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12 UNITED STATES DISTRICT COURT
13 FOR THE DISTRICT OF ARIZONA

14 _____)
15 UNITED STATES OF AMERICA,)

16 Plaintiff,)

17 v.)

18 PILKINGTON plc)
and)

19 PILKINGTON HOLDINGS INC.,)

20 Defendants.)
_____)

Civil Action No. 94-345

Filed: 5/25/94

21
22 COMPLAINT

23 The United States of America, acting under the direction
24 of the Attorney General of the United States, brings this
25 civil action to obtain equitable and other relief against the
26 Defendants named herein, and complains and alleges as follows:

I.

JURISDICTION, VENUE, AND DEFENDANTS

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2
3 1. This Complaint is filed under Section 4 of the
4 Sherman Act (15 U.S.C. § 4) to prevent and restrain
5 violations of Sections 1 and 2 of the Sherman Act (15 U.S.C.
6 §§ 1 and 2). These violations result from conduct that,
7 insofar as it involves trade or commerce with foreign
8 nations, is within the purview of Sections 1 and 2 of the
9 Sherman Act pursuant to the Foreign Trade Antitrust
10 Improvements Act of 1982 (15 U.S.C. § 6a).

11 2. Defendant Pilkington plc ("Pilkington") is an
12 English corporation with its principal place of business in
13 St. Helen's, Merseyside, England. Pilkington is the world's
14 largest float glass producer. Pilkington may be found or
15 transacts business in the District of Arizona. Venue as to
16 Pilkington is proper under 15 U.S.C. § 22 and 28 U.S.C.
17 § 1391(d).

18 3. Defendant Pilkington Holdings Inc. ("Holdings") is
19 a Delaware corporation with its principal place of business
20 in Toledo, Ohio. Holdings is the wholly-owned subsidiary of
21 Pilkington Overseas Holdings Ltd., an English corporation
22 that is itself a wholly-owned subsidiary of a wholly-owned
23 subsidiary of Defendant Pilkington. Holdings holds
24 Pilkington's United States-based assets, including 80 percent
25 of the outstanding shares of voting capital stock, and
26

1 thereby full control, of Libbey-Owens-Ford Co. ("LOF"), a
2 Delaware corporation headquartered in Toledo, Ohio. LOF is
3 the second-largest producer of float glass in the United
4 States. The remaining outstanding shares of LOF are owned by
5 Nippon Sheet Glass Co., Ltd. of Tokyo, another of the world's
6 major float glass producers. Holdings may be found or
7 transacts business in the District of Arizona. Venue as to
8 Holdings is proper under 15 U.S.C. § 22.

9
10 II.

11 TRADE AND COMMERCE

12 4. The Defendants and their subsidiaries receive large
13 amounts of money in the form of payments for float glass and
14 float glass technology that flow across state lines and
15 national borders. The Defendants' business activities and
16 operations involve or affect the interstate and international
17 flow of funds, and are within the flow of, and have a
18 substantial effect upon, interstate and foreign commerce.

19
20 III.

21 BACKGROUND

22 A. Flat Glass

23 5. Flat glass is glass formed in a flat shape, such as
24 for cutting into window panes, and glass formed flat and then
25 bent or curved, such as for fabrication into automobile
26

1 windshields. Float glass is flat glass made by a float
2 process as described below. Almost all of the flat glass
3 currently made and sold throughout the world is float glass.
4

5 B. Float Glass Processes

6 6. Float glass processes involve placing molten glass
7 on the surface of a pool of molten tin or other metal. The
8 molten glass forms a flat layer that floats on this surface
9 of molten metal, as oil floats on the surface of a pool of
10 water. This flat layer of floating glass is allowed to cool
11 until it is sufficiently rigid to retain its flat shape, and
12 is then removed from the surface. In a float glass plant,
13 the float glass process proceeds uninterruptedly: a stream
14 of molten glass is delivered continuously to one end of the
15 molten metal surface, forming an endless, cooling ribbon of
16 glass that is continuously removed from the opposite end of
17 the surface when sufficiently cooled. The ribbon of glass is
18 then subjected to further processing, including annealing,
19 inspection, and cutting to desired dimensions.

20 7. The first float glass process patent was issued in
21 1902 to an American unaffiliated with Pilkington. Over 50
22 years later, Pilkington applied for and obtained over 1,000
23 patents in various jurisdictions, including over 100 United
24 States patents, on float glass process improvements.
25 Pilkington's float glass process is sometimes called the "PB
26 Process."

