3.5" MICRODISKS AND MEDIA THEREFOR FROM JAPAN

Determination of the Commission in Investigation No. 731-TA-389 (Final) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigation

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C O N T E N T S

	Page
Determination	1
Views of the Commission	3
Dissenting views of Commissioner Ronald A. Cass	37
Information obtained in the investigation:	
Introduction	A-1
Background	A-1
The nature and extent of sales at less than fair value:	
Sales at LTFV	A-2
The product:	
Description and uses:	
Product description	A-2
History of the 3.5" microdisk	A-3
Physical and magnetic characteristics	A-3
Interchangeability	A-6
Future generations	A-7
Manufacturing considerations:	
Manufacturing process	A-8
Machinery and equipment	A-10
U.S. tariff treatment	A-11
The U.S. industry:	
U.S. producers	A-11
U.S. importers	A-15
The Domestic market:	
Apparent U.S. consumption	A-17
Channels of distribution	A-17
Market factors	A-22
Production yields	A-28
Consideration of material injury to an industry in the United States	A-29
U.S. production, capacity, and capacity utilization	A-30
U.S. producers' shipments	A-30
U.S. producers' inventories	A-33
U.S. producers' domestic purchases and imports	A-35
Employment and productivity	A-36
Financial experience of U.S. producers	A-38
Overall establishment operations	A-38
Operations on 3.5" microdisks and/or media	A-38
Verbatim	A-41
Investment in productive facilities	A-43
Capital expenditures	A-44
Research and development expenses	A-44
Capital and investment	A-45
The question of threat of material injury to an industry in the United States	A-46
World demand	A-47
Background	A-49
The industry in Japan	A-49
Third-country production	A-56
U.S. inventories of 3.5" microdisks from Japan	A-56

CONTENTS

Page

Information obtained in the investigation--continued
Consideration of the causal relationship between
LTFV imports and the alleged material injury:
U.S.Imports---------- A-57
Market penetration of imports---------- A-58
Prices---------- A-64
Exchange rates---------- A-79
Lost sales---------- A-79
Lost revenues---------- A-85

Appendices
A. Copies of the Commission's notices---------- A-87
B. Copies of Commerce's notices---------- A-91
C. Impact of imports on R & D----------A-105
D. Incentive programs for 3.5" microdisks----------A-107
E. OEM ratings of supplier product quality----------A-111
F. Supplemental Pricing tables----------A-113

Figures

1. Microdisk assembly drawing---------- A-4
2. Total United States market, 1987-88---------- A-24
3. 3.5" finished microdisks: Apparent U.S. consumption, 1985-88----- A-63

Tables

1. 3.5" microdisks and media therefor: U.S. producers' operations and their shares of U.S. production, January-September 1988---------- A-13
2. 3.5" finished microdisks and media therefor: U.S.-producers' shares of production by position on the petition, 1985-87, January-September 1987-88---------- A-15
3. 3.5" microdisks and media therefor: U.S. importers and their shares of imports from Japan, January-September 1987-88---------- A-16
4. 3.5" finished microdisks and media therefor: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87, January-September 1987-88---------- A-18
5. 3.5" microdisks: U.S.-produced domestic shipments and U.S. shipments of imports as a share of total U.S. shipments, by channels of distribution, 1985-87, January-September 1987-88---------- A-20
6. 3.5" finished microdisks: Unfilled orders of U.S producers and importers, 1986-88---------- A-25
7. 3.5" microdisks: Production yields and clipping levels of U.S. and Japanese products, 1985-87, January-September 1987-88---------- A-29
8. 3.5" microdisks and media therefor: U.S. production, capacity, and capacity utilization, 1985-87, January-September 1987-88---------- A-31

CONTENTS

Tables--continued

		Page
9.	3.5" finished microdisks: U.S. production and shares of total, by sources of media, 1985-87, January-September 1987-88	A-30
10.	3.5" finished microdisks and media therefor: U.S.-produced domestic shipments, 1985-87, January-September 1987-88	A-38
11.	3.5" finished microdisks and media therefor: U.S.-produced domestic shipments, export shipments, and total shipments, 1985-87, January-September 1987-88	A-33
12.	3.5" finished microdisks: U.S.-produced domestic shipments and U.S. shipments of imports, unit value and as a share of total U.S. shipments, by type of product, 1985-87, January-September 1987-88	A-34
13.	3.5" finished microdisks and media therefor: U.S.-producers' end-of-period inventories, and shares of production or total shipments 1985-87, and January-September 1987-88	A-33
14.	3.5" finished microdisks and media therefor: U.S.-producers' imports and purchases of imports from Japan, and ratio of imports to total production or shipments, 1985-87, January-September 1987-88	A-35
15.	Average number of employees in U.S. establishments producing 3.5" microdisks and media therefor, hours worked, wages and total compensation paid, and productivity, 1985-87, January-September 1987-88	A-37
16.	Income-and-loss experience of U.S. producers on the overall operations of their establishments within which microdisks and media therefor are produced, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988	A-39
17.	Income-and-loss experience of U.S. producers on their operations producing 3.5" media and/or finished microdisks, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988	A-41
18.	Income-and-loss experience of U.S. producers on their operations producing 3.5" media and/or finished microdisks, by products, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988	A-41
19.	Income-and-loss experience of U.S. producers on their operations producing 3.5" media and/or finished microdisks, by producers, accounting years 1985-87, and interim periods ended September 30, 1987, and September 30, 1988	A-41
20.	Income-and-loss experience of U.S. producers,(* * *) on their operations producing 3.5" media and/or finished microdisks, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988	A-41

CONTENTS

Tables--continued

		Page
21.	Income-and-loss experience of Verbatim on the overall operations of its establishments within which microdisks and media therefor are produced, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988	A-21
22.	Income-and-loss experience of Verbatim on its operations producing 3.5" microdisks and media therefor, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988	A-22
23.	Income-and-loss experience of Verbatim on its U.S. operations producing 3.5" media and microdisks and its offshore operations producing microdisks incorporating U.S.-made media, accounting years 1985-87 and interim periods ended Sept. 30, 1987 and Sept. 20, 1988	A-22
24.	3.5" microdisks and media therefor: Value of property, plant, and equipment of U.S. producers, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988	A-44
25.	Floppy disks: Worldwide shipments by product, and shipments of 3.5" product by region, 1986-87, and projections for 1988-92	A-48
26.	3.5" finished microdisks: Japanese producers total shipments, 1986-87	A-50
27.	3.5" media and finished microdisks: Japan's production, capacity, capacity utilization, and inventories, 1985-87, January-September 1987-88	A-52
28.	3.5" media and finished microdisks: Japan's home market sales, exports to the United States, and exports to third countries, 1987-88, January-September 1987-88	A-53
29.	3.5" finished microdisks: End-of-period inventories of imports held in the United States, reported imports, and ratios of end-of-period inventories to reported imports, 1985-87, January-September 1987-88	A-57
30.	3.5" media: U.S. imports from Japan and all other countries, 1985-87, January-September 1987-88	A-58
31.	3.5" finished microdisks: U.S. imports from Japan, Canada, Mexico, and all other countries, 1985-87, January-September 1987-88	A-59
32.	3.5" media: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87, January-September 1987-88	A-58
33.	3.5" finished microdisks: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87, January-September 1987-88	A-61
34.	3.5" media: Weighted-average net unit values of DD media sold to unrelated purchasers and margins of under/(over) selling, by U.S. producers and importers of Japanese media, by quarters, January 1986-September 1988	A-68

CONTENTS

Tables--continued

		Page
35.	Finished 3.5" DS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988	A-70
36.	Finished 3.5" DS DD microdisks: Unit values of microdisks sold to unrelated mass merchandisers by the top 7 suppliers of microdisks to mass merchandisers, by suppliers and by months, January 1986-September 1988	A-71
37.	Finished 3.5" DS DD microdisks: Unit values of microdisks sold to unrelated OEMs by the top 9 suppliers of microdisks to OEMs, by suppliers and by months, January 1987-September 1988	A-71
38.	Finished 3.5" HD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 suppliers of microdisks, by suppliers and by months, January 1987-September 1988	A-71
39.	Finished 3.5" DS DD microdisks: Unit values adjusted for the value of incentives of branded products sold to unrelated distributors by the top 8 suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988	A-72
40.	Finished 3.5" HD microdisks: Unit values adjusted for the value of incentives of branded products sold to unrelated distributors by the top 8 suppliers of microdisks, by suppliers and by months, January 1987-September 1988	A-73
41.	Finished 3.5" DS DD microdisks: Unit values adjusted for the value of incentives of microdisks sold to unrelated mass merchandisers by the top 7 suppliers of microdisks to mass merchandisers, by suppliers and by months, January 1986-September 1988	A-73
42.	Finished 3.5" DS DD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988	A-74
43.	Finished 3.5" HD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988	A-75
44.	Finished 3.5" HD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988	A-76
45.	Finished 3.5" microdisks: Average margins of underselling (overselling) by the subject imports from Japan, by months, January 1986-September 1988	A-77
46.	U.S.-Japanese exchange rates: Nominal exchange rates of the Japanese yen in U.S. dollars, real exchange rate equivalents, and producer price indicators in the United States and Japan, indexed by quarters, January 1985-September 1988	A-80

CONTENTS

Tables--continued

		Page
F-1.	3.5" double-density media: Total reported quantity sold of U.S.-produced and imported Japanese product, by quarters, January 1986-September 1988	A-114
F-2.	Finished 3.5" SS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988	A-114
F-3.	Finished 3.5" DS DD microdisks: Unit values of unbranded products sold to unrelated distributors by the top 7 U.S. suppliers of microdisks, by suppliers and by months, January 1986-September 1988	A-114
F-4.	Finished 3.5" DS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988	A-114
F-5.	Finished 3.5" SS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988	A-114
F-6.	Finished 3.5" DS DD microdisks: Sale quantities of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988	A-114
F-7.	Finished 3.5" DS DD microdisks: Sale quantities of microdisks sold to unrelated mass merchandisers by the top 7 U.S. suppliers of microdisks to mass merchandisers, by suppliers and by months, January 1986-September 1988	A-115
F-8.	Finished 3.5" DS DD microdisks: Sale quantities of microdisks sold to unrelated OEMs by the top 9 U.S. suppliers of microdisks to OEMs, by suppliers and by months, January 1987-September 1988	A-115
F-9.	Finished 3.5" HD microdisks: Sale quantities of branded products sold to unrelated distributors by the top 8 U.S. suppliers of microdisks, by suppliers and by months, January 1987-September 1988	A-115
F-10.	Finished 3.5" SS DD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988	A-116
F-11.	Finished 3.5" DS DD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988	A-117

CONTENTS

Tables--continued

Page

F-12. Finished 3.5" SS DD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by months, January 1986-September 1988---------- A-118
F-13. Finished 3.5" DS DD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by months, January 1986-September 1988---------- A-119
F-14. Finished 3.5" HD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by months, January 1987-September 1988---------- A-120

Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report. Such deletions are indicated by asterisks.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-389 (Final)

3.5 INCH MICRODISKS AND MEDIA THEREFOR FROM JAPAN

Determination

On the basis of the record 1/ developed in the subject investigation, the Commission determines, 2/ pursuant to section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) (the act), that an industry in the United States is materially injured by reason of imports from Japan of 3.5 inch microdisks and media therefor, provided for in subheading 8523.20.00 of the Harmonized Tariff Schedule of the United States (previously reported under item 724.4570 of the Tariff Schedules of the United States), that have been found by the Department of Commerce to be sold in the United States at less than fair value (LTFV). 3/

Background

The Commission instituted this investigation effective September 29, 1988, following a preliminary determination by the Department of Commerce that imports of 3.5 inch microdisks and media therefor from Japan were being sold at LTFV within the meaning of section 731 of the act (19 U.S.C. § 1673). Notice of the institution of the Commission's investigation and of a public hearing to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of October 19, 1988, (53 F.R. 38045). The hearing was held in Washington, DC, on February 9, 1989, and all persons who requested the opportunity were permitted to appear in person or by counsel.

1/ The record is defined in sec. 207.2(h) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(h)), as amended, 53 F.R. 33041 (Aug. 29, 1988).
2/ Commissioner Cass dissents. Acting Chairman Brunsdale did not participate in the consideration or determination of this case.
3/ 3.5 inch microdisks and media therefor are defined by Commerce as unrecorded flexible magnetic disk recording media, with or without protective covering, for ultimate use in recording and storing data with a 3.5" floppy disk drive.

VIEWS OF THE COMMISSION 1/

We determine that an industry in the United States is materially injured by reason of imports of 3.5 inch microdisks and media therefor from Japan which the Department of Commerce has determined are being sold in the United States at less than fair value (LTFV). Our determination is based primarily on the continuing precarious financial condition of the domestic industry and the continuing declines in prices during a period of explosive market growth, in light of the dramatically increasing volumes and dominant market share of LTFV imports from Japan.

