, Champion had the interest, incentive and capability of entering the United States replacement wiper market in the near future.<sup>16</sup>

Champion has had a history of expanding its business into new geographical markets by building new plants after initially entering by sales through importation. (F. 615–20). Before the acquisition, Champion had a clear incentive in getting into the windshield wiper business, which its executives felt was compatible with (F. 626–28), growing faster, and more profitable than the spark plug business. (F. 621, 623, 625).

During the late 1960's and early 1970's Champion was interested in acquiring Anco or Trico. (F. 629–31). In the middle 1970's Champion became interested in buying Arman in Italy (F. 632) or Paul Journee in France (F. 637), and had in [95] mind the eventual entry into the U.S. wiper market. (F. 634–35). Settling on Arman, Champion

<sup>15</sup> Since price and quality vary so widely in the wiper business (F. 271, 272, 279), the market shares are based on unit, rather than dollar sales. *Coca-Cola Bottling Co. of New York, Inc.*, 93 F.T.C. 110, 206 n. 10 (1979). And each refill was treated as a unit in determining market shares. Although wiper refills are often sold at retail in a package of two, the use of each refill replaces one blade, and vice versa; blades are also sometimes sold two to a package (Kulavik 3059–60); and consumers normally buy either two blades or two refills at a time regardless of packaging. (Cohn 2411; Campbell 1144).

High two firm shares were used because, in this industry, they are more relevant than four firm shares in predicting competitive behavior. *Heublein, Inc.*, 96 F.T.C. 385, 577 (1980).

The market share findings are not precise because they do not exclude foreign sales by United States manufacturers and do not include sales in this country by many foreign manufacturers. These market share findings do show the broad picture of oligopoly, however. "[P]recision in detail is less important than the accuracy of the broad picture." *United States v. Brown Shoe Co., Inc.*, 370 U.S. 294, 342 n. 69 (1962). See also *United States v. Philadelphia Nat'l Bank*, 374 U.S. 321, 364 n. 40 (1963); *A.G. Spalding & Bros., Inc. v. FTC*, 301 F.2d 585, 610–11 and n. 20 (3d Cir. 1962).

<sup>16</sup> The issue for determining potential competition in this case is whether it is "reasonably probable" that, but for the acquisition, Champion would have entered the relevant market. *United States v. Marine Bancorporation*, 418 U.S. 602, 617 (1974); *FTC v. Proctor & Gamble Co.*, 386 U.S. 568, 577 (1967); *United States v. Penn-Olin Chemical Co.*, 378 U.S. 158, 175 (1964); *Yamaha Motor Co., Ltd. v. FTC*, 657 F.2d 971, 977 (8th Cir. 1981); *Ekco Prods. Co. v. FTC*, 347 F.2d 745, 752–53 (7th Cir. 1965); *Tenneco, Inc.*, 98 F.T.C. 464, 626 (Clanton, concurring), *rev'd on other grounds*, 689 F.2d 346 (2d Cir. 1982); *contra, FTC v. Atlantic Richfield Co.*, 549 F.2d 289, 294–95 (4th Cir. 1977).

also planned construction of an additional plant in Europe even before the acquisition was completed. (F. 640).

Champion acquired Arman in February 1977 (F. 642), and by August was negotiating a new wiper plant in Belgium doubling its capacity (F. 643-44). Champion continued to plan entry into other wiper markets, including the U.S. (F. 645-653). Champion's interest in importing into this country wipers made at Latour or by Arman was halted by the acquisition of Anco. (F. 655).

Before the acquisition Champion was capable of importing wipers into the U.S. from its plants in Europe, and, in fact, was already doing so, on a small scale.<sup>17</sup> (F. 698, 699).

One of Champion's three top executives assumed in 1977 that a new plant could be built in the U.S. in three years. (F. 656). After building the Latour plant in Belgium in 18 months (F. 644, 673), Champion could have built a wiper plant in the U.S. even quicker. (F. 704).

Before acquiring Anco, Champion was a potential entrant into the relevant market.

### 3. Likelihood of Deconcentration and Procompetitive Effects

In 1978 Champion could have entered the U.S. wiper market with blades produced by Arman and at Latour. Champion had a universal short line of blades which covered much of the replacement market (F. 681, 685, 686), had a large unused capacity in Europe (F. 696), and was already selling a small amount of wipers for imported cars in the U.S. to one customer in Chicago and trying to sell more. (F. 698, 699). Champion's European wipers were especially suited for replacing wipers on foreign cars imported into the U.S. (F. 679, 681), which, by 1980, involved 34.9% of all new automobiles sold in the U.S. (F. 683). Furthermore, Champion projected that a plant in the [96] U.S. similar to the Latour plant would produce, for a \$12 million capital investment,<sup>18</sup> enough wipers to obtain about a 20% market share in five years. (CX 147A). With Champion's marketing experience in the U.S. replacement market (F. 665), the entry into the U.S. replacement market would, with reasonable probability, have produced further deconcentration and other procompetitive effects. *Yamaha v. FTC*, 657 F.2d 971, 979 (8th Cir. 1981).<sup>19</sup>

<sup>17</sup> Bosch has been importing wipers from Belgium into the U.S. market for several years. (F. 161, 183). The Latour plant, also in Belgium, also could have supplied the U.S. market.