1 8. Pilkington began the first successful commercial
2 production of float glass in 1962. Since then, others have
3 developed their own float glass processes, which have been
4 shown to be technologically and commercially viable.

5 9. Commercial float glass manufacture requires
6 relatively large-scale, single-purpose plants that are not
7 efficiently convertible to other use, nor are other
8 manufacturing facilities efficiently convertible to float
9 glass production. Float glass plants are operated
10 continuously for periods of 8 to 12 years or more before
11 requiring "cold shut-down" for extensive rebuilding and
12 repair. The cost of designing and constructing a
13 typically-sized float glass plant is between \$100 and \$150
14 million.

15
16 C. Float Glass Production

17 10. The largest demand for float glass is for
18 fabrication into windows for dwellings and commercial
19 structures, automobile glass products (e.g., car and truck
20 windshields and windows), architectural products (e.g.,
21 siding panels for office towers and glass doors), and
22 mirrors. The demand for float glass depends largely on such
23 factors as the volume of housing starts, commercial
24 construction, automobile production, and catastrophic storm
25 damage. As with other homogeneous, fungible commodities, the
26

1 key factors in marketing float glass are price and quality;
2 brand names and trademark recognition are relatively
3 unimportant to purchasers.

4 11. In 1991, United States' float glass producers
5 shipped approximately \$2.9 billion of float glass, with the
6 four largest United States producers accounting for about 85
7 percent of this total.

8 12. Float glass shipments worldwide in 1991 were
9 approximately \$15 billion, with the four largest producers
10 accounting for about two-thirds, and the nine largest
11 producers accounting for over 95 percent, of total world
12 shipments. Worldwide float glass demand is increasing,
13 largely in the developing economies of Asia, Africa, and
14 eastern Europe.

15
16 D. Float Glass Process Technology Market

17 13. From 1984 to 1991, 55 new float glass plants were
18 designed, built, and placed in service throughout the world.
19 Of these plants, nine were built in North America, including
20 seven in the United States. The construction worldwide of
21 approximately 30 to 50 additional float glass plants is
22 planned or projected for completion between now and the end
23 of the century. Many are planned for locations, such as in
24 Asian and eastern European countries, where the sponsoring
25 entities are likely to award contracts to outside bidders for
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1 plant design, construction, and construction supervision
2 services. Such services include the specifying, ordering,
3 and procuring of equipment and supplies for use in such
4 plants.

5 14. Persons in the United States and elsewhere can
6 compete, if not restrained, for the award of these float
7 glass design and construction contracts. Among the persons
8 engaging in such competition are firms that currently
9 manufacture float glass, as well as others. Such contracts
10 may be on a pure fee-for-service basis, or may provide the
11 contractor an equity position in the plant to be built, or
12 may provide other consideration for the contractor.

13 15. The relevant service market is the provision of
14 float glass plant design, construction, and construction
15 supervision services.

16 16. The relevant geographic market for these services
17 is worldwide.

18 17. Competition to design and construct float glass
19 plants, if not restrained, creates or increases demand for
20 innovations in float glass-making technology. Such
21 innovations tend to reduce the manufacturing cost and improve
22 the quality of float glass.

23 18. Persons in the United States who successfully
24 compete for contracts to design and construct float glass
25 plants to be built outside the United States are engaged in
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1 United States export trade or commerce with foreign nations
2 for such services. Such export trade or commerce generates
3 substantial domestic economic activity, providing numerous
4 opportunities for employment of individuals and firms highly
5 skilled in contributing to the creation of the designs,
6 drawings, specifications, and other work product required to
7 perform the exported services. Moreover, persons in the
8 United States who design and construct float glass plants
9 abroad are likely to specify domestic fabricators' and
10 suppliers' products for use in these plants, thereby creating
11 substantial additional opportunities for domestic economic
12 activity. The design and construction of a typically-sized
13 float glass plant abroad requires an investment of about \$100
14 million. When a United States firm provides those services,
15 approximately \$35 to \$50 million of that total eventually
16 flows into the United States economy in orders for domestic
17 materials, equipment, and services.