I. Like product

As a prerequisite to the Commission's material injury analysis, the Commission must make threshold factual determinations with respect to "like product" and "domestic industry". Section 771(4)(A) of the Tariff Act of 1930 defines the relevant domestic industry as the "domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product." 2/ "Like product" is defined as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to investigation." 3/

1/ Commissioner Cass dissenting. See his Separate Views. Acting Chairman Brunsdale did not participate in the consideration or determination of this case.

2/ 19 U.S.C. § 1677(4)(A).

3/ 19 U.S.C. § 1677(10).

The imported articles subject to this investigation are 3.5 inch microdisks and coated media therefor from Japan. 4/ A 3.5 inch microdisk is used to record and store encoded, digital computer information for random access by the head of a 3.5 inch floppy-disk drive. The 3.5 inch format is smaller than the previously introduced 8 inch and 5.25 inch formats, enabling manufacturers to downsize disk drives so that computers with 3.5 inch disk drives are more compact than with previous formats. 5/

The production process for 3.5 inch microdisks involves (1) the precise coating of a clear mylar or polyester base film with a suspension

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4/ The Department of Commerce's Final Determination of Sales at Less Than Fair Value describes the scope of the investigation as:

> 3.5" microdisks and coated media thereof from Japan [] currently provided for under subheading 8523.20.0000 of the HTS. These products were previously provided for in item 724.4570 of the TSUSA.
>
> A 3.5" microdisk is a tested or untested magnetically coated polyester disk with a steel hub encased in a hard plastic jacket. 3.5" microdisks are used to record and store encoded digital computer information for access by a 3.5" floppy disk drive. They include single sided, double-sided or high density formats.
>
> Coated media is the flexible recording material used in the finished microdisk. Media consists of a polyester base film to which a coating of magnetically charged particles is bonded. It is intended for use specifically in a 3.5" floppy disk drive.

54 Fed. Reg. 6433-44 (February 10, 1989).

5/ The parties have not argued that 8 inch or 5.25 inch disks or media are like products in this investigation. We agree with the parties in this regard. There are significant differences between 8 inch, 5.25 inch, and 3.5 inch formats in media coating, media and production technology, manufacturing processes and specific end uses, as well as obvious physical differences, which render them in our opinion unlike. See Preliminary Report at A-2-A-3 for a description of the characteristics and uses of the different formats. Respondents Sony Corporation and Sony Corporation of America (Sony), Hitachi Maxell, Ltd., Fuji Photo Film Company, Ltd. and Fuji Photo Film USA (Fuji), TDK Corporation and TDK Electronics Corporation (TDK), and Kao Corporation and Kao-Didak, Ltd (Kao), (hereinafter collectively "Sony Respondents"), have argued that the differences between high density (HD) 5.25 inch media and double density (DD) 3.5 inch media are less than the differences between DD 3.5 inch media and HD 3.5 inch media, and that therefore if the Commission determines that DD and HD 3.5 inch media are a single like product, there is no rational basis for distinguishing 5.25 inch media. This argument is discussed further below in the context of consideration of whether HD and DD 3.5 inch media are like.

of magnetically charged particles, bonded to the film by sophisticated binders, resulting in "webs" of "coated media", (2) the punching out of doughnut-shaped "cookies" from the webs of coated media, (3) "burnishing" of cookies to remove imperfections in the coated disk surface, 6/ (4) precise attachment of a stainless steel "hub" to the burnished cookie, (5) assembly of the hubbed, burnished cookie inside a plastic protective "clamshell" between soft synthetic liners (which wipe the surface as the disk turns) held in place by a spring. The clamshell has a shutter mechanism that seals the disk when it is not in use but opens when the disk is in use to allow the disk-drive head access to the media.

Microdisks are tested (certified) at various stages in the production process. The precise point of certification differs among manufacturers. Some manufacturers perform only statistical controls during the media coating stages, and delay certification until after assembly. Others certify after the cookie has been burnished, discard "bad" cookies, and certify again after assembly.

The 3.5 inch microdisk is available in various formats, each of which represents progressive advances in memory capacity. Currently, there are single-sided double-density 3.5 inch microdisks (SSDD), double-sided double-density 3.5 inch microdisks (DSDD), and high density 3.5 inch microdisks (HD). 7/

6/ The need for and importance of burnishing is a matter of contention between the parties. Their arguments in this regard are discussed in the context of consideration of whether 3.5 inch microdisks and media for 3.5 inch microdisks are a single like product.

7/ SSDD 3.5 inch microdisks are DSDD 3.5 inch microdisks that have been certified only on one side. Report at A-2, n.2. Development of even higher density media for 3.5 inch microdisks is ongoing. While there may be some testing of such higher density media, there are no commercial imports, and no commercial sales in the U.S. market. Petitioner has

(continued...)

Verbatim argues that the like product in this investigation is all 3.5 inch microdisks and coated media therefor, whether cut into cookies or in web form. 8/ The respondents have taken the position that finished 3.5 inch microdisks are a separate like product from coated media for 3.5 inch microdisks, and that high density (HD) and double density (DD) microdisks and media are separate like products. Consequently, respondents argue that there are four like products in this investigation: (1) HD 3.5 inch microdisks, (2) media for HD 3.5 inch microdisks, (3) DD 3.5 inch microdisks; and (4) media for 3.5 inch DD microdisks.

The Commission's decision regarding the appropriate like product(s) in an investigation is essentially a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis. 9/ In analyzing like product issues, the Commission generally considers a number of factors including: (1) physical appearance, (2) interchangeability between the articles, (3) channels of distribution, (4) customer perceptions of the articles, (5) common manufacturing facilities and production

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7/(...continued)
requested that the Commission include these "future generation" products within the scope of its determination. These future generation products are not specifically within the scope of Commerce's determination, and therefore we have not considered them in our analysis.

8/ Petitioner has not alleged that uncoated media is a like product in this investigation. The base film can also be used for production of other products such as audio or video tape, using different magnetic coating formulations and production processes.

9/ Asociacion Colombiana de Exportadores de Flores v. United States, 12 CIT ___, 693 F. Supp. 1165, 1168, n.4 (1988) (hereinafter ASOCOLFLORES); Digital Readout Systems and Subassemblies Thereof from Japan, Inv. No. 731-TA-390 (Final), USITC Pub. 2150 (January 1989) (hereinafter Digital Readout Systems.

employees, and, where appropriate, (6) price. 10/ No single factor is necessarily dispositive, and the Commission may consider other factors it deems relevant based on the facts of a given investigation.

In addition, in considering the question of whether "semifinished" or "component" articles are "like" the finished product, the Commission has considered: (1) the necessity for further processing, (2) the costs of such processing, (3) the value added by such processing, (4) whether the article at an earlier stage of production embodies or imparts to the finished article an essential characteristic or function, (5) whether there are significant uses or independent markets for the finished and unfinished articles, and (6) the degree of interchangeability of articles at the different stages of production. 11/ Again, no single factor is determinative, and the Commission may consider other factors which it deems relevant based on the facts of a given investigation.

10/ ASOCOLFLORES, supra note 9, 693 F. Supp. at 1170, n.8; Digital Readout Systems, supra note 9 at 4; Certain Forged Steel Crankshafts from the Federal Republic of Germany and the United Kingdom, Invs. Nos. 731-TA-351 and 353 (Final), USITC Pub. 2014 (September 1987) (hereinafter Crankshafts); Tapered Roller Bearings and Parts Thereof, and Certain Housings Incorporating Tapered Rollers from Italy and Yugoslavia, Invs. Nos. 731-TA-342 and 346 (Final), USITC Pub. 1999 (August 1987) (hereinafter Tapered Roller Bearings); 64K Dynamic Random Access Memory Components from Japan, Inv. No. 731-TA-270 (Final), USITC Pub. 1862 (June 1986) (hereinafter 64K DRAMs).

11/ Light-Duty Integrated Hydrostatic Transmissions and Subassemblies Thereof, With or Without Attached Axles, from Japan, Inv. No. 731-TA-425 (Preliminary), USITC Pub. 2149 (January 1989) at 19, n.64 (hereinafter Transmissions); Antifriction Bearings (Other than Tapered Roller Bearings) and Parts Thereof from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom, Invs. Nos. 303-TA-19 and 20, 731-TA-391-399 (Preliminary), USITC Pub. 2083 (May 1988) at 7 (hereinafter Bearings); Crankshafts, supra note 10; 64K DRAMs, supra note 10; Tapered Roller Bearings, supra note 10; Cellular Mobile Telephones and Subassemblies Thereof from Japan, Inv. No. 731-TA-207 (Final), USITC Pub. 1786 (December 1985) (hereinafter Cellular Mobile Telephones).

The Commission has found minor variations to be an insufficient basis for a separate like product analysis. Rather, the Commission has generally looked for clear dividing lines to define separate like products. 12/ However, the Commission should not fashion its like product definition to reach a particular result. 13/ Moreover, the like product requirement may not be "interpreted in such a narrow fashion as to permit minor differences in physical characteristics or uses to lead to the conclusion that the product and article are not 'like' each other." 14/

There are two fundamental like product questions in this investigation:

1. Whether finished 3.5 inch microdisks and media therefor of differing densities (memory capacity), i.e., DD and HD, are separate like products?

2. Whether coated media for 3.5 inch microdisks 15/ is a separate like product from finished 3.5 microdisks?

12/ Digital Readout Systems, supra note 9, at 4; Bearings, supra note 11; Operators for Jalousie and Awning Windows from El Salvador, Invs. Nos. 701-TA-272 and 731-TA-319 (Final), USITC Pub. 1934 (January 1987) at 4, n.4.

13/ ASOCOLFLORES, supra note 9, 693 F. Supp. at 1169; Transmissions, supra note 11; Crankshafts, supra note 10.

14/ S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

15/ Respondents refer to unburnished cookies rather than coated media. Trade between media coaters and microdisk "converters" is generally transacted in the form of unburnished cookies, although some converters purchase rolls of coated media in web form, and punch the cookies themselves. Burnished cookies are delicate, so the burnishing process is normally performed as part of the conversion or finishing process.

1. 3.5 inch microdisks of different densities are not separate "like products"

3.5 inch microdisks of different densities are substantially identical in appearance. 16/ HD 3.5 inch microdisks and media are characterized by: (i) smaller, more densely packed magnetic particles and (ii) different, thinner coating material with higher coercivity. 17/ The

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16/ The Sony respondents argue that there are certain physical differences between HD and DD microdisks, referring to an identification hole in the HD microdisk, the preferred use of a smaller hub with a smaller A-ring, and a finer liner material. Sony respondents' pre-hearing brief at 38. With the exception of the ID hole, these differences are not visible to the user. We do not consider these minor differences to be a sufficient basis on which to distinguish separate like products in this case. In addition, there are minor differences among 3.5 inch microdisks of different manufacturers, i.e. in the color of the plastic clamshell, and the labeling. However, these differences do not relate to the density of the 3.5 inch microdisk, but are based largely on the manufacturers' choices concerning cosmetics.

17/ See Report at A-3 for a description of the primary parameters of HD and DD media. The Sony respondents have argued that the differences between high density (HD) 5.25 inch media and double density (DD) 3.5 inch media are less than the differences between DD 3.5 inch media and HD 3.5 inch media, and that therefore if the Commission determines that DD and HD 3.5 inch media are a single like product, there is no rational basis for distinguishing 5.25 inch media. However, we do not believe that this argument warrants finding that HD and DD media constitute separate like products. The consideration of whether different densities of media (and microdisks) constitute a single like product is in the context of determining what domestic product is like imported media dedicated for use in 3.5 inch microdisks, not all media. Moreover, while the differences between media dedicated for 3.5 inch DD microdisks and HD 5.25 inch floppy disks may not be substantial, there is no contention that HD 5.25 inch media, if packaged in the 3.5 inch microdisk format, would function properly in a 3.5 inch disk drive. The 3.5 inch format is one of the primary defining characteristics of the articles subject to investigation, and of the like product. Thus, 5.25 inch media does not perform the same function or have the same uses, as the imported articles subject to investigation. Simply because other articles are similar to the products under consideration does not necessitate a finding that they are like products, if there are sufficiently clear dividing lines between them. We believe that the dedication for use in 3.5 inch microdisks of the coated media under consideration is a sufficiently clear dividing line to warrant not including HD 5.25 inch media within the like product.

precise composition of the magnetic coatings within a given density of 3.5 inch microdisk may also vary from manufacturer to manufacturer. 18/

All 3.5 inch microdisks share a common end use, as memory storage devices for computers, and perform their function in the same way, by storing encoded computer data in the magnetic particles on the media. 19/ However, different densities are not fully interchangeable, since disk drives are specifically engineered to accept a particular density of media. 20/ Use of a higher density 3.5 inch microdisk in a drive designed

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18/ The "recipes" for media coatings are proprietary to the individual manufacturers. Coating formulations are subject to continual refinement to improve performance and production characteristics. As a rule, coating formulations are not patented, but are treated as trade secrets by the individual manufacturers.