<sup>18</sup> Champion could have paid cash for the plant in 1977. (Stranahan CX 3007Z-25; CX 978V).

<sup>19</sup> This finding requires no elaborate factual proof. *Heublein*, 96 F.T.C. 385, 588 n. 43 (1980).

#### 4. Market Performance

##### a. *Trend to Deconcentration*

The clearest indication that the concentration ratio here is an unreliable indicator of market behavior is that Anco and Trico, which together controlled 100% of the market in 1968, had their market share drop to 76.7% in 1975 and to 59.1% in 1980.<sup>20</sup> Further, in recent years, there have been seven new firms successfully making wipers in the United States as well as foreign wiper manufacturers selling here. During this period Anco's market share declined steadily. In 1975, Anco had a 45.1% market share; in 1980, Anco had 34.3%. (F. 183).

A trend toward deconcentration and a decline in the acquired firm's market share indicate a competitive market despite continuing relatively high concentration. *United States v. Siemens Corp.*, 621 F.2d 499, 506 (2d Cir. 1980); *United States v. First Nat'l State Bancorporation*, 499 F.Supp. 793, 804-05 (D.N.J. 1980); *United States v. Hughes Tool Co.*, 415 F.Supp. 637, 643 (C.D. Calif. 1976). [97]

##### b. *Ease of Entry*

Entry barriers are low.<sup>21</sup> There are no capital cost impediments to entry into the market. (F. 312-321). Costs of leaving the industry are low. (F. 320). Since the late 1960's, there have been no blocking patents preventing entry. (F. 322). Production equipment is available. (F. 334-349). Suppliers stand ready to provide raw materials and finished parts for the new firm which can choose to enter as a light assembler or a manufacturer of wipers. (F. 323-333). Economies of scale are achieved at a relatively low market share. (F. 415-421). There are no product differentiation or other distributional barriers. (F. 372-414).

##### c. *New Entrants*

Since 1968, seven firms have successfully entered the wiper replacement market. Complaint counsel argue, however, that the wiper companies who have entered the market in recent years cannot compete effectively with Anco and Trico. They say that mobility barriers to "traditional" distribution through WDs and oil companies prevent the new entrants from expanding their foothold in the market.

High expansion barriers can indeed prevent recent entrants from the further growth they need to be effective competitors.<sup>22</sup> Here, however, such barriers are minimal. [98]

<sup>20</sup> This contrasts with *Tenneco*, where the ratio remained stable since the late 1960's, 689 F.2d at 353.

<sup>21</sup> As are "mobility" barriers which might dissuade expanders from gaining market share.

<sup>22</sup> In *The Budd Co.*, 86 F.T.C. 518, 577-88 (1975), the Commission discounted the effect of 100 small firms in the markets because they were too small to extend favorable financing terms for large orders of trailers or to maintain branch outlets to service or re-sell large numbers of trade-in trailers. And, in *Beatrice Foods Co.*, Docket No. 9112, initial decision, November 21, 1980 (101 F.T.C. 733 (1983)) although there were no technological barriers to

For many years Anco emphasized wiper sales to the traditional market by having a full line (F. 191) and using sales "pull-through" marketing with heavy advertising and a relatively large factory sales force. (F. 386). However, Trico has also been highly successful in this market using a different style of marketing. (F. 372, 392). Other wiper manufacturers have started to penetrate this market without copying Anco's methods. (F. 377-380, 402). New entrants have started selling plastic blades and short, universal lines of wipers. Distributors like these short lines because of their lower prices and inventory costs. (F. 212, 405-413). Both Anco and Trico have moved to follow this innovation. (F. 249-253, 414).

Furthermore, department stores and chains of auto parts stores have increased sales of wipers rapidly in recent years (F. 193, 231, 232), and provide new entrants with a ready channel of distribution to compete effectively. (F. 214, 216). And wipers are now being sold through grocery, hardware and drug stores. (F. 234-36).

#### d. *Price Competition*

The wiper industry is now fairly competitive. (F. 263). The record is replete with evidence showing, about the time of the acquisition, price competition<sup>23</sup> and other procompetitive [99] effects in the sale of wipers. (F. 238-310). For example in April of 1977, Anco's marketing vice president recommended in an internal memo to its controller that prices should not be increased on refills. He described the condition of the market:

The market place continues to be an extremely volatile and competitive environment and our position as the leader in the traditional aftermarket or replacement field is being continually challenged by new competitors who are concentrating their efforts through Traditional, Private Label and Volume Retailer types of distribution. Their main thrust is to offer "universal" refills at suggested retail prices which are discounted to the consumer thru additional and questionable extra allowances. However, this is the world of reality! Our market is changing rapidly. Nefco, it is reported, are selling Jobbers at W/D prices and traditional Dealers at Jobber prices. Industry statistics prove that the number of service stations (the back bone of our business for many years) is declining and that the sale of wiper products is shifting to retailing Jobbers and Volume Retailers. Our competitors (Roberk, Pylon, Fram, Pylon [sic], Trico) have con-

of the raw material, orange juice concentrate (*Beatrice* findings 141-44) [101 F.T.C. at 758], a trend towards concentration (*Beatrice* findings 122, 123, 261) [101 F.T.C. at 756, 777], and the heavy advertising expenditures necessary to obtain consumer acceptance and shelf space on a national level (*Beatrice* initial decision, p. 63) [101 F.T.C. at 740] as well as other barriers to effective competition (*Beatrice* finding 267). [101 F.T.C. at 778]

<sup>23</sup> While price competition might also be deduced from a finding of substantial unused capacity, the evidence in this regard is conflicting and unreliable. (CSC Reply pp. 189-99).