18
19 E. Pilkington Licenses

20 19. Beginning in 1962, Pilkington entered into patent
21 and know-how license agreements with all of its principal
22 competitors. Although these agreements differed as to
23 details, they generally provided for: (1) allocation and
24 division of territories, restricting each licensee to a
25 specified country or group of countries for the construction
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1 and operation of float glass plants generally corresponding
2 to the territory in which the respective licensee previously
3 manufactured flat glass ("territorial restrictions");
4 (2) limitation on the use of Pilkington's float glass
5 technology strictly to the manufacture of float glass ("use
6 restrictions"); (3) restrictions on sublicensing of
7 Pilkington's float glass technology; and (4) the reporting
8 and grant-back of all improvements in float glass technology.

9 20. Pilkington's territorial and use restrictions
10 discouraged competitor licensees from developing and using
11 their own innovations in float glass technology. The
12 territorial restrictions discouraged the development of
13 competing technology by geographically limiting the
14 opportunities for economic exploitation of innovations. The
15 use restrictions had a similar effect since, according to
16 Pilkington, the use of its technology to develop a new or
17 broader range of float glass technology was a violation of
18 the licensing agreement. The consequent reduction in
19 innovation in float glass technology deprived consumers of
20 the benefits of more efficient production techniques and
21 higher quality glass.

22 21. Similarly, the reporting and grant-back provisions
23 in the Pilkington license agreements disadvantaged
24 competitors in creating and competitively marketing float
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1 glass technology that could be used free of Pilkington's
2 licensing restrictions by eliminating or reducing economic
3 incentives to innovate.

4 22. In many of its licensing contracts, Pilkington also
5 imposed restrictions on the export of float glass from the
6 allocated territories. Thus, Pilkington imposed restrictions
7 on export of glass made in the United States by certain
8 licensees, and export of glass made abroad to the United
9 States.

10 23. By the end of 1982, Pilkington's principal United
11 States patents, the specified duration of Pilkington's
12 contracts with United States licensees, and the obligation of
13 royalty payments under those contracts expired.
14 Nevertheless, Pilkington continued to enforce the
15 territorial, use, and sublicense restrictions in those
16 contracts, until a licensed competitor could prove that all
17 of Pilkington's float glass technology had become public
18 knowledge.

19 24. Pilkington's maintenance and continued enforcement
20 of the license restraints described above was not justified
21 by any intellectual property rights of substantial value.
22 Pilkington's core float glass technology was disclosed in
23 numerous patents that have long expired, placing that
24 technology in the public domain. Moreover, unpatented
25 Pilkington float glass technology has been publicly disclosed
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1 in substantial part. The remaining secret unpatented
2 technology consisted largely of engineering solutions with no
3 substantial value over other, equally efficacious engineering
4 alternatives.

5 25. Pilkington's license agreements provided a
6 framework for a worldwide cartel, created and controlled by
7 Pilkington, for float glass technology and the design and
8 construction of float glass plants. The agreements enabled
9 Pilkington to exercise control over float glass markets as
10 well as over the design and construction of new float glass
11 facilities and to control the extent to which float process
12 innovations were permitted to be commercially exploited.

13
14 IV.

15 FIRST CAUSE OF ACTION

16 (Contracts In Restraint Of Trade)

17 26. Beginning at least as early as 1982, and continuing
18 until the date of this Complaint, the Defendants, without
19 sufficiently valuable intellectual property rights,
20 maintained and enforced licensing contracts and other
21 agreements to restrict the construction and operation of
22 float glass plants and float glass process technology in
23 unreasonable restraint of interstate and foreign trade and
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1 commerce in violation of Section 1 of the Sherman Act. This
2 violation is likely to continue unless the relief asked for
3 is granted.

4 27. For the purpose of forming and effectuating these
5 contracts and agreements, the Defendants did the following
6 things, among others:

7 (a) allocated and divided territories for, and
8 limited the use of, float glass technology worldwide;

9 (b) interpreted and enforced the territorial and
10 use restrictions so that their combined effect prevented
11 competitors from using or developing competing float
12 glass technology;

13 (c) required competitors to prove that all of the
14 licensed technology had become publicly known before
15 being relieved of the territorial and use restrictions;

16 (d) imposed and enforced restrictions on
17 competitors' ability to sublicense float glass
18 technology;

19 (e) imposed and enforced reporting and grant-back
20 provisions in the license agreements;

21 (f) imposed and enforced restrictions on exports
22 of glass by licensees from and to the United States; and

23 (g) continued enforcement of the territorial, use,
24 and sublicense restrictions indefinitely, even after no
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1 further licensing royalties were payable and the patents
2 had expired.