19/ See 64K DRAMs, supra note 10, Erasable Programmable Read Only Memories from Japan, Inv. No. 731-TA-288 (Final), USITC Pub. 1927 (December 1986) (hereinafter EPROMs); Dynamic Random Access Memory Semiconductors of 256K and Above from Japan, Inv. No. 731-TA-300 (Preliminary), USITC Pub. 1803 (January 1986). In these cases, the Commission concluded that the different densities of semiconductor did not distinguish separate like products, relying primarily on the conclusion that while there was an evolution of the products over time, the essential characteristic of the semiconductors, i.e. their memory function, remained the same, and each succeeding generation performed that function in essentially the same manner. The Commission also noted the close linkage in pricing of successive generations, common manufacturing facilities, and common channels of distribution. The Commission concluded that the lack of full substitutability of generations did not preclude the determination that different densities of semiconductors constituted a single like product. Cf. Crankshafts, supra note 10 (Commission determined that crankshafts of different weights were a single like product); Tapered Roller Bearings, supra note 10 (Commission determined that different sizes, types, and specifications of tapered roller bearings were a single like product).

20/ This question of interchangeability in use was much discussed by the parties. It is clear that a DD disk drive cannot reliably read or write on a HD microdisk formatted to its full capacity in a HD drive. A DD disk drive can read and write on a HD microdisk formatted to double density, but the significantly greater cost of HD microdisks makes this an uneconomical prospect. Moreover, a HD microdisk formatted to less than its full capacity in a DD drive is potentially more likely to be subject to disk errors and data loss than if it were properly formatted to full capacity.

for lower density 3.5 inch microdisks is possible, although the higher cost makes such use unlikely, and there is increased risk of data loss. 21/

In addition, disk drives are a relatively costly part of a computer purchase. Respondents note the significant costs associated with purchasing a new disk drive to accommodate higher density 3.5 inch microdisks. 22/ However, the HD disk drives currently available are "backward compatible," that is, a HD disk drive can reliably read and write on a DD microdisk, with the use of specific additional circuitry in the drive. 23/ This backward compatibility is a practical solution to the problem caused by the existence of a large body of software available (at least initially) only on DD microdisks, which owners of HD drives would want to use, and the desire to be able to share information on microdisks between users of HD and DD drive personal computers. It would be impossible to design a disk drive to be compatible with as yet undeveloped future generation microdisks, making complete interchangeability possible. Therefore we conclude that the lack of full interchangeability between HD and DD microdisks does not require a finding of separate like products. 24/

21/ Report at A-3-A-6.

22/ Respondents seek to distinguish the semiconductor determinations on this basis, arguing that the costs associated with altering a product to incorporate a higher density semiconductor are significantly less than the cost of a new disk drive.

23/ The IBM PS/2 systems, which are the most significant of the personal computers incorporating 3.5 inch drives, accept both DD and HD disks. Disk drives with backward compatibility contain additional circuitry to enable them to read different densities of media.

24/ See Crankshafts, supra note 10; Tapered Roller Bearings, supra note 10. In both cases, a specific weight or size/specification of the

(continued...)

3.5 inch microdisks of all densities share common channels of distribution. 25/ While not all manufacturers produce all densities, it is a general practice in the industry to offer all densities to customers. 26/ The different densities are the result of improvements in magnetic media technology and coating technology, which allow for smaller, more densely packed magnetic particles to be coated onto the underlying film, providing the increased memory capacity.

Production of HD 3.5 inch microdisks generally involves some higher technology production facilities and materials, requiring, among other things, a "cleaner" environment than does production of DD media. 27/ In

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24/(...continued)
finished product was necessary for different end users, but the function of the product was the same regardless. Similarly, in cases involving color picture tubes, the Commission has determined that color picture tubes of different sizes, despite a lack of interchangeability in television manufacture, are a single like product. E.g. Color Picture Tubes from Canada, Japan, the Republic of Korea, and Singapore, Invs. Nos. 731-TA-367-370 (Final), USITC Pub. 2046 (December 1987). Thus, the Commission has in the past found articles which are not interchangeable in use to be like, based on the other considerations present in the investigation.

25/ Report at A-19-A-22. 3.5 inch microdisks are sold to original equipment manufacturers (usually as unbranded product which the OEM then resells under its own name, includes with computers, or uses for internal purposes), software manufacturers and duplicators, distributors, and mass merchandisers. The latter three sell the 3.5 inch microdisk to computer users. We do not find the fact that different consumers will purchase primarily either DD or HD microdisks, depending on their disk drive, to be dispositive.

26/ For example, a company such as Nashua, a manufacturer of 8 inch and 5.25 inch disks, imports 3.5 inch microdisks and sells them under its brand name. Transcript of preliminary conference at 187.

27/ Verbatim Post-Conference Brief at 11, n.15. The issue of the need for "cleaner" production environments was also present in the semiconductor cases, where the higher density chips required significantly cleaner production facilities. However, in those cases, as here, the lower density products would only benefit from production in a cleaner environment, and the same equipment can be and often is used for coating of DD and HD media, and assembly of DD and HD microdisks, by the same employees, with relatively minor operational changes.

general, however, DD and HD media can be and is coated using the same equipment by the same employees, with relatively minor operational adjustments. Similarly, DD and HD microdisks can be and are assembled on the same equipment by the same employees, again with relatively minor operational adjustments. The HD media and microdisks are essentially a technological improvement, evolved from DD media and microdisks, performing the same function for end users in the same way. 28/

We believe that there are substantial factual similarities between this investigation and the semiconductor investigations. 29/ Despite lack of complete interchangeability, 3.5 inch microdisks of all densities perform the same function, recording and reading back encoded computer information, in the same way, and are produced in common manufacturing facilities and share channels of distribution. Accordingly, we determine that different densities of 3.5 inch microdisks are a single like product.

2. 3.5 inch microdisks and media therefor constitute a single "like product"

Coated media and finished 3.5 inch microdisks are clearly different in physical appearance. Coated media and 3.5 inch microdisks can be and often are produced in separate manufacturing facilities. Moreover, coated media and 3.5 inch microdisks are manufactured using different equipment and technology. The assembly process for 3.5 inch microdisks is complex,

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28/ See EPROMs, supra note 19; 64K DRAMs, supra note 10.

29/ Commission determinations are sui generis, and should be made on the basis of the facts (and arguments) present in each investigation. Armstrong Bros. Tool Co. v. United States, 489 F. Supp. 269, 279 (Cust. Ct. 1980); ASOCOLFLORES, supra note 9, at 1169 & n.5. However, factual similarities between investigations can be persuasive in subsequent Commission determinations.

and adds substantial value to the finished product. 30/ However, a significant portion of that value-added is attributable to the high cost of the raw materials used in the 3.5 inch microdisk packaging format. 31/

Coated media and 3.5 inch microdisks have different customers: coated media is purchased by converters, who assemble finished 3.5 inch microdisks, often using solely purchased components, while 3.5 inch microdisks are purchased by mass merchandisers, software manufacturers and duplicators, OEMs, and distributors, for sale to computer owners. However, converters of 3.5 inch microdisks sell their products into the same channels of distribution as integrated producers, i.e., mass

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30/ In Crankshafts, supra note 10, the Commission determined that the fact that up to two-thirds of the value of the finished crankshaft was added by the machining process did not preclude the conclusion that machined and unmachined crankshafts are like. The Commission noted that machining is an exacting process that must be performed to extremely tight tolerances, could be done either by producers of unmachined crankshafts or by end users, and was a necessary step in an integrated production process. Similarly, in Tapered Roller Bearings, supra note 10, the Commission noted that substantial finishing was required in order for tapered roller bearings to perform their function of reducing friction. In the semiconductor cases, the value added by the assembly process increased over time, as improved production technologies and experience lessened the cost of the chips. E.g. 64K DRAMs, supra note 10.

31/ The packaging format for 3.5 inch microdisks was developed by Sony, which holds a number of patents on the design, production, and assembly of 3.5 inch microdisks, although not on the media. These Sony patents have been broadly licensed, in order to ensure industry-wide acceptance of the standard packaging format. The packaging format is costly in terms of materials, and due to the degree of precision necessary in assembly to ensure proper operation of the microdisk.

It appears that the packaging format of the 3.5 inch microdisk resulted from an industry-wide realization of the need for a single format, and competition among various proposed formats. The Sony design, which emerged as the industry standard, has been criticized as high cost, requiring a degree of precision in assembly which is not technologically necessary, and containing some elements, particularly the shutter, which actually detract from the efficiency of the package. The choice by the industry of a packaging format entailing high raw material costs, and resulting in substantial value added in the assembly process does not require the Commission in this case to find media and microdisks to be separate like products.

merchandisers, software manufacturers and duplicators, OEMs, and distributors, for sale to computer owners. Thus the ultimate consumers are the same for the media as for the finished microdisks. However, coated media is not interchangeable with 3.5 inch microdisks and cannot function when inserted into a disk drive. 32/

There is an independent market for coated media for 3.5 inch microdisks in the United States. According to the information gathered in the investigation, that open market represents only a small percentage of total U.S. consumption of media in 1987. Media coaters in the United States by and large do not participate significantly in this open market for media, preferring to own their own finishing operations, or have microdisks finished for them under contract. There are, moreover, no distributors or retailers dealing in media, 33/ and media per se is not advertised. While this market is not insignificant, and is likely to grow as new companies are entering the field of 3.5 inch microdisk assembly, 34/ we do not find the existence of this market for cookies to

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32/ We note that in most instances, a good at an earlier stage of production will not be interchangeable with the finished good. This need not be determinative. E.g. 64K DRAMs, supra note 10; EPROMs, supra note 19; Crankshafts, supra note 10; Tapered Roller Bearings, supra note 10. But see Cellular Mobile Telephones, supra note 11.

33/ Given the nature of the product, it is not surprising that there is no retail market for coated media. No computer owner would have the capabilities or facilities to assemble 3.5 inch microdisks from coated media and other component parts.

34/ Report at A-14-A-15. Most of these companies do not appear to have any intention of entering the more costly, high technology field of media coating, and are therefore dependent on purchases of coated media, usually from unrelated sources. Although there need not be corporate or even long-term contractual relationships between media coaters and assemblers, there is a tendency toward long-term informal supply relationships. Each manufacturer's media may differ from another's, necessitating differences in the burnishing process, which tends to limit a finisher's ability to source from alternative manufacturers without increased expense.

be dispositive. Cookies are traded solely for finishing purposes: cookies have no use except to be finished into microdisks, as the ultimate consumers purchase and use microdisks. 35/

On the other hand, while there are differences between the two, coated media for 3.5 inch microdisks, aside from research and testing, has no independent function and is dedicated exclusively to use in the production of finished 3.5 inch microdisks. The parties appear to agree that the essential characteristic or function of a 3.5 inch microdisk is to serve as a memory device, although they disagree as to whether the coated media embodies or imparts to the finished microdisk its memory capability. 36/ The other components comprise the protective packaging,

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35/ In Crankshafts, supra note 10, the Commission found that production of unmachined crankshafts was part of an integrated production process resulting ultimately in the production of a usable machined crankshaft, even though machining was performed by both end users and the producers of the unmachined crankshafts, and found machined and unmachined crankshafts to be one like product. In Tapered Roller Bearings, supra note 10, the Commission noted that finishing operations could be performed separately from the initial production, but found finished and unfinished tapered roller bearings to be one like product. In EPROMs, supra note 19, the Commission noted that almost all U.S. chip manufacturers transferred chips to overseas affiliates or subcontractors for assembly, but nonetheless found assembled and unassembled EPROMs to be a single like product.

36/ The coated media, in cookie form following burnishing, is tested, or certified, by some manufacturers, by writing an electrical signal onto it, and reading it back. Thus, it appears that the capability to store electrical information is imparted to the media in the coating process and certification, although it may be improved by burnishing. This latter point is subject to some dispute, as some manufacturers contend that the burnishing process may actually do more harm than good to the electromagnetic properties of the media. As noted above, burnishing may ultimately become unnecessary as coating processes become more sophisticated. Verbatim has developed an improved coating and calendering process which eliminates the need for burnishing.