Although some of the evidence on competition involved opinions and anecdotes of customers and competitors, it was credible, especially testimony from competitors antagonistic to Champion's acquisition of Anco, such as Messrs. Longman, Sullivan and Oshei, and corroborated objective evidence on that issue. *Independence Tube Corp. v. Copperweld Corp.*, 691 F.2d 310, 330-31 n. 38 (7th Cir. 1982).

centrated their efforts in these areas through innovations in packaging, displays, discounts and other allowances.

(RX 45).<sup>24</sup> [100]

e. *Profits*

A study of profits on sales for the years 1975–1980 shows that profit trends in the wiper business have been consistent with a competitive industry (F. 311). The low and declining profits of Anco and Trico are indicative of competitive, rather than oligopolistic practices. *United States v. Consolidated Foods Corp.*, 455 F.Supp. 108, 140 (E.D. Pa. 1978).

5. Expanders

Where there are low barriers to expansion, recent entrants with but a small market share may well be effective competitors. In *Fruehauf Trailer Co.*, 67 F.T.C. 878, 930 (1965), the Commission held that one of the acquired firms, which had a 2% market share, was held to be a healthy and strong competitor. In *Stanley Works v. FTC*, 469 F.2d 498, 506–07 (2d Cir. 1972), *cert. denied*, 412 U.S. 928 (1973), the acquired firm, with a 1% market share, was held to be a significant competitor. In *Heublein, Inc.*, 96 F.T.C. 385, 590 (1980), the Commission held that nine firms whose market shares ranged from .24% to 2.9%, were all potential expanders.

Tridon built new plants in 1978 and 1980 (F. 102, 104, 423–28), and now has a good share of the OE market. (F. 433–36). In the replacement market, Tridon sells to WDs and mass merchants and in 1980 took the Sears wiper business from Trico. (F. 440–42). Bosch, with \$6 billion in sales in the auto aftermarket, is a leading wiper firm in Europe (RX 79) and is preparing to expand its wiper sales in the United States with lower prices. (F. 156, 466–472). Pylon, Roberk, Ideal,<sup>25</sup> [101] Fram and Nefco all have the capability, interest and incentive to expand. These potential expanders insure that the deconcentration trend in wiper manufacturing will continue.<sup>26</sup> *Heublein, Inc.*, 96 F.T.C. 385, 590 (1980).

<sup>24</sup> The author of the document recommended that: "It is the unanimous opinion of our field force, supported by Regional and Executive Marketing Management that refills for Anco and Trico passenger car wiper blades should be excluded from a price increase at this time." (RX 45) (Emphasis added.) While this could be some evidence of "interdependent or parallel behavior," it may merely be unilateral recognition that the two market leaders tend to match each other's prices. In any event, there was no proof that Anco and Trico had the "capacity effectively to determine price and total output of goods or services" in 1977. *United States v. Marine Bancorporation*, 418 U.S. 602, 630 (1972).

<sup>25</sup> Although Ideal and Roberk are related companies, their management is independent. (Glassman 4904).

<sup>26</sup> The changing market with fewer consumer sales by professional installers like gas stations, and more sales by mass merchants, also will help the new entrants.

### 6. Potential Entrants

Where many firms are interested in and capable of entering or expanding a market, the elimination of one of them by acquisition will have no significant competitive effect. Their presence will prevent market leaders from colluding to raise prices or diminish product quality. *Heublein, Inc.*, 96 F.T.C. 385, 588-89 (1980); *Tenneco, Inc.*, 98 F.T.C. 604 (1981), *vacated on other grounds*, 689 F.2d 346 (2d Cir. 1982).

Here, with relatively low entry barriers,<sup>27</sup> the following firms have shown the interest and skill necessary to enter, and have been dissuaded only by the lack of profit opportunity:<sup>28</sup> Acushnet Company (F. 489-497); Echlin Manufacturing Company (F. 510-527); IC Industries (F. 528-538); IT&T (F. 539-545); Premier Rubber Company (F. 546-558); Purolator, Inc. (F. 559-567); Stewart-Warner Corporation (F. 572-582); Tenneco, Inc. (F. 583-595); and General Motors Corporation (F. 596-607).<sup>29</sup> [102]

### IV. CONCLUSION AND ORDER

In 1978, at the time of the acquisition of Anco, Champion was one of twelve potential entrants into the United States wiper market. In addition, there were six other companies already in the market ready to expand. In this context, the elimination of Champion as a potential entrant was not likely to substantially lessen competition. *Heublein, Inc.*, 96 F.T.C. 385, 591 (1980). Furthermore, although still concentrated, the market is competitive, with low entry barriers and a deconcentration trend. These factors prevent application of the actual potential competition theory. *United States v. Marine Bancorporation*, 418 U.S. 602, 630 (1974).