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4 V.

5 SECOND CAUSE OF ACTION

6 (Monopolization)

7 28. The allegations of ¶¶ 26-27 of this Complaint are
8 re-alleged and incorporated by reference.

9 29. By entering into licensing contracts with its
10 competitors and continuing to enforce the restrictions
11 imposed in those contracts and by the other predatory and
12 exclusionary conduct described herein, Pilkington willfully
13 acquired, and willfully maintained, a monopoly in the world
14 market for the design and construction of float glass plants
15 in violation of Section 2 of the Sherman Act, 15 U.S.C. § 2,
16 with adverse effects that satisfy the requirements of the
17 Foreign Trade Antitrust Improvements Act of 1982, 15 U.S.C.
18 § 6a. This violation is likely to continue unless the relief
19 asked for is granted.

20 30. Over 90 percent of the float glass produced in the
21 United States and throughout the world is manufactured
22 subject to restraints imposed by Pilkington through its
23 licensing contracts with competitors. These restrictive
24 contracts have enabled Pilkington to monopolize the worldwide
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1 market for the design and construction of float glass plants,
2 and to exercise control over float glass technology and the
3 extent to which float glass innovations are permitted to be
4 commercially exploited.

5
6 VI.

7 EFFECTS

8 31. These violations had the following direct,
9 substantial, and reasonably foreseeable effects, among
10 others, which satisfy the requirements of the Foreign Trade
11 Antitrust Improvements Act of 1982, 15 U.S.C. § 6a:

12 (a) restraint and reduction of competition in the
13 United States' export business for the design and
14 construction of float glass plants outside the United
15 States;

16 (b) restraint and reduction of competition in the
17 United States' export business for the design,
18 fabrication, furnishing, shipping, and packaging of
19 related equipment and supplies for float glass plants
20 constructed or renovated outside the United States;

21 (c) restraint and reduction of the export of glass
22 to and from the United States; and

23 (d) depriving United States' businesses and
24 consumers of the benefits of free and open competition.
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1 VII.

2 RELIEF

3 WHEREFORE, Plaintiff prays that this Court enter final
4 judgment against the Defendants declaring, ordering, and
5 enjoining them, and all persons acting in concert with them,
6 as follows:

7 1. That the provisions in Pilkington's contracts and
8 agreements with float glass manufacturers that specify the
9 territorial limits where a manufacturer may manufacture and
10 sell float glass and the provisions that limit the use of
11 information originally supplied by Defendants for further
12 innovation in float glass technology be declared and adjudged
13 to be in violation of Sections 1 and 2 of the Sherman Act, 15
14 U.S.C. §§ 1 and 2, and no longer enforceable.

15 2. That Pilkington, and all others acting in concert
16 with Pilkington, be permanently enjoined from enforcing said
17 provisions and from interfering with the efforts of any
18 person in this country to perform or offer to perform
19 services connected with the design or construction of float
20 glass plants anywhere in the world, and from interfering with
21 the design, construction, or operation of any such plant or
22 the sale or shipment of glass from those plants.

1 3. That Pilkington, and all others acting in concert
2 with Pilkington, be permanently enjoined from enforcing said
3 provisions and from interfering with the efforts of any
4 person anywhere in the world to perform or offer to perform
5 services connected with the design or construction of float
6 glass plants in the Unites States, and from interfering with
7 the design, construction, or operation of any such plant or
8 the sale or shipment of glass from those plants.

9 4. That Pilkington, and all others acting in concert
10 with Pilkington, be permanently enjoined from interfering
11 with the efforts of any person, including any contracting
12 manufacturers' former employee, who has never been or who no
13 longer is under any lawful obligation to maintain secrecy, to
14 offer services in connection with the design or construction
15 of float glass plants, whether by representing that such
16 services would violate intellectual property rights or
17 otherwise.

18 5. That Pilkington, and all others acting in concert
19 with Pilkington, be enjoined from monopolizing or attempting
20 to monopolize the market for the design and construction of
21 float glass plants.

22 6. That Plaintiff have such other relief as may be
23 just and proper.
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26

7. That Plaintiff be awarded its costs in this action.

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