Respondents dispute the media's importance. The Sony respondents argue that the coated media, prior to burnishing, merely has the potential to store electrical signals, and that burnishing is critical. In this regard, they refer to the Commerce decision excluding microdisks assembled in third countries using Japanese media from the scope of the investigation. In making that determination, Commerce relied on an

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and help position the microdisk within the disk drive to enable it to connect with the computer. 37/ The disk drive head reads the information directly in contact with the media. Although the components of the microdisk package are necessary to the proper functioning of a 3.5 inch microdisk in a disk drive, none of these components is able to receive or read back encoded computer data in the form of an electrical signal. 38/

36/(...continued)
examination of Kao-Didak's Canadian assembly operation, which is completely automated, and highly technology and capital intensive. See Commerce Notice of Final Determination, supra note 4, at 6434-35. While a number of the considerations addressed by Commerce in determining the scope of its investigation are similar to those addressed by the Commission in defining the like product, the two determinations are made for different purposes based on different statutory provisions. Therefore, the Commission is not bound by the Commerce scope determination in making its like product determination. The Commerce determination does not necessarily reflect the universe of microdisk finishing operations. Moreover, we believe the reference in the Commerce determination to the dissimilarity of microdisk finishing and finishing of erasable programmable read only memories (EPROMs) is incorrect on the facts. Whatever Commerce may have found with respect to EPROM finishing, the Commission did not find that EPROM finishing is a "relatively simple process." Moreover, the Commission determined, in the EPROMs case, supra note 19, that assembled and unassembled EPROMs constituted a single like product. Consequently, we are not persuaded by Commerce's determination to find that microdisks and media are separate like products.

37/ Essentially, a 3.5 inch microdisk consists of, in addition to the cookie, the plastic shell, the liner, the lifter, the center plate, the center hub, the A-ring, the write protect, and the shutter and spring assembly. See Report at A-2-A-11 and figure 1 for a description of the parts, their functions, and the assembly process.

38/ Respondents contend that the coated media or cookie merely has the potential to store electrical signals, and requires burnishing to be functional. Moreover, they argue that each of the components is essential to allow the finished 3.5 inch microdisk to perform its function. They cite the Commission's determination in Cellular Mobile Telephones, supra note 11, where a plurality of the Commission found that each of seven subassemblies performed an essential function of the completed cellular mobile telephone (CMT), was necessary to the function of the complete unit, and represented an earlier stage of production requiring extensive further processing. Therefore the Commission determined that each of seven subassemblies constituted a separate like product. The Commission also found, however, that CMT transceivers, control units, and complete CMTs, comprised a single like product, since a CMT transceiver must be
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The question of whether 3.5 inch microdisks and coated media for 3.5 inch microdisks constitute one like product or two is a difficult one. Based on the record in this final investigation, we determine that 3.5 inch microdisks and coated media therefor, irrespective of density, comprise a single like product. We find that the dedicated nature of coated media, and the lack of any other use for coated media than assembly into 3.5 inch microdisks, is persuasive in this case.

II. Domestic industry

Having determined that there is a single like product in this investigation, we determine that there is one domestic industry, comprised of the companies that either coat media for 3.5 inch microdisks or assemble 3.5 inch microdisks in the United States. In view of our determination, two domestic industry questions arise. 39/ The first

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38/(...continued)
used together with a control unit to form an operating CMT, and there are no independent uses for either part. We note that on remand, three Commissioners found cellular mobile telephones and subassemblies to be a single like product, one Commissioner reaffirmed his original determination of eight like products, one Commissioner reaffirmed his original determination of two like products, and one Commissioner did not specifically decide the question of like product, determining rather that the results of the remand investigation did not indicate that the Commission's original affirmative determination was defective. Cellular Mobile Telephones and Subassemblies Thereof from Japan, Inv. No. 731-TA-207 (Final)(Remand), USITC Pub. 2155 (February 1989).

39/ In addition, we note that the respondents raised a standing question before Commerce (and before the Commission in the preliminary investigation), arguing that Verbatim does not produce microdisks in the United States, and therefore has no standing to bring the petition. Commerce did not accept respondents' arguments, and declined to dismiss the petition for lack of standing. However, Commerce did note that it placed "great importance on the ITC's finding of one like product and one industry [in making its determination.]" Commerce therefore stated that should the Commission find two like products and industries in its final determination, Commerce would consider the question of whether Verbatim has standing with respect to the industries found by the Commission, including in this consideration Verbatim's activities as a producer,
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question concerns whether companies that perform part of the production of microdisks, either media coating or assembly, off-shore, are properly considered members of the domestic industry. The second question concerns whether domestic producers that are importers or related to importers or exporters of the articles subject to investigation should be excluded from the Commission's analysis of the domestic industry.

1. Domestic producers

In evaluating whether a company that conducts manufacturing operations partly in the United States and partly in a foreign country is a domestic producer, the Commission generally considers the overall nature of production related activities in the United States, including: (1) the extent and source of a firm's capital investment, (2) the technical expertise involved in production activity in the United States, (3) employment levels, (4) the quantity and type of parts sourced in the United States, (5) the value added to the product in the United States, and (6) any other costs and activities in the United States directly leading to production of the like product. 40/ The Commission's analysis

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39/(...continued)
manufacturer, or wholesaler of the like product, and if it found that Verbatim lacks standing with respect to any like product, would rescind initiation of the investigation as to that like product. Commerce Notice of Final Determination, supra note 4, at 6435.

40/ Digital Readout Systems, supra note 9, at 13; EPROMS, supra note 19; 64K DRAMs, supra note 10; Color Television Receivers from the Republic of Korea and Taiwan, Invs. Nos. 731-TA-134-135 (Final), USITC Pub. 1514 (April 1984) at 8; Certain Radio Paging and Alerting Receiving Devices from Japan, Inv. No. 731-TA-102 (Final), USITC Pub. 1410 (August 1983) at 11.

In addition, under section 1328 of the Omnibus Trade and Competitiveness Act of 1988, the Commission is directed to evaluate the impact of imports on the domestic producers of the like product, but only in the context of production operations within the United States. Pub. L. 100-418, 102 Stat. 1107, 1205, to be codified at 19 U.S.C. § 1677(7)(B)(i)(III). This provision, while not technically applicable to (continued...)

of who constitutes the domestic producers of the like product is a factual determination and is made on a case-by-case basis, and no single factor is determinative.

During the period of investigation eleven companies either coated media for and/or assembled 3.5 inch microdisks in the United States. 41/ These companies have varying operations in the United States ranging from solely assembly operations to fully integrated operations involving media coating, final assembly, testing, and sale.

We determine that the domestic industry consists of the U.S. operations of both producers of coated media for 3.5 inch microdisks and converters of coated media into 3.5 inch microdisks. 42/ We believe this decision is appropriate based not only on the nature of the production operations in the United States, but also on the fact that producers of either media or microdisks literally "produce" the like product in the United States. While media coating may be the technologically more complex aspect of the industry, microdisk assembly adds substantial value to the finished product. Both operations employ significant numbers of workers in the United States, and represent significant investments of

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40/(...continued)
this investigation, which was initiated prior to the effective date of the OTCA, essentially describes prior Commission practice.

41/ The chart at page A-13 in the report identifies the specific operations of each company in the United States. In addition a number of new companies entered the industry in 1988 and 1989. The specific operations of these new entrants range from microdisk assembly or media coating alone, to fully integrated operations.

42/ As noted above, there are different degrees of integration in U.S. producers' operations. The economic interests of a fully integrated producer may vary significantly from those of a media coater, or an assembler of microdisks. Although this fact has little (if any) relevance to the question of determining whether a producer has sufficient U.S. production-related activities to be considered a "domestic" producer, it may be an appropriate consideration in the causation analysis.

capital overall. The question whether to exclude from the domestic industry companies which import part of their materials, particularly media, from Japan, is a matter more appropriately treated under the related parties provision of the statute.

2. No related party companies should be excluded

Almost all of the companies in the domestic industry have imported either 3.5" media or microdisks, or both, during the period of investigation. Consequently, the question arises whether any of these companies should be excluded from the definition of the industry as a "related party" under section 771(4)(B) of the statute. 43/ The related parties provision enables the Commission to exclude a domestic producer from the domestic industry, in appropriate circumstances, if the producer is "related to a foreign exporter and the foreign exporter directs his exports to the United States so as to not compete with his related U.S. producer." 44/ Application of the related parties provision is within the Commission's discretion based on the facts presented in each case. 45/

43/ 19 U.S.C. § 1677(4)(B), which provides:
When some producers are related to the exporters or importers, or are themselves importers of the allegedly subsidized or dumped merchandise, the term "industry" may be applied in appropriate circumstances by excluding such producers from those included in that industry.

44/ S. Rep. No. 249, 96th Cong., 1st Sess. 83 (1979).

45/ Empire Plow Co. v. United States, 11 CIT ___, 675 F. Supp. 1348, 1352 (1987). Factors the Commission has examined in determining whether appropriate circumstances exist to exclude a company from the domestic industry include: (1) the position of the related producers vis-a-vis the rest of the domestic industry; (2) the reasons why the domestic producers have chosen to import the product under investigation--to benefit from the unfair trade practice, or to enable them to continue production and compete in the domestic market; and (3) the percentage of domestic production attributable to the related producers. E.g. Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Preliminary), USITC Pub. 2071 (March 1988) at 13 (hereinafter ATVs); Granular

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Verbatim has specifically requested that the Commission exclude three companies from its analysis of the domestic industry. These companies are related to large Japanese producers, and set up their U.S. operations subsequent to the Commission's preliminary affirmative determination. 46/ Verbatim argues that exclusion is appropriate in this case, where these related parties have benefitted substantially from LTFV sales. Verbatim argues that in view of the substantial dumping margins assessed for the Japanese companies to which these companies are related, there can be no doubt of the benefit derived by these companies from LTFV sales prior to the establishment of U.S. subsidiary operations. In addition, Verbatim argues that these U.S. subsidiaries have been supported by Japanese technology and expertise, research, and process development, a "substantial benefit" under the related parties analysis. Finally, Verbatim asserts that exclusion of these companies will not distort the Commission's analysis in any way, due to their relatively insubstantial domestic activities.

In response, the Sony respondents argue that the "benefit" accruing to other importing domestic producers cannot be distinguished from the "benefit" accruing to the U.S. subsidiaries of Japanese producers, and that therefore if these three companies are to be excluded, all the domestic producers which imported microdisks or media must also be excluded. Moreover, respondents argue that the primary interests of these

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Polytetrafluoroethylene Resin from Italy and Japan, Invs. Nos. 731-TA-385 and 386 (Final) USITC Pub. 2112 (August 1988) at 15. The Commission has also considered whether each company's books are kept separately from its "relations" and whether the primary interests of the related producers lie in domestic production or in importation. Rock Salt from Canada, Inv. No. 731-TA-239 (Final) USITC Pub. 1798 (January 1986) at 12.

46/ Report at A-12-A-14.

producers lie in domestic production, not importation, and therefore exclusion is not appropriate.

The Commission has stated previously that the related parties provision enables it to avoid any distortion in the aggregate data in the domestic industry that might result from including related parties whose operations are shielded from the effect of the imports. 47/ Almost every company in the domestic industry has imported 3.5" microdisks or media therefor during the period of investigation, and thus qualifies as a related party. We do not believe that a distinction among companies subject to potential exclusion as related parties should be made solely on the basis that they are subsidiaries of the Japanese producers of the products subject to investigation. Moreover, exclusion of the numerous related parties in this investigation would skew the aggregate data, and render the Commission's determination almost meaningless. Therefore, we determine that appropriate circumstances do not exist to warrant exclusion of any producers from the domestic industry on the basis of the related parties provision.

III. Exclusion of imports

The Sony respondents argue that if the Commission finds that media and microdisks constitute the same like product, it should "exclude" all types of media from its analysis because there is no plausible claim that imports of media are a cause of or threaten material injury to a domestic industry. 48/ They argue that the Commission possesses the authority to

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47/ Granular Polytetrafluoroethylene Resin from Italy and Japan, Invs. Nos. 731-TA-385 and 386 (Preliminary) USITC Pub. 2043 (December 1987) at 9. See also EPROMs, supra note 19; Rock Salt from Canada, Inv. No. 731-TA-239 (Final), USITC Pub. 1798 (January 1986).

48/ Sony respondents post-hearing brief at 13.

exclude imports from its consideration, and contend that media imports occupy a "discrete segment" of the market because they serve a valuable purpose in supplying the U.S. industry. The Sony respondents contend that there is no evidence of injury by reason of imports of media, the domestic industry benefits from imports of media, and continued imports are necessary to the U.S. microdisk industry. Therefore they contend the Commission should either make a negative determination as to media imports or exclude media imports from its determination.

We do not exclude media imports from our analysis. Commerce determines which imports are subject to investigation, 19 U.S.C. § 1673b(a), and the Commission is required to determine whether there is a reasonable indication of material injury, or threat thereof to, or material retardation of the establishment of, a domestic industry producing products "like" the imports under investigation. 49/ We do not believe respondents' arguments justify the Commission's failing to make a determination with respect to media imports, which are specifically within the scope of Commerce's investigation. 50/

49/ Several past decisions of the Commission have suggested that "in certain narrowly-drawn circumstances," imported merchandise may be excluded if it occupies a "'discrete and insular' segment of the market, and that there would be no impact on the domestic industry" as a result of such exclusion. Color Television Receivers from the Republic of Korea and Taiwan, Invs. Nos. 731-TA-134 and 135 (Final), USITC Pub. 1514 (April 1984) at 17. See also, ATVs, supra note 45; Synthetic L-Methionine from Japan, Inv. No. 751-TA-4, USITC Pub. 1167 (July 1981) at 12; Sprague Electric Co. v. United States, 84 Cust. Ct. 260, 262 (1980) (the "Commission has no authority to refine or modify the class or kind of merchandise found to be, or likely to be, sold at LTFV."). We believe that this suggestion is not supportable in light of the statutory language.