The complaint must therefore be dismissed.

### DISSENTING OPINION OF COMMISSIONER MICHAEL PERTSCHUK

The majority of the Commission today summarily affirms the Initial Decision in this case and dismisses charges against Champion Spark Plug Company. The majority fails to explain the reasons for its decision even though the Bureau Director conceded that the central

<sup>27</sup> Despite low entry barriers, potential entrants may be dissuaded by low profits. *FTC v. Great Lakes Chemical Corp.*, 528 F.Supp. 84, 94 (N.D. Ill. 1981).

<sup>28</sup> Less certainty of proof is required to establish a company as an expander or potential entrant that is required to show that Champion was a potential entrant. *Heublein*, 96 F.T.C. 385, 590 (1980).

<sup>29</sup> In 1979, Dana Corporation became a potential entrant (F. 498-509), and Stewart-Warner was no longer a potential entrant. (F. 582). Since Neiman Industries (Paul Journee) acquired Nefco in 1979, at the time of the acquisition Neiman was also a potential entrant. And, since Ideal did not enter the market until 1979, it should be treated as a potential entrant at the time of the acquisition.

question urged on appeal by complaint counsel was largely unaddressed by the ALJ in the Initial Decision.

In his Initial Decision, the ALJ concluded that there were high levels of concentration within the windshield wiper products industry and that Champion, had it not acquired Anco, would have entered the market *de novo* and significantly deconcentrated the market. Consequently, I do not discuss these issues below. However, the ALJ also found that Champion's acquisition did not violate the law because the market remained "reasonably competitive." The basis for the ALJ's conclusion stemmed primarily from the rapid change in the windshield wiper product market in the last fifteen years and his finding that there were numerous potential expanders and entrants. [2]

Complaint counsel do not dispute that there has been significant change in the market. Fifteen years ago, Anco and Trico, protected by patents, were the sole manufacturers of windshield wiper products which were retailed solely through auto repair shops, oil company service stations, and car dealers. In the late 1960's, when Anco's and Trico's patents expired, Roberk, a small auto parts manufacturer, developed a new universal windshield wiper replacement blade and refill that could easily be installed by consumers on most cars. Marketed directly to consumers through such "mass merchandisers" as K-Mart and Sears, Roberk and other manufacturers quickly achieved substantial market share.

Nevertheless, complaint counsel assert that the market is not competitive. The heart of complaint counsel's argument is that the market is actually divided into two distinct channels, with the more significant "traditional" channel dominated by Anco and Trico and protected from effective competition by entry and mobility barriers. While Roberk and others have been free to enter and *expand* the market by appealing to a new group of consumers, complaint counsel argue that they have been unable to break into the "traditional" channel. As a result, Anco's and Trico's prices have been insulated from effective competition. Complaint counsel argue that Champion was uniquely situated to enter the traditional channel and create effective competition. [3]

I would reverse the ALJ's decision because I find that complaint counsel have shown that such market segmentation exists and that there are significant mobility and entry barriers which have prevented would-be entrants and expanders from challenging the duopolistic structure of the significant "traditional" channel of the market. Given the high levels of concentration in this industry, and the evidence supporting the presumption of poor performance, including the lack of price competition within the traditional channel, complaint counsel have shown that Champion's acquisition of Anco deprived the

market of the independent entry of the potential entrant which was in fact most likely to enter and most likely to challenge Anco and Trico.

#### I. PERSISTENCE OF THE TRADITIONAL CHANNEL

It is clear that members of the industry themselves perceive the existence of a "traditional channel," involving sales to warehouse distributors ("WD"), oil companies, and OES firms, and a "mass market channel" involving sales either directly to retail outlets or indirectly to mass merchant feeders. (ID 138)<sup>1</sup> Further, firms deliberately develop marketing strategies which take into account the different demands of the two segments. Anco, Trico, Ideal, Fram, Bosch, and Nefco all compete primarily in the traditional market, making relatively few sales to mass merchants. (ID 97, 152, 163, 172) Roberk and Pylon compete [4] primarily in the mass merchant market, making relatively few sales to traditional distributors. (ID 119) Indeed, attempts to market the same product to both channels have largely failed. (ID 132-133 (Roberk); CPF 2-67 (Fram); CPF 2-75 (Tridon); ID 280-282 (Anco "Rainy Day")) As a result, it is not surprising that Roberk and Pylon together account for 69.6 percent of the sales of WWP in the mass merchant channel, while Anco and Trico continue to dominate the traditional channel, accounting for 87.1 percent of the sales in that channel. (CPF 5-7)

The "traditional" channel—distribution from the manufacturer, through the WD and jobber to the auto repair shop, oil company service station, auto dealership, or consumer—remains the dominant method of distribution of replacement windshield wipers and blades.<sup>2</sup> The evidence indicates that about 72% of replacement windshield wipers and blades, measured in unit sales, still move through the traditional channel.<sup>3</sup>

Perhaps the most telling evidence indicating that there are two separate channels is the evidence of price independence between the two channels. CX 2511 *in camera* shows that Anco and Trico were able to raise prices while Roberk and Pylon were [5] lowering theirs.<sup>4</sup> Thus

<sup>1</sup> Citations are made to Initial Decision Findings (ID); Complaint Counsel's Proposed Findings (CPF); Complaint Exhibit (CX); Respondent's Proposed Findings (RPF); and Complaint Counsel's Reply (C. Rep. to RPF); and Transcript (Tr.).