50/ The Commission has rejected the proposition that certain imports be "excluded" from an affirmative determination. ATVs, supra note 45, at 9, n.30. See Digital Readout Systems, supra note 9 at 5, n.10; Certain Brass Sheet and Strip from Japan and the Netherlands, Invs. Nos. 731-TA-379-80 (Final), USITC Pub. 2099 (July 1988) at 6, n.9. But see, e.g., Digital

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IV. Condition of the Industry

In assessing the condition of the domestic industry, the Commission considers, among other factors, production, capacity, capacity utilization, shipments, inventories, employment, wages, sales, and profitability. 51/ No single factor is determinative, and in each investigation the Commission will consider the particular nature of the industry concerned.

Apparent U.S. consumption of 3.5 inch microdisks increased by almost 500 percent from 1985 to 1987, and increased in interim 1988 when compared to interim 1987. 52/ Apparent U.S. consumption of media for 3.5 inch microdisks increased by 21 percent from 1985 to 1987, and increased again in interim 1988 when compared to interim 1987. 53/ Domestic producers' shipments of both finished 3.5 inch microdisks and media therefor also increased during the period of investigation. 54/ Shipments of DD 3.5 inch microdisks showed large percentage increases throughout the period, and shipments of HD 3.5 inch microdisks increased dramatically between

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50/(...continued)
Readout Systems, supra note 9 at 28 (Views of Acting Chairman Brunsdale) and 57-95 (Concurring and Dissenting Views of Commissioner Cass).

51/ 19 U.S.C. § 1677(7)(C)(iii).

52/ Report at A-18, Table 4.

53/ Report at A-18, Table 4. We note that all media for 3.5 inch microdisks produced in or imported into the United States is used in finished 3.5 inch microdisks.

54/ Report at A-32, Table 10. U.S. producer's domestic shipments of 3.5 inch microdisks increased by nearly 500 percent from 1985 to 1987, and increased again in interim 1988 as compared with interim 1987. U.S. producer's domestic shipments of media for 3.5 inch microdisks increased by 1000 percent from 1985 to 1987, and increased again in interim 1988 as compared with interim 1987.

interim 1988 and interim 1987. 55/ The HD 3.5 inch microdisk was first introduced in 1986, and gained in importance with the introduction of the IBM PS/2 line of personal computers incorporating 3.5" drives in April, 1987. Since then, consumption, as well as production and shipments, of HD 3.5 inch microdisks has skyrocketed. It is generally expected that demand and production in this sector of the industry will continue to increase significantly over the next several years. 56/

Employment in both the media coating and conversion sectors of the industry increased during the period of investigation. 57/ Some producers, however, reported layoffs and reductions of personnel between 1985 and 1987, including reductions of personnel involved in research and development. 58/ Hours worked in the conversion sector declined between 1985 and 1986, as did wages and total compensation paid to workers in that sector, before recovering almost to the 1985 levels in interim 1988. 59/ The opposite trend was evident in the media coating sector, with hours worked, wages, and total compensation all increasing throughout the period of investigation. 60/ Productivity in both sectors of the industry increased significantly throughout the period of investigation. 61/

Capacity to produce 3.5 inch media increased by 400 percent from 1985 to 1987, and increased substantially in interim 1988 as compared with

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55/ Report at A-32, Table 10.

56/ Report at A-24, Figure 2.

57/ Report at A-36.

58/ Report at A-36-A-37.

59/ Report at A-37, Table 15.

60/ Report at A-37, Table 15.

61/ Report at A-37, Table 15.

interim 1987. 62/ Capacity to produce finished 3.5 inch microdisks also increased, by more than 400 percent from 1985 to 1987, and increased significantly in interim 1988 as compared with interim 1987. 63/ Capacity utilization in the 3.5 inch media coating sector declined from 1985 to 1986, recovered during 1987, and increased significantly in interim 1988 as compared with interim 1987. 64/ Capacity utilization in the 3.5 inch microdisk assembly sector of the industry increased throughout the period of investigation. 65/

End-of-period inventories of finished 3.5 inch microdisks increased through 1987, although not as much as production, resulting in a decline in the ratio of inventories to total production throughout the period of investigation. 66/ End-of-period inventories of media for 3.5 inch microdisks also increased throughout the period of investigation. 67/ The ratio of inventories of media for 3.5 inch microdisks to total production increased from 1985 to 1986, declined in 1987, and declined again in interim 1988 as compared with interim 1987. 68/

The increases in production, capacity, capacity utilization, shipments, employment, and productivity are not unexpected, since the 3.5 inch microdisk is a relatively new product. Moreover, demand for 3.5 inch microdisks is driven by demand for computers incorporating 3.5 inch disk

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62/ Report at A-31, Table 8.

63/ Report at A-31, Table 8.

64/ Report at A-31, Table 8.

65/ Report at A-31, Table 8.

66/ Report at A-33, Table 13.

67/ Report at A-33, Table 13.

68/ Report at A-33, Table 13.

drives. Such computers are also relatively new products, and the market for them is continuing to expand.

However, despite rapidly increasing consumption and shipments 69/, the industry has continued to show large (though decreasing) losses. While losses in a new industry are not unusual, the level of losses in this industry is significant.

The Commission received usable income and loss data on production of 3.5 inch microdisks and/or media therefor from six domestic producers, accounting for all U.S. production of 3.5 inch microdisks and 90 percent of U.S. production of media for 3.5 inch microdisks in 1987. 70/ Most companies in the industry have different fiscal years, and different entry dates into the industry, making aggregation and comparison of data difficult. One U.S. producer's questionnaire response concerning financial data was deficient in several respects. That producer's fiscal year also results in a significant skewing of the data for domestic sales in 1987. Therefore, we have considered the domestic industry's performance apart from that company's financial information to be more reliable for analysis of the condition of the industry.

The domestic industry sustained significant operating losses throughout the period of investigation. While the level of those losses declined, both absolutely and as a percentage of net sales, losses of this magnitude over the entire period of investigation indicate that the domestic industry is in precarious financial condition. Moreover, capital expenditures declined significantly from 1985 through 1987, before

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69/ As noted below, because of differences in fiscal years among companies, which result in a skewing of data for domestic sales in 1987, we believe shipments are a more reliable indicator of industry performance.

70/ Report at A-38.

increasing in interim 1988. 71/ A substantial portion of that increase is accounted for by the entry into U.S. production operations of companies related to Japanese producers Commerce has determined are making sales at less than fair value. 72/ While we have not excluded these related party companies from our analysis, we do not believe this recent increase outweighs the declines exhibited during the first three years of the period of investigation.

Research and development expenses declined during the period of investigation. As the Commission has recognized in previous investigations, research and development are critical to the success of industries in high technology fields, where new developments in product and process technology are continuous, and necessary in order for the industry to be successful. 73/

Based on our consideration of the information in this final investigation, we determine that the domestic industry was materially injured throughout the period of investigation.

V. Causation

In making its determinations, the Commission is directed to determine whether the domestic industry is materially injured "by reason of" imports

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71/ Report at A-53.

72/ In addition, one domestic producer did not have records available for, and thus did not report, capital expenditures prior to interim 1988. Since this company has been in operation throughout the period of investigation, it is likely that this results in an underreporting of capital expenditures for the first three years of the period, although such underreporting is unlikely to be sufficient to account for the substantial declines in capital expenditure exhibited.

73/ See, e.g. EPROMs, supra note 19; Cellular Mobile Telephones, supra note 11.

Commerce has determined are sold at LTFV. 74/ While the Commission may consider information indicating that injury to the domestic industry is caused by factors other than LTFV imports, we may not weigh various possible causes. 75/ The statute directs the Commission to consider, among other factors:

> (i) the volume of imports of the merchandise which is the subject of the investigation,
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> (ii) the effect of imports of that merchandise on prices in the United States for like products, and
>
> (iii) the impact of imports of such merchandise on domestic producers of like products. 76/

The specific data concerning the volume and value of imports of both 3.5 inch microdisks and media therefor are confidential, as are the specific market penetration ratios. In terms of both volume and value, imports of 3.5 inch microdisks from Japan increased significantly throughout the period of investigation. 77/ Imports of media in terms of volume declined from 1985 to 1986, increased in 1987, and increased significantly in interim 1988 as compared with interim 1987. 78/

74/ 19 U.S.C. § 1673d(b).

75/ S. Rep. No. 249, 96th Cong., 1st Sess. 57-58 (1979); H.R. Rep No. 317, 96th Cong., 1st Sess. 47 (1979).

76/ 19 U.S.C. § 1677(7)(B).

77/ Report at A-68, Table 31.

78/ Report at A-67, Table 32. The value of Japanese media imports increased from 1985 to 1986, and then declined significantly in 1987, despite the substantial increase in import volume, and increased in interim 1988 as compared with interim 1987. Report at A-67, Table 32. This pattern reflects the trends in media prices.

Increasing imports of 3.5 inch microdisks from Japan accounted for a significant percentage of apparent U.S. consumption. 79/ While U.S. producers' share of apparent consumption increased from 1986 to 1987, and again in interim 1988 as compared with interim 1987, the bulk of the decline in market penetration of imports from Japan was made up for by an increase in third country imports not subject to investigation. 80/ Imports of media for 3.5 inch microdisks from Japan as a percentage of apparent U.S. consumption increased from 1985 to 1986, and then declined in 1987, and again in interim 1988 as compared with interim 1987. 81/ U.S. producers' share of apparent consumption increased throughout the period of investigation. 82/ It is not surprising that the LTFV imports lost market share to the domestic producers after 1986, since the Japanese were the first to introduce the 3.5 inch microdisk in 1985. Despite the increases in U.S. producers' share of apparent consumption, LTFV imports from Japan have accounted for a dominant share of apparent U.S. consumption throughout the period of investigation.

Pricing information was requested on a quarterly basis for sales of media for 3.5 inch microdisks, and a monthly basis for sales of finished 3.5 inch microdisks. Price data were requested for sales of media,

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79/ Report at A-70, Table 33. In analyzing the record in this investigation, we have concentrated our attention on the first three years of the period of investigation. The petition in this case was filed in February 1988. Consequently, the pendency of the antidumping investigation is likely to have influenced events during interim 1988.

80/ Report at A-70, Table 33. Those third country imports are largely accounted for by imports of 3.5 inch microdisks finished in Mexico which incorporate U.S.-produced media, and imports of 3.5 inch microdisks finished in Canada which incorporate Japanese-produced media not subject to this investigation.

81/ Report at A-67, Table 32.

82/ Report at A-67, Table 32.

branded and unbranded microdisks to distributors, microdisks to mass merchandisers, and microdisks to OEMs. Price data were requested separately for single-sided DD 3.5 inch microdisks, double-sided DD 3.5 inch microdisks, and HD 3.5 inch microdisks. For media sales, pricing data were requested for DD and HD media for 3.5 inch microdisks. The Commission received pricing information from nineteen suppliers of 3.5 inch microdisks or media therefor. Not all suppliers provided information for all periods or for all categories of product requested.

During the period of investigation, U.S. producers and importers of Japanese media sold only DD media for 3.5 inch microdisks to unrelated purchasers. The price of media fell between 1986 and 1987, and stayed relatively level during 1987 and interim 1988. 83/ The prices for imported media were higher than the prices for U.S. produced media in each instance where comparisons could be made. 84/

For finished 3.5 inch microdisks, the price trends were similar, with weighted average unit values of single-sided DD, double-sided DD, and HD microdisks, both U.S.-finished and Japanese-finished declining from 1986 through late 1987, and becoming relatively stable through interim 1988. 85/ Prices declined for sales to all customers of imported Japanese-finished product. 86/ Prices for sales to all customers of U.S.-finished 3.5 inch microdisks also declined, by somewhat higher percentages

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83/ Report at A-77, Table 34.

84/ Report at A-77, Table 34.

85/ Report at A-83-A-85, Tables 42-44.

86/ Report at A-83-A-85, Tables 42-44. The magnitude of the price declines is confidential. We find these price declines to have been significant in most instances.

in all categories. 87/ Price comparisons based on weighted average unit values resulted in underselling in 41 percent of the comparisons possible. 88/ Instances of underselling were most frequent in the singled-sided DD sector of the market during 1986 and interim 1988; in the double-sided DD sector of the market, for sales of branded premium product to distributors, during 1986 and 1987; and in the HD sector of the market. 89/

The existence of underselling by the imports subject to investigation, which accounted for a very large share of apparent U.S. consumption, particularly in the early part of the period of investigation, indicates that prices of LTFV imports have contributed to the price declines in the market. While declining prices are common in a new industry, particularly an industry such as this in which the effects of economies of scale and learning curves are important, we do not believe that these factors fully account for the levels of price declines of the LTFV imports. 90/ Moreover, Japanese prices declined more rapidly than did Japanese producer costs. 91/ Declining prices for U.S. producers have contributed to the industry's inability to generate profits necessary for expansion, capital expenditures, and continuing research and

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87/ Report at A-83-A-85, Tables 42-44.