<sup>2</sup> The distinction between the traditional channel and the mass market channel does not depend on who does the installation, but rather on how the product is distributed through the channel.

<sup>3</sup> (CPF 5-7) The ALJ erred in finding that mass marketers accounted for 45% of the market (ID 233), since that figure was based only on a 1975 projection. (C. Rep. to RPF 408) Complaint counsel's figures, on the other hand, are based on a detailed analysis of actual 1978 sales. (CPF 5-7)

<sup>4</sup> Respondent does not deny that it increased its prices as those of Roberk and Pylon were falling. It argues, however, that CX 2511 *in camera* is misleading. (R. Ans. 17, n.43) However, much of respondent's argument simply goes to the issue that its prices were higher than those of Roberk and Pylon, which, by itself, may be explained by higher costs and higher quality. The only argument which it offers to explain the increasing spread between prices is that the price data for Anco includes the sales of lower-priced Rainy Day products up until 1978, when the line was dropped. The implication is that the apparent price increase is due solely to this factor.

(footnote cont'd)

the evidence shows that prices appear to be determined separately in the two different channels. As complaint counsel's expert economic witness, Dr. Winter, testified:

Price sensitivity is relevant [to the level of competition] when we are trying to assess the degree of connectedness between different segments of the market. If the customers are highly sensitive to price, as opposed to other considerations, then you expect them to move back and forth among sellers in such a way as to impose something like a single price discipline on the market as a whole, whereas if they are less sensitive to price and if they are concerned about other attributes of the product or conditions of purchase, then the market may tolerate substantial price differentials among its segments for extended periods of time. (Winter, Tr. 1779) [6]

Respondent is clearly correct that there is some overlap between the two channels and that there is some limited evidence of competition between the two channels. For example, Anco and Trico may be able to compete in the mass market channel, even though the mass market manufacturer has great difficulty competing in the traditional channel. (CAB 29) But the fact that the precise boundary lines may be blurred does not refute the strong evidence that there are in fact two distinct distribution channels within the overall market. The evidence is persuasive that competition within channels is greater than competition *between* channels.

Notwithstanding the evidence of separate channels, respondent argues that it is not insulated from competition from the new entrants. While not directly denying that it has raised prices while Roberk and Pylon prices have declined, respondent points to its declining market share, its eroding profits, and its inability to raise prices to cover increased costs—all evidence purporting to show that the overall market is reasonably competitive.

It is evident that Anco and Trico have both suffered losses of market share, and that Roberk and Pylon have gained market share. (ID 183) But there is little evidence to support the implication that Roberk and Pylon have captured sales that otherwise would have been made by Anco and Trico. Indeed, the preponderance of the evidence shows that Pylon and Roberk have gained sales primarily by developing part of the market which had largely been ignored by Anco and Trico. While unit sales have [7] increased as a result of the growth of the "mass market,"<sup>5</sup> both Anco and Trico have, on average, been able to main-

An examination of the record materials, however, clearly rebuts the implication that the inclusion of the Rainy Day sales data could explain the increase in the price spread. After subtracting the "mass merchandisers" dollar and unit sales listed in CX 1337P *in camera* from the gross dollar and unit sales listed in CX 3065 *in camera*, it is clear that excluding Rainy Day products has very little impact on the trend of Anco's average unit prices.

<sup>5</sup> The other new entrants—Fram, Bosch, Ideal, Tridon, and Nefco—have garnered a modest increase in market share (as measured in unit sales) from 6.8% to 11.1% from 1975 through 1980. (ID 183) Some of that increase can be ascribed to increased sales to the mass merchant channel, rather than diverted sales from Anco and Trico in the traditional channel. (ID 106 (Tridon); ID 152 (Fram))

tain at least their 1975 level of unit sales. Given the record evidence showing that Anco and Trico have largely been willing to cede the mass merchant portion of the market to other manufacturers, the loss of market share in the overall market, under the circumstances here, is not a convincing sign of competitiveness.<sup>6</sup>

Respondent also argues that, by pleading a single replacement windshield wiper and blade market, complaint counsel cannot now contend that there are, in effect, submarkets. But complaint counsel argue, correctly, that proving that there is an overall market for replacement windshield wipers and blades is not inconsistent with demonstrating that areas within that market are less susceptible to competition and that the loss of Champion as a potential entrant substantially lessened competition within [8] a segment of the overall market. Furthermore, respondent had ample notice of complaint counsel's theory.<sup>7</sup>

## II. MOBILITY BARRIERS AND BARRIERS TO ENTRY

The persistence of the two channels seems to stem largely from different demand characteristics. The mass market channel serves the demand for a lower-priced, universal replacement windshield wiper or blade that can be easily installed by "do-it-yourselfers." (CPF 3-38 to 3-45)

The ultimate consumer is the same in either channel. But in the traditional channel, the WD is in reality the primary customer of the traditional channel manufacturers. As Champion's President and Chairman of the Board observed: [9]

When you are talking about brand consciousness you have to get it back down to the marketing people, the distributors, the jobbers, the retailer, whoever it is. They are the ones in this case, that you are trying to sell a given brand to. Not the consumers. (Stranahan Dep. CX3007-Z-89)

<sup>6</sup> Respondent's argument that its profitability has suffered turns primarily on data showing a decline in return on sales ("ROS"). For a variety of reasons, ROS data is of limited use in determining the profitability of an industry, which is more appropriately measured by return on investment ("ROI"). While the evidence on ROI does not permit a conclusion that Anco's profits are supracompetitive, the available evidence is consistent with a practice of a noncompetitive industry. For example, even the ALJ's findings show that Anco's return on sales since 1976, has been above 1976 levels, with the exception of 1980, a year of industrywide slump.

<sup>7</sup> Paragraph 19 of the complaint charges that "[B]arriers to entry into and to effective competition in the manufacture and sale of windshield wiper products for the United States replacement market are high." (Emphasis added) In response to respondent's interrogatories, complaint counsel, eight months before the trial, explained:

A new entrant may fail to create effective competition if it continuously operates on a small scale or is limited to particular channels of the market so that its presence does not demonstrably affect the structure, conduct, or performance of the market.

Complaint Counsel's Answers to Respondent's First Set of Interrogatories, July 9, 1981, at 25. (Emphasis added) Complaint counsel also indicated in those answers that Pylon and Roberk were confined to "one segment of the market"—"the mass merchant channel." *Id.* at 22.

Whatever question there may have been in respondent's mind about the theory of complaint counsel's case, respondent admits that it was put on notice about the "two channel" theory by complaint counsel's pre-trial brief, filed on January 29, 1982. (Tr. 6532-6533)

The WD's demands differ to some extent from the usual retail consumer. The WD is more concerned with quality, full coverage, and assurances that the product will move through the distribution system. (CPF 3-49 to 3-97)

In turn, these demand differences can result in entry or mobility barriers. Entry barriers can be established when potential entrants are so disadvantaged that the expected rate of return on their entry investment is too low to justify entering, while incumbent firms continue to realize rates of return higher than normal. When the would-be entrant already has a toehold within some segment of the industry, the same disadvantages can be termed "mobility barriers," since they prevent the firm from expanding into other segments of the market.<sup>8</sup>

[10]

The preponderance of the evidence indicates that there are no major technological barriers to the production of low quality replacement windshield wipers and blades. The WD's demand for high-quality replacement windshield wipers and blades, however, creates technological mobility or entry barriers.

While the expertise needed to develop and produce high-quality replacement windshield wipers and blades may not involve the significant capital barriers typical of "high-technology" products, the evidence shows that extended testing and product development is indeed necessary to produce a high-quality product. Virtually all of the entrants have experienced significant difficulty in developing wipers and blades of sufficient quality and coverage to be attractive to the traditional channel. (ID 107-108; (Tridon); ID 132-133 (Roberk); ID 142-143 (Ideal); ID 153 (Fram); ID 180-181 (Gates)) Many of those manufacturers blame their quality problems for difficulties in attempting to sell to the traditional channel. *See, e.g.*, CPF 5-58 (Fram); CPF 5-79 (Tridon). While most of the manufacturers ultimately overcame most of those problems, they did so only after substantial investment of resources. [11]

The WD's demand for quality and marketing assistance throughout the distribution chain also lead to distributional barriers into the traditional channel. Incumbents who have demonstrated consistent high quality have a market advantage over newcomers who must demonstrate quality. As a result, brand name associated with high

<sup>8</sup> *See, e.g.*, Caves and Porter, *From Entry Barriers to Mobility Barriers: Conjectural Decision and Contrived Deference to New Competition*, 91 Q. J. of Econ. 241, 254 (May 1977).

In the FTC's Policy Statement on Horizontal mergers, we also noted:

Besides mere entry, effective competition might also depend upon a firm's achieving a certain scale of operation. Evidence of substantial expansion by firms already in an industry, especially non-dominant firms, may persuasively indicate that barriers to larger scale are not high. Conversely, evidence of frequent entry, but on a small scale, without significant expansion by fringe firms, may also suggest the existence of barriers to larger scale.

*Statement of Federal Trade Commission Concerning Horizontal Mergers* at 5. (June 14, 1982)

quality is an important factor in the traditional channel,<sup>9</sup> and the lack of a brand name may operate as a barrier. Perhaps more importantly, buyers in the traditional channel do not want to be stuck with unwanted merchandise. As a result, the traditional channel demands that the manufacturer promote the product and work with all levels of distribution to promote the sale of the products, a method known as "pull-through marketing." (CPF 3-88 to 3-97) Again, incumbents who have a proven track record in their ability to move their product through the entire chain have an advantage over new entrants. New entrants must either invest substantial amounts in advertising and product promotion, reduce prices, or offer significant marketing assistance through direct sales forces. These requirements are not insignificant. The two dominant firms, Trico and Anco, spent \$2 million and \$3 million respectively each year on product promotion. [12]

Finally, the traditional channel's requirements for marketing assistance and for a product line with wide coverage lead to substantial scale economy barriers in distribution. The best means of meeting the demand for pull-through marketing is the use of a direct factory sales force, rather than manufacturer's representatives. (CPF 4-87 to 4-102) Both Anco and Trico have traditionally employed direct sales forces. Direct sales forces, however, require a large sales volume, precluding firms with smaller volumes from using it. While firms not using direct sales forces have been able to penetrate the mass market, none have been able to garner more than a very small share of the traditional channel.