88/ Report at A-86.

89/ Report at A-86, Table 45.

90/ These price declines are a telling indicator of price pressure from LTFV imports in a rapidly expanding market experiencing shortages where domestic producers are operating at significant losses.

91/ Report at A-29.

development. 92/ These price declines are particularly troublesome in view of the sharply increasing demand for 3.5 inch microdisks and media therefor during the period of investigation. Even during 1987, when demand exploded and suppliers, both U.S. and Japanese, were unable to supply product in sufficient quantity, despite significant increases in shipments, resulting in substantial backlogs of orders, prices in general only stabilized late in the year, with slight increases in a few instances.

The double-sided DD sector of the market is currently the most important in terms of volume, and sales of branded product to non-OEM customers return higher margins to the supplier, while sales to OEMs provide the lowest margins. 93/ These two types of sales account for approximately equal shares of the U.S. market. Respondents have argued

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92/ In Section 1328(2)(C)(iii)(IV) of the Omnibus Trade and Competitiveness Act of 1988, Congress directed the Commission to consider, in addition to the other factors set forth in the statute, "the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product." Pub. L. 100-418, 102 Stat. 1107, 1205, to be codified at 19 U.S.C. § 1677(7)(C)(iii)(IV). Congress explained the purpose of the "derivative product" amendment as follows:

> To compete successfully in R&D and investment intensive industries, U.S. producers can remain in the forefront of technical progress only through maintaining the ability to develop new product innovations and the next generation of a product. Dumped or subsidized foreign sales in the U.S. market may impede or threaten to impede the ability of U.S. producers to devote the necessary resources to important product innovations and next generation development because of the long lead times from product design to actual production, business uncertainties, lost marketing opportunities, and erosion of profitability caused by such unfair trade practices.

S. Rep. No. 71, 100th Cong., 1st Sess. 117 (1987).

The 1988 Act is not technically applicable to this investigation, which was initiated prior to the effective date of the 1988 Act. However, we believe that this section of the 1988 Act effectively codifies prior Commission practice, and is a relevant consideration in our analysis.

93/ Report at A-19-A-21.

that the domestic industry is not qualified to supply 3.5 inch microdisks to major OEM customers, and that this failure to qualify both supports their argument that domestic product is inferior in quality to imported product, and accounts for the domestic industry's inability to achieve improved performance. However, in light of the information in the record, the concentration of some U.S. producers on supplying branded product to the distributor market appears reasonable to us. It appears that qualification with OEMs can be an expensive project for producers, requiring the allocation of resources to research and development to satisfy OEM customer requirements. Moreover, imports from Japan had captured much of the OEM market before U.S. producers had the opportunity to compete for such sales. 94/ In view of the declining prices and the precarious financial condition of the industry during the period of investigation, we do not find it surprising that the domestic industry did not concentrate its efforts in this area.

The quality issue is a difficult one in this investigation. Respondents have argued that the domestic industry suffers from low production yields and an inability to qualify product for sale to major OEMs, resulting in the poor financial performance exhibited. It appears from the information in the record that quality is an important factor in OEM purchase decisions. Most OEMs undertake an extensive testing program to ensure consistent high quality product, in many cases requiring standards higher than ANSI performance standards, and qualify product by manufacturing site. Domestic product is qualified with fewer OEMs than is

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94/ Underselling by domestic producers in the OEM market reflects efforts to capture some of this market from established Japanese producers.

the imported Japanese product. 95/ It is also true that the information provided on production yields indicates that while the domestic industry's yields have improved throughout the period of investigation, they are still, on average, lower than reported Japanese yields. 96/

While we do not discount the effects of these factors on the domestic industry's condition, we do not believe that they account completely for the injury suffered by the domestic industry. We are prohibited from weighing causes, 97/ and cannot say that the injury to the domestic industry is solely by reason of factors other than LTFV imports. 98/ We conclude that the LTFV imports are a cause of material injury to the domestic industry.

95/ Report at A-75.

96/ Report at A-29, Table 7. Production yields are a critical cost factor in the manufacture of both 3.5 inch microdisks and media therefor. Low quality output that either cannot be sold, or can only be sold in the low price end of the market, raises the unit cost of a finished microdisk. Report at A-28-A-29.

97/ Current law does not . . . contemplate that the effects from the subsidized (or LTFV) imports be weighed against the effects associated with other factors (e.g., the volume and prices of nonsubsidized imports, contraction in demand or changes in patterns of consumption, trade restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry) which may be contributing to overall injury to an industry.
S. Rep. No. 249, 96th Cong., 1st Sess. 57, 74 (1979). See also H.R. Rep. No. 317, 96th Cong., 1st Sess. 47 (1979).

98/ The Commission is directed to determine whether LTFV imports are a contributing cause of material injury to the domestic industry. S. Rep. No. 249, 96th Cong., 1st Sess. 74 (1979). See British Steel Corp. v. United States, 8 CIT 86, 593 F. Supp. 405 (1984).

DISSENTING VIEWS OF COMMISSIONER RONALD A. CASS

3.5" Microdisks and Media Therefor from Japan
Inv. No. 731-TA-389
(Final)

I dissent from the Commission's affirmative determination in this investigation. For the reasons explained below, I find that there is no domestic industry that is materially injured, or threatened with such injury, by reason of the less than fair value ("LTFV") imports that are the subject of this investigation. I also find that these imports have not materially retarded the establishment of a domestic industry.

I. DOMESTIC LIKE PRODUCT AND DOMESTIC INDUSTRY

A. Like Products: 3.5" Microdisks and Media

At the outset, before we can determine whether the imports at issue have caused material injury to a domestic industry, the Commission must define the domestic industry to be examined. Title VII of the Tariff Act of 1930 directs us to look at imports' effects on the domestic firms producing a product "like" or most similar to the imports under investigation.1/

In this investigation, we have been presented with two very difficult questions relating to the definition of the domestic like product and domestic industry. Petitioner urged us to find a single like product consisting of all types of finished

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1/ See 19 U.S.C. §§ 1677(10).

microdisks and media used in the production of such disks.2/ Respondents contended that there are four separate like products: (1) double density microdisks; (2) media used in the production of double density microdisks; (3) high density microdisks; and (4) media used in the production of high density microdisks.3/ Accordingly, we must decide whether high density microdisks and double density microdisks are separate like products, and must also decide whether finished microdisks and the media used to produce such disks are separate like products. On the basis of the information that has been presented to us in this final investigation, I have decided that the answer to both of these questions is affirmative, and have, therefore, adopted the "four like product" definition suggested by Respondents. Accordingly, I have determined that there are four domestic industries for purposes of analyzing the question of causation of material injury by reason of the subject less than fair value ("LTFV") imports; these four industries are the industries that produce each of the four like products.

Although my ultimate disposition of this investigation would have been the same if I used a single like product, as Petitioner proposed, it nevertheless seems appropriate to provide a detailed

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2/ See Prehearing Brief of Verbatim Corporation ("Petitioner's Prehearing Brief") at 3.

3/ See Prehearing Brief on Behalf of Sony Corporation; Hitachi Maxell, Ltd.; Fuji Photo Film Company, Ltd. and Fuji Photo Film USA; TDK Corporation; and Kao Corporation and Kao-Didak, Ltd. ("Respondents' Prehearing Brief") at 22.

explanation of the reasoning that shaped my conclusion on the like product issues in this case. The parties devoted a great deal of time to the like product issues, and I believe that they are entitled to such an explanation for that reason alone. Furthermore, questions similar to those raised in this case are likely to arise in future Title VII investigations; an exposition of our analysis may therefore be of some benefit to others in presenting their cases to the Commission. Finally, the like product definition has important implications for the actions that should be taken by the Department of Commerce, a matter taken up below.

When we conducted our preliminary investigation in this case, I explained at length how I generally approach like product questions.4/ I stated, inter alia, that I employ the criteria traditionally used by the Commission in considering like product questions. These criteria involve an examination of five factors: (1) product characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer or producer perceptions of the relevant articles; and (5) common manufacturing equipment, facilities and production employees.5/ In addition, although the Commission has not expressly

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4/ See 3.5" Microdisks and Media Therefor from Japan, USITC Pub. 2076, Inv. No. 731-TA-389 (Preliminary) 38-49 (April 1988) (Additional Views of Commissioner Cass) ("Microdisks Preliminary").

5/ See, e.g., Fabric and Expanded Neoprene Laminate from Taiwan, USITC Pub. 2032, Inv. No. 731-TA-371 (Final) at 4 & n. 5 (Nov. 1987).

incorporated comparison of prices as one of the factors examined in its like-product determinations, it has often considered the similarity (or disparity) of prices for imports and potential like domestic products.6/

These considerations traditionally examined by the Commission together describe the markets in which products compete for customers or for factors of production. The Commission's effort has been to assure that its investigation focuses on domestic firms that compete in the same market as one another and for the same consumers as the imports subject to investigation. While we do not make arbitrary divisions among products or firms, the Commission usually has recognized that this statutory mandate -- to assess the LTFV imports' effects on the industry producing the product that is "like" or most similar to these imports -- suggests that we look for relatively narrow and highly homogenous markets in delineating the scope of our inquiry into domestic markets.

In the preliminary investigation, I found only two like products -- high density microdisks and media therefor, and double density microdisks and media therefor -- in determining whether there was a reasonable indication of material injury to domestic industry. In other words, I disagreed with the Commission's determination that double density microdisks and high density microdisks constituted a single like product, but

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6/ See, e.g., Asociacion Columbiana de Exportadores de Flores v. United States, 693 F. Supp. 1165, 1167 (Ct. Int'l Trade 1987).

concurred with the Commission's conclusion that coated media and finished microdisks were not separate like products. At the same time, however, I noted that this judgment, especially as to separation of media from finished disks, was by no means free from question.7/

In this final investigation, we have been provided with new information bearing upon the question whether media is a like product separate from finished microdisks. We have also been provided with new information relevant to the question whether high density microdisks constitute a like product separate from double density disks. I have reconsidered the like product issue in light of this information and have, for reasons explained below, reached a different conclusion in this investigation respecting the treatment of media. However, I have once again concluded that high density disks and double density disks are separate like products, although I believe that the new information that has been presented to us makes this a somewhat closer call than it was in the preliminary investigation.

1. Media and Finished Microdisks

The Commission has long recognized that special treatment is required in analyzing like product questions when the issue is whether a finished product and the components included in that product comprise a single like product. In such cases, the Commission has considered various factors in addition to those

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7/ See, e.g., Microdisks Preliminary, supra, at 56.

normally considered in analyzing like product questions, including, inter alia, whether the component is dedicated to use in the finished product, the amount of further processing necessary to convert the component into the finished product, the cost and value added of such processing, whether the article at an earlier stage of production embodies or imparts to the finished product an essential characteristic or function, whether there are independent markets for the finished and unfinished products, and the degree of interchangeability of the unfinished articles at different stages of production.8/

As I indicated in the preliminary investigation, I believe that in many cases these criteria are useful if they are used primarily with a view toward assessing the degree of independence of the markets for the finished product and the markets for components of that product.9/ If used in this manner, these criteria help achieve the fundamental purpose of the like product definition, as evidenced in the legislative history of Title VII: they assist us in identifying the segment or segments of the domestic economy that are most likely to be affected by the

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8/ See, e.g., Certain Forged Steel Crankshafts from the Republic of Germany and the United Kingdom, USITC Pub. 2014, Inv. Nos. 731-TA-351 and 353 (Final) (Sept. 1987).

9/ Microdisks Preliminary, supra, at 55-56. In cases where there is total congruence between the firms that make the finished product and the components, this typically will not be a relevant issue. See Certain Telephone Systems and Subassemblies Thereof from Japan, Korea and Taiwan, USITC Pub. 2156, Inv. Nos. 731-TA-426-428 (Preliminary) 64-67 (Feb. 1989) (Additional Views of Commissioner Cass) ("Phone Systems").

unfair import practices on which Title VII investigations are predicated.10/

In this investigation, most of the criteria traditionally examined by the Commission suggest that media and finished disks should be treated as separate like products. Media and finished microdisks have different channels of distribution,11/ require different production technologies,12/ and are purchased by different consumers (coated media by firms that produce finished microdisks and finished disks by the sellers and end users of such disks).13/ Furthermore, the finishing process is costly and adds substantial value to the finished product.14/

All of these factors are consistent with other compelling evidence that was brought before the Commission in this final investigation indicating that the producers of media and the producers of finished microdisks are affected by the subject

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10/ See, e.g., S. Rep. No. 249, 96th Cong., 1st Sess. 82-83 (1979); Digital Readout Systems and Subassemblies Thereof from Japan, USITC Pub. 2150, Inv. No. 731-TA-390 (Final) 61-62 (Jan. 1989) (Concurring and Dissenting Views of Commissioner Cass) ("Digital Readout Systems").