### III. HISTORICAL ATTEMPTS TO ENTER THE TRADITIONAL CHANNEL

The evidence that there are significant mobility and entry barriers to the traditional channel is strongly buttressed by the direct evidence of a variety of unsuccessful attempts to enter the traditional channel. Other than Pylon and Roberk, who have largely catered exclusively to the mass market channel, none of the other four existing replacement windshield wipers and blades manufacturers, despite years of effort, have succeeded in gaining more than 3% of the overall market.

The record also contains evidence of at least six other attempts to enter the market—some of which were targeted at the traditional segment—which ended in failure and exit from the market. (ID 182) [13]

The only fair conclusion that can be drawn from the historical record is that entry into the traditional channel has been extraor-

<sup>9</sup> Alternatively, manufacturers may seek OE supplier status as a means of establishing a quality reputation. While there are no distributional barriers to obtaining such status, there are clearly substantial costs in both obtaining OE status and in developing the technology needed to develop windshield wipers and blades of sufficient quality to meet OE specifications. For example, it took seven years of extensive product development before Tridon produced blades which could pass General Motor's specifications. (CPF 4-215)

dinarily difficult. While some firms have been able to maintain a small share of the traditional segment (Fram,<sup>10</sup> Tridon,<sup>11</sup> Bosch,<sup>12</sup> Nefco,<sup>13</sup> Ideal,<sup>14</sup>), none—with the [14] possible exception of Tridon—appear to be poised to compete directly with Anco and Trico to take additional market share. Despite years of promotion, Fram, Nefco and Bosch have been able to retain only a small and, in some instances, declining market share. While the evidence is necessarily less conclusive with respect to the newer entrants, Tridon and Ideal, Ideal's own limited marketing goals seem to preclude a major competitive challenge to the dominant producers.

#### IV. CONCLUSION

In assessing potential entrants and expanders, it is necessary to evaluate each firm's interest, incentive and capability to determine whether it is reasonably probable that the firm will enter the market and cause significant [15] deconcentration or other procompetitive effects. *Yamaha Motor Co. v. FTC*, 657 F.2d 971, 978 (8th Cir. 1981); *Heublein, Inc.*, 96 F.T.C. 385, 584 (1980).

Given the technological and distributional barriers to entry into the traditional channel, none of the present WWP manufacturers can

<sup>10</sup> Despite ten years of promotion, Fram has never been able to become more than a fringe manufacturer. Its initial attempts in 1972 to sell to the traditional market were supplemented in 1978 by efforts to sell to mass marketers in an attempt to increase moribund sales. But Fram has largely been unsuccessful in either channel, due primarily to continuous product quality problems.

<sup>11</sup> Tridon, a Canadian manufacturer of automotive products, including replacement windshield wipers and blades, attempted entry into the traditional channel in a joint venture with Gates Rubber Company in 1971. (ID 107) After experiencing major quality problems, Tridon withdrew from the field. After further extensive product improvement and development, Tridon sought to obtain OE approval beginning in 1977. (ID 108) After obtaining OE business of Ford, and some OE business of other manufacturers, Tridon began efforts to reenter the replacement market. By 1980 Tridon's sales were heading up, largely as a result of landing several large mass merchant accounts, including Sears (ID 183, 270, 441-442), but Tridon was continuing to lose money on its replacement windshield wipers and blades. (CPF 5-144, 5-147) While Tridon's management projected continuing increases in sales (ID 447), by the end of 1980 Tridon had still failed to capture any significant WD business.

<sup>12</sup> Robert Bosch GmbH is a German manufacturer and supplier of automotive parts throughout the world. (ID 156) In Europe, Bosch is an OE supplier for major European car manufacturers. Bosch's wiper line for the U.S. replacement market is largely limited to covering European imports for which Bosch was the OE supplier. (ID 162) Bosch has aimed its sales efforts primarily at OES services and WDs serving the import market. All the evidence shows that Bosch has aimed its efforts at selling wiper replacement for imports, which account for a relatively small percentage of total unit sales of replacement wipers and blades. While the record shows that Bosch has plans to increase coverage (ID 470), those plans primarily address increasing coverage of Japanese, as well as European, imports. (ID 471; CPF 5-21) Indeed, in 1977 Bosch decided not to expand into the U.S. domestic market, in part because it recognized that it lacked the means to distribute the product through the traditional channel and would only be able to garner a negligible market share. (CPF 5-17) By 1980, Bosch had only a 1.2 percent share of the overall market. (ID 183)

<sup>13</sup> Despite promotions of its replacement windshield wipers and blades to the traditional channel since 1973, Nefco has remained a manufacturer of minor significance, capturing only 3 percent of market share (in unit sales) in 1980. (ID 183) Nefco has lost money in every year but one. (CPF 5-73) While Nefco has had problems in producing a line with sufficiently broad coverage, its primary difficulty, in the eyes of Anco, lies in its lack of marketing assistance. (CPF 5-70)