11/ Report at A-17-A-19.

12/ Id. at A-8-A-10.

13/ Id. at A-17-A-21.

14/ The parties apparently agree on this point, although they do not agree on the precise value that is added in the finishing process. Petitioner asserts that media accounts for about 35% of the value of its finished disk. Petitioner's Prehearing Brief at 26. Respondents argue that media represents only 10 to 20 percent of the value of a finished disk. Respondents' Prehearing Brief at 31-32.

imports in very different ways. Specifically, as discussed below, the Commission has been presented with evidence that non-integrated domestic purchasers of media, i.e., "converters" of finished microdisks, overwhelmingly view domestically produced media as a poor quality, unreliable product.15/ Accordingly, these firms rely heavily, if not exclusively, upon imported media, principally media imported from Japan. The potential effects of the subject imports on these firms is, therefore, notably different than the effects that might be felt by domestic producers of media, such as Petitioner. For these reasons, I believe that treatment of media as a separate like product is the approach that is most consistent with the command of Title VII that we attempt to delineate with as much precision as possible the domestic industries that are most affected by unfairly traded imports.

2. Double Density and High Density Microdisks

In the preliminary investigation, I concluded, for a number of reasons, that double density microdisks and high density microdisks constitute separate like products.16/ In this investigation, I have reached the same conclusion, even though we have been presented with certain new evidence that suggests a

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15/ See, e.g., Report at A-21, n. 2; Prehearing and Posthearing Briefs of Nashua Corporation; Transcript of 1/17/89 Hearing ("Tr.") at 239-242.

16/ Microdisks Preliminary, supra, at 50-53.

greater degree of technical interchangeability between the two products than was evident in the preliminary investigation.

In the preliminary investigation, I concluded that double density and high density were like products because, in my view, the record evidence indicated that the consumer markets for these products were largely separate.17/ I noted, among other things, that high density disks cannot, as a practical matter, be used reliably or efficiently in double density drives.18/ The record in this proceeding reinforces my conclusion on that score. While high density disks can be used in a double density drive if formatted for such a drive, this process can cause errors in data transmission.19/ In addition, given the substantially higher cost of high density disks, it is most unlikely that any significant number of consumers would purchase a high density microdisk and format it for a double density drive, thereby using only half of the disk's data storage capability and thereby losing the benefit of the principal perceived advantage of the product.20/

In the preliminary investigation, I also noted that the distinct uses of microdisks were borne out by evidence respecting

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17/ Id. at 51.

18/ Id. at 52.

19/ Report at A-6, n. 1.

20/ Id.

the manner in which consumers' purchasing decisions are made.21/ The facts relevant to my conclusion in this regard also have not changed. The nature of the products in question virtually precludes the possibility that consumer's decisions concerning the purchase of a particular type of microdisk would be significantly affected by changes in the relative prices of the two types of disk. The cost of a microdisk is very small relative to the cost of acquiring a disk drive.22/ Accordingly, in the near term, end users would be quite unlikely to adjust to a change in the relative prices of the two types of disk by purchasing a new disk drive to enable the end user to use the type of disk that has experienced a relative decline in price. As I indicate below in Section II of these Views, the most likely consumer reaction to changes in the price of disks of the density that they are employing is a change in the number of disks purchased and in the nature of their use.

Finally, I note that the production technologies involved in the manufacture of high density microdisks differ in important respects from the technologies used in producing double density disks. For example, the coercivity of high density disks is significantly greater than that of double density disks.23/

21/ Microdisks Preliminary, supra, at 53.

22/ See USITC Memorandum EC-M-083 (March 13, 1989) from the Office of Economics ("OE Memorandum") at 20.

23/ Report at A-5. Coercivity is a measure of magnetic energy. Id. at A-3.

Furthermore, in order to achieve satisfactory resolution, high density disks are made with a coating thickness only one-half that of double density disks.24/ These differences in technology are reflected in the fact that only one domestic firm, [*], has developed the capability to produce high density disks in commercial quantities. Moreover, in order to develop this capability, [*], which had already been a producer of double density disks for some time, was required to make substantial research and development outlays.25/

The only significant new data presented to us in this final investigation that bears in any way on the question whether high density disks should be treated as a like product separate from double density disks is information suggesting that the newer generation high density drive computers are able to write on, as well as read, double density disks.26/ This suggests that there is greater "backward compatibility" between the two types of disks than was apparent in the preliminary investigation. Still, I am not persuaded that such backward compatibility is a sufficient basis for a finding that double density microdisks and high density disks are a single like product. The clear limits

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24/ See id. at A-3, A-5.

25/ See id. at A-44.

26/ See Petitioner's Prehearing Brief at 7-9. In the preliminary investigation, it appeared that most high density drives could read, but could not write on, double density disks. See Microdisk Preliminary, supra, at 52, n. 44.

on the ability of consumers to substitute one product for another suggests to me that, while the two types of disks are interchangeable to a limited extent, consumer markets for the two types of disks are nevertheless to a large degree independent.

B. Standing

The like product determination that I have made in this case raises squarely the question whether Petitioner Verbatim has standing to bring an antidumping petition with respect to double density microdisks and high density microdisks and media. In March 1986, long before it filed the Petition, Verbatim ceased producing finished microdisks in the United States.27/ Although Verbatim is about to commence commercial production of finished disks at a new facility in North Carolina,28/ at all times relevant for present purposes, Verbatim was not a domestic producer of finished disks.

Under Title VII, antidumping and countervailing duty cases must be brought "on behalf of an industry".29/ This requirement has been interpreted to mean that a Petition must be supported by producers representing a majority of the production of the domestic like product.30/ As I have stated in other opinions, given that the authority for Title VII investigations is

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27/ Report at A-12.

28/ Id.

29/ 19 U.S.C. §§ 1671a(b)(1) and 1673a(b)(1).

30/ See Gilmore Steel Corp. v. United States, 585 F. Supp. 670 (Ct. Int'l Trade 1984).

bifurcated between the Commission and the Department of Commerce, that Commerce has the authority to self-initiate investigations (suggesting authority to determine which investigations should be initiated, regardless of the stance taken by domestic producers), and that the Court of International Trade has held that Commerce has authority to determine Title VII standing questions, conflicts between the two agencies could arise if the Commission were also to render standing determinations.31/ For this reason, I have concluded that it may be inappropriate for the Commission to pass on standing questions in cases where Commerce has already considered and resolved the issue.32/

In this case, in its final investigation, Commerce reaffirmed its preliminary determination that Verbatim has the requisite standing.33/ However, Commerce explicitly relied on the Commission's decision in our preliminary investigation that one domestic like product was at issue.34/ Commerce further has expressly indicated that it will reconsider this issue if the Commission should determine that there is more than one like product.35/ I have in fact determined that there is more than

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31/ See Certain Electrical Conductor Aluminum Redraw Rod from Venezuela, USITC Pub. 2103, Inv. Nos. 701-TA-287 and 731-TA-378 (Final) 20-22 (Aug. 1988) (Additional Views of Commissioner Cass) ("Aluminum Rod").

32/ Id. at 22.

33/ See 54 Fed. Reg. 6433, 6435 (February 10, 1989).

34/ Id.

35/ Id.

one like product in this case. Of these four like products, only one is made by Petitioner. The investigations of the products not made by Petitioner do not seem to be appropriately initiated. Moreover, Commerce did not separately determine that any LTFV sales of imports corresponding to the domestic like product actually made by Petitioner -- i.e., media used in the production of double density microdisks -- were made during the period covered by Commerce's investigation.36/ This brings the entire investigation into question.

Consistent with the position that I have taken in other cases,37/ I do not believe that it would be appropriate for us to rule on the standing issue here. But I strongly urge the Commerce Department to reconsider the standing issue in light of the clear evidence that Verbatim was not at any relevant time a domestic producer of finished microdisks.

C. Related Parties

In its determination in the preliminary investigation in this case, the Commission concluded that it would be inappropriate for the Commission to exclude any domestic firms from the domestic industry under the related parties provision of Title VII.38/ In reaching this conclusion, we noted that the

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36/ 54 Fed. Reg. 6433, 6437 (February 10, 1989).

37/ See Aluminum Rod, cited, supra, at n. 31.

38/ See 3.5 Microdisks and Media Therefor from Japan, USITC Pub. 2076, Inv. No, 731-TA-389 (Preliminary) 18-21 (Views of the Commission).

related parties provision is intended to avoid any distortion in the data pertaining to the domestic industry that might result by including in the industry firms whose operations were shielded from the effects of unfairly traded imports.39/ In light of the fact that nearly every domestic producer imported media or finished microdisks, we determined that the purpose of the related parties provision would not be served by excluding any domestic firm as a related party.40/ The record evidence compiled in this final investigation contains no evidence that suggests to me that it would be appropriate for us to do so.

Indeed, I believe that the record before us suggests that it would be especially inappropriate to use the related parties doctrine to redefine the domestic industry in this case. Many of the firms that produce microdisks (or media) in the United States cannot be characterized as either fully "domestic" or fully "foreign" producers. The production of microdisks has increasingly become a globalized process involving multiple cross-border shipments of the components that go into the production of the finished product.41/ Such globalized production has also become increasingly common in many of the other industries that are the focus of Title VII cases that have

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39/ Id. at 19.

40/ Id. at 19-20.

41/ See Report at A-11-A-14.

recently come before us.42/ This evolution of the production process is a phenomenon that does not appear to have been contemplated when the related parties doctrine came into being. In the absence of new direction from Congress as to the manner in which investigations involving globalized production are to be treated, I believe that we have acted appropriately in this case in carefully considering the implications of such production for the application of existing legal standards such as the related parties doctrine.

II. INJURY BY REASON OF LTFV IMPORTS

A. Framework for Analysis: The "Unitary" or "Comparative Approach"

In Title VII cases, in determining whether imports sold at less than fair value have caused material injury to a domestic industry, I have employed an approach that is often referred to as the "unitary" or "comparative" approach. This approach is "comparative" in that it compares the domestic industry's actual performance with what the industry's performance would have been had there been no LTFV imports.43/ It is "unitary" because, unlike the approach used by certain of my colleagues, it does not conduct an independent inquiry into the existence of "material injury" defined simply as a change in the condition of the

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42/ See, e.g., Internal Combustion Engine Forklift Trucks from Japan, USITC Pub. 2082, Inv. No. 731-TA-377 (Final) (May 1988) (Additional Views of Commissioner Cass) ("Forklift Trucks").

43/ See, e.g., Forklift Trucks, supra, at 113-118; Phone Systems, supra, at 64-67; Microdisks Preliminary, cited, supra, at n. 3.

domestic industry, divorced from the effects of LTFV imports.44/ My approach instead assesses directly the effects of selling particular volumes of given imports in the United States at less than fair value.

In this investigation, as in certain other cases recently before us,45/ we are presented with a factual record that highlights the practical, as well as legal, advantages of this approach. There is evidence before us that, if viewed in isolation, might be construed as indicating that the domestic industries have been experiencing difficulties, which ungrammatically might be called "injury". However, we have also been presented with evidence suggesting that the performance of the industries in question is roughly in line with what one would expect for businesses whose products embody new technologies, such as those involved here. Furthermore, we have been presented with evidence that factors other than the imports that are the subject of this investigation account for the bulk of any problems that the domestic industries have encountered. All of this evidence is described and discussed at length below.

The information indicating that harm has been caused to the domestic industry by factors other than LTFV imports certainly is

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44/ For reasons that I have explained elsewhere, I do not believe that such an inquiry is necessary or appropriate under Title VII. See, e.g., Digital Readout Systems, supra, at 95-117.

45/ See, e.g., Certain All-Terrain Vehicles from Japan, USITC Pub. 2163, Inv. No. 731-TA-388 (Final) (Mar. 1989) (Additional Views of Commissioner Cass) ("All-Terrain Vehicles").

relevant to our determination.46/ We rightly may, and in this case have, taken account of it. This information, however, standing alone, cannot tell us whether the subject imports, considered separately from other causes of injury, have caused material injury to the domestic industry. Even if the evidence clearly suggests that the performance of the domestic industry is normal if viewed in context, or suggests that other factors accounted for the bulk of any problems experienced by the domestic industry, our inquiry does not end there. Under Title VII, we are required by the plain language of the statute to ascertain whether dumping of LTFV imports accounted for some quantum of injury to the industry that is material. This is the reason that the Commission does not compare the harm from different causes in Title VII cases to determine whether factors other than sales of LTFV imports have caused injury that exceeds the harm attributable to the subject imports. In other words, in the terminology commonly used to express this concept, we do not "weigh causes of injury".47/ In short, it is essential that we undertake an independent assessment of the actual effects of dumping.