<sup>14</sup> Recognizing the traditional channel's demand for higher quality, Roberk's parent company, Parker-Hannifin, attempted in 1979 to enter the traditional channel through a separate subsidiary, Ideal. (CPF 5-45) Even here, however, Ideal envisioned placing itself only as a "second line" to be carried by jobbers along with a "primary" Anco or Trico line, not a line that would replace an Anco or Trico account. (CPF 5-46) Even with these limited goals and a commitment to produce a high quality product, Ideal by the end of 1980 had secured less than 2% of the overall market. (ID 183)

reasonably be considered to have the incentive or capability to expand into the traditional channel.<sup>15</sup>

The ALJ found that there were twelve potential entrants, including Champion. The ALJ's principal error here is in his apparent conclusion that firms can be considered potential entrants if they manufacture or distribute some automotive product and have sufficiently large financial resources to purchase the requisite technology to enter the *overall* market. When each of the firms are examined on the attributes required to become a significant competitor in the *traditional* channel, however, it becomes clear that only Champion possesses the relevant capabilities, interest, and incentives. (CAB 72 to 78) [16]

Given the conclusion that the market is not, as the ALJ found, reasonably competitive, and the further finding that there are few, if any, other expanders or potential entrants as well suited as Champion to cause significant deconcentration, I conclude that Champion's acquisition of Anco effectively deprived the market of the benefit of Champion's *de novo* entry. Accordingly, I would find that Champion's acquisition of Anco violated Section 7 of the Clayton Act by substantially lessening competition in the replacement windshield wipers and blades market, and that divestiture should be ordered.

#### FINAL ORDER

This matter having been heard by the Commission upon the appeal of respondents and complaint counsel from the initial decision; and

The Commission having considered the oral arguments of counsel, their briefs, and the whole record;<sup>1</sup> and

The Commission having denied in full the appeals of respondent and complaint counsel; and

The Commission having determined that the initial decision and order contained therein shall become the decision and order of the Commission.

*Therefore, it is ordered, That the initial decision and the order*

<sup>15</sup> The only possible candidate in this group would be Tridon, who possesses a product with OE approval status, wide application, and efficient production capabilities. (ID 422-477) Nevertheless, Tridon's prior attempts to enter may have given its product a reputation of low quality, it still lacks the sales force necessary for pull-through marketing and it has failed to promote the product aggressively. (ID 107, 112, 440; CPF 5-146) While these negative features may well explain Tridon's failure to obtain significant WD business, the record does not permit as strong a conclusion about its lack of future potential as the other present manufacturers. Even if Tridon were a potential expander, however, that fact would not bar a finding that Champion's acquisition of Anco violated Section 7, since we need find only that the acquisition eliminated one of a "limited number" of other firms reasonably likely to enter or expand in the relevant market. *Heublein, supra*, at 588.

<sup>1</sup> By this action the Commission also denies Respondent's Motion to Strike four tables and references thereto from Complaint Counsel's Reply Brief.

contained therein shall become the decision and the order of the Commission on the date of issuance of this order.

Commissioner Pertschuk voted in the negative.

IN THE MATTER OF  
GENERAL MOTORS CORPORATION

DISMISSAL ORDER, ETC., IN REGARD TO ALLEGED VIOLATIONS OF  
SECTION 2(d) OF THE CLAYTON ACT AND SECTION 5 OF THE FEDERAL  
TRADE COMMISSION ACT

*Docket 9114. Complaint, July 19, 1978—Final Order, June 21, 1984*

This order dismisses the Commission's complaint charging a Detroit, Mich. motor vehicle manufacturer with allegedly violating the Robinson-Patman Act and Section 5 of the Federal Trade Commission Act by failing to make promotional allowances available on proportionally equal terms to all competing rental and leasing firms. In its opinion, the Commission noted that "in light of the Commission's public interest mandate" the Commission and the courts must be careful "not to expand the ambit of legislation beyond that set forth by Congress" and the Commission will therefore "eschew efforts to broaden application of the Robinson-Patman Act beyond that established by law."

*Appearances*

For the Commission: *Renee S. Henning.*

For the respondent: *Frederick Rowe, Kirkland & Ellis*, Washington, D.C.,

COMPLAINT

The Federal Trade Commission, having reason to believe that respondent, General Motors Corporation [hereinafter referred to as GM], has violated and is now violating the provisions of Section 2(d) of the Clayton Act, as amended (15 U.S.C. 13), and of Section 5 of the Federal Trade Commission Act, as amended (15 U.S.C. 45), and that a proceeding by it in respect thereof is in the public interest, hereby issues its complaint charging as follows:

PARAGRAPH 1. GM is a corporation organized, existing and doing business under the laws of the State of Delaware, with its principal office and place of business located at 3044 West Grand Boulevard, Detroit, Michigan.

PAR. 2. GM is the largest manufacturer of automobiles in the United States. In 1977, GM sold approximately 6.6 million automobiles, trucks and coaches in the United States. During 1977, GM's net sales exceeded \$54,961,000,000. GM's net income during 1977 exceeded \$3,337,000,000.

PAR. 3. In the course and conduct of its business, GM has been and