46/ See S. Rep. No. 249, 96th Cong., 2d Sess. 74-75 (1979); H. Rep. No. 317, 96th Cong., 1st Sess. 46-47 (1979).

47/ See, e.g., Hercules, Inc. v. United States, 673 F. Supp. 454, 481 (Ct. Int'l Trade 1987); S. Rep. No. 249, 96th Cong., 1st Sess. 57 (1979); Certain Granite from Italy and Spain, USITC Pub. 2110, Inv. Nos. 701-TA-289 and 731-TA-381 (Final) 22 (Aug. 1988).

Although the statutory text does not describe all the aspects of this assessment, the factors that are listed in the statute, as well as the order in which they are listed, offer important guidance concerning the nature of the inquiry that must be carried out. Title VII directs the Commission, in assessing the causation of injury by dumped imports, to

> "consider, among other factors --
> (i) the volume of imports of the merchandise which is the subject of the investigation,
> (ii) the effect of imports of that merchandise on prices in the United States for like products, and
> (iii) the impact of imports of such merchandise on domestic producers of like products . . . ."48/

The statute goes on to spell out these three factors with greater particularity.

The statute therefore suggests that Congress contemplated that the Commission would consider three related questions in evaluating the possible existence of injury by reason of LTFV imports. First, we are to examine the volumes of imports of the merchandise under investigation and must, in the process, assess the extent to which import volumes changed as a result of dumping. The change in import volumes will be closely related to, and in large part a function of, changes in the prices of the imports that occurred as a result of dumping. Second, we must attempt to determine how the subject imports affected prices, and concomitantly sales, of the domestic like product. Finally, we must evaluate the extent to which these changes in demand for the

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48/ See 19 U.S.C. § 1677(7)(B).

domestic like product caused by LTFV imports affected such factors as return on investment and the level of employment and employment compensation in the domestic industry.49/ The three-part inquiry into the causation of material injury that I conduct in Title VII cases is designed to facilitate such an assessment.50/

The recently enacted Omnibus Trade and Competitiveness Act of 1988 ("1988 Trade Act") has further directed that the Commission explicitly consider and state its conclusions on the factors that form the basis for each of these three inquiries.51/

49/ Of course, the Commission must also evaluate whether these effects are "material" within the meaning of the statute. This assessment is, in some sense, a fourth part of our inquiry. See Digital Readout Systems, supra, at 117-19.

50/ As I have stated elsewhere, although analysis of the effects of dumped imports on prices and sales of the domestic like product is central to our decision on the degree of injury caused by those imports, I do not believe that an analysis of trends in prices and sales of the domestic like product, viewed either in isolation or in comparison to trends in import volumes, can of itself form the basis for any meaningful conclusions on this subject. See, e.g., Nitrile Rubber from Japan, USITC Pub. 2090, Inv. No. 731-TA-384 (Final) (June 1988) (Additional Views of Commissioner Cass).

51/ See Pub. L. No. 100-418, § 1328(1), 102 Stat. 1107, 1205 (to be codified as 19 U.S.C. § 1677(7)(B)(ii)). The 1988 Trade Act is not technically applicable to this investigation, which was initiated before the passage of the Act; however, I believe that these directives are nevertheless relevant in that they are consistent with my understanding of the Commission's long-standing obligation under Title VII.

I have explained in detail in other opinions how the three-part inquiry that I employ considers the specific factors listed in the statute as well as certain other economic factors relevant to an assessment of the impact of unfairly traded imports on the domestic industry producing the like product. See, e.g, New Steel Rails from Canada, USITC Pub. 2135, Inv. Nos. 731-TA-422

Moreover, the Act instructs the Commission, in making these inquiries, to consider the particular dynamics of the industries and markets.52/ Each of the three inquiries outlined above are undertaken in light of these directions in the succeeding sections of these Views.

B. Injury by Reason of LTFV Imports: 3.5" Microdisks and Media

1. Volumes and Prices of LTFV Imports

Over the period covered by our investigation, the volume of the subject imports increased substantially. In 1985, slightly less than [*] units of media were imported from Japan.53/ Imports of media fell by almost one-half in 1986, before rising to approximately [*] units in 1987 and over [*] units in the first nine months of 1988. Imports of finished microdisks from Japan similarly rose over the period covered by the Commission's investigation. In 1985, roughly [*]

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and 701-TA-297 (Preliminary) 35-37 (Nov. 1988) (Additional Views of Commissioner Cass); Generic Cephalexin Capsules from Canada, USITC Pub. 2142, Inv. No. 731-TA-423 (Preliminary) 56-58 (Dec. 1988) (Dissenting Views of Commissioner Cass).

52/ See new Section 771(C)(iii)(IV) of the statute (to be codified at 19 U.S.C. § 1677(C)(iii)(IV)). See also S. Rep. No. 71, 100th Cong., 1st Sess. 117 (1987). For the reasons stated in n. 51, supra, I believe that this provision is relevant to this investigation even though the 1988 Trade Act is not technically applicable to this proceeding.

53/ Report at A-58, Table 30. The data for media imports are for both types of media: media used in the production of double density microdisks and media used in the production of high density disks. We do not have separate import data for the two types of media used in finished microdisks.

double density microdisks were imported from Japan.54/ The volume of imports rose consistently in subsequent years, to a high of almost [* *] finished disks in the first nine months of 1988.55/ No imports of high density disks were reported until 1986, when [* *] disks were imported from Japan.56/ Imports of high density disks rose to a level in excess of [* *] units in the first nine months of 1988.57/

The volumes of the LTFV imports are closely related to the prices at which those imports are sold.58/ The record evidence in this investigation indicates that dumping resulted in a significant decrease in the prices of the subject imports, but that these decreases were, nevertheless, far less than the full amount of the dumping margins calculated by the Commerce Department. Commerce determined that sales of the subject imports by each of the Japanese Respondents were made at prices reflecting sizable margins of dumping. For Respondents Fuji and Sony, the dumping margins were 50.52% and 51%, respectively.59/ A substantially lower margin of 27.73% margin was calculated for

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54/ Id. at A-59, Table 31.

55/ Id.

56/ Id.

57/ Id.

58/ See, e.g, Digital Readout Systems, supra, at 25-26.

59/ Report at A-2.

Respondent Hitachi.60/ The weighted average dumping margin assigned to all other Japanese producers, based upon sales by Respondents Fuji, Hitachi and Sony, was 42.95%.61/

For all three Respondents, the Department of Commerce calculated a single dumping margin that covers sales of both high density and double density microdisks as well as media used in the production of both products. Accordingly, in evaluating the effects of dumping on the prices of the four domestic like products, I have used these margins as the best information available in accordance with the statutory command generally applicable to Title VII proceedings.62/

Even where there are dumping margins of the magnitude presented in this investigation, it is not necessarily the case that the price of the subject imports will have declined by the full amount of the margins, or even by a figure near that amount. The fall in the price of LTFV imports that accompanies dumping will usually be less than the full amount of the dumping margin.63/ Generally, dumping causes a decrease in the price of the dumped product by a fraction of the dumping margin roughly comparable to the share of the sales at issue in determining the existence of dumping that are made in the foreign producer's home

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60/ Id.

61/ Id.

62/ See 19 U.S.C. § 1677e(b).

63/ See, e.g., Digital Readout Systems, supra, at 125; All-Terrain Vehicles, supra, at 53-54.

market. That is, the price decline will be a fraction of the dumping margin that reflects the ratio of the sales made by the subject producers in their home market as a proportion of their combined U.S. and home market sales.64/

In this investigation, during 1987 and the first nine months of 1988, when Commerce found that dumping was occurring, U.S. sales of low density microdisks by each of the subject Japanese producers in the United States substantially outweighed sales by those producers in their home market, Japan.65/ Accordingly, for each of the subject Japanese producers, dumping caused a decline in the price of those products that was only a small percentage of the relevant dumping margin.66/

During the same periods -- 1987 and the first nine months of 1988 -- sales of high density disks were, on the whole, more [* *] between the U.S. and home markets, although sales by certain producers, notably [* *], were concentrated heavily

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64/ See, e.g., Digital Readout Systems, supra, at 125; Microdisks Preliminary, supra, at 82. In cases where such differential pricing is the basis for a dumping finding, this will generally be the case, irrespective of the motivation for dumping. For a thorough explication of this subject, see USITC Memorandum EC-L-149 (May 10, 1988) from the Office of Economics. In cases where a dumping finding is predicated upon a Commerce Department finding of pricing below the foreign producer's cost of production, a different analysis might be appropriate. See All-Terrain Vehicles, supra, at 57-62. However, that situation is not presented here. Accordingly, I need not address here the analytical issues that such a case would present.

65/ See Report at A-53, Table 28, and data contained in Foreign Producers' Responses to Commission's Request for Data.

66/ The precise percentage would vary from producer to producer.

in the United States.67/ The same was also true for sales of media.68/69/ Thus, the record evidence suggests that dumping caused the price of the subject imports of media and high density microdisks to decline by a somewhat greater percentage of the dumping margin than was the case with double density microdisks.70/ For all of these products, however, the decline in prices was, in percentage terms, only a fraction of the dumping margin.71/

The evidence indicates that dumping resulted in some increased sales of the subject imports. However, this increase was not nearly as great as one might expect based only on the

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67/ See Report at A-53, Table 28, and data set forth in Foreign Producers' Responses to Commission's Request for Data.

68/ See Report at A-53, Table 28, and data set forth in Foreign Producers' Responses to Commission's Request for Data.

69/ The available data on domestic and foreign production of media are not broken down between media used for double density microdisks and media used for high density microdisks. Accordingly, it is not possible to distinguish the effects of dumping on the price of subject media used to produce double density disks from the effects of dumping on prices of media used to make high density disks. There is no record basis for concluding that dumping affected the prices of double density media and high density media in different ways. I have therefore used the best available information -- i.e., the data available for all media -- in assessing the effects of dumping on prices of the subject imported media.

70/ The precise price decline would have varied from producer to producer, with the price decline being somewhat greater, in each case, for those producers that made a relatively higher percentage of their sales in their home market.

71/ The maximum price decreases were 3% for double density disks, 7% for high density disks and 20% for media.

extent to which the price of these goods decreased consequent to dumping. The extent to which decreases in subject import prices cause increases in subject import sales is, in large measure, a function of the degree to which the imported goods are substitutable for the domestically produced product. For reasons explained in more detail below, it is clear that the substitutability of each of the domestic like products for the subject imports to which it corresponds was quite limited.

2. Prices and Sales of the Domestic Like Product

In this investigation, the record evidence indicates that the changes in the demand for the subject imports that resulted from dumping, as discussed above, did not have significant adverse effects on prices and sales of any of the domestic like products produced by the four domestic industries.72/ The effects of dumping on prices and sales of each of the domestic like products are discussed separately below.

72/ I find that all four of these industries are established; accordingly, I do not find that this is a case where the establishment of a domestic industry is materially retarded. The only one of the four industries that might be characterized as relatively new is the domestic industry producing high density microdisks. I believe that the production levels and financial performance attained by [* * * * * *] sufficiently demonstrate that this industry is also established. See discussion, infra, in Sections II.B.2 and II.C of these Views.

a. Media 73/

Over the period covered by our investigation, prices of media sold in the United States generally declined,74/ while domestic production of media rose dramatically -- more than [*] -- over the same period.75/ Throughout this period, imported Japanese media was consistently sold at a higher price than the domestically produced product.76/ However, I do not believe that these data, standing alone, form an adequate basis for any conclusions about the effect of imports of media from Japan on prices and sales of the domestic like product.

Respondents argued that the declines in price that took place are attributable in large measure to "learning curve" effects common in industries that make products embodying a new technology.77/ Although they strongly take issue with Respondents' assertion that such effects are the complete

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73/ Because the only data on domestic production of media available to us is, without notable exception, data pertaining to all media used in the production of microdisks, rather than to media used in the production in double or high density disks, I have examined the effects of the subject imports on all media, in accordance with the direction of Title VII. See 19 U.S.C. § 1677(4)(D).

74/ See Report at A-68, Table 34.

75/ Id. at A-31, Table 8.

76/ See id. at A-68, Table 34.

77/ See, e.g., Posthearing Brief on Behalf of Sony Corporation; Hitachi Maxell, Ltd.; Fuji Photo Film Company, Ltd. and Fuji Photo Film USA; TDK Corporation; and Kao Corporation and Kao-Didak, Ltd. ("Respondents' Posthearing Brief") at Answers to Questions by Respondents' Economic Consultants ("Respondents' Economic Submission") at Part II.

explanation for the price declines that took place in the domestic market, Petitioner appears to acknowledge that such effects may have contributed to a price decline of some magnitude.78/ Accordingly, in this investigation, it seems clear that evidence of price declines, viewed in isolation, does not form an adequate basis for drawing inferences respecting the effect of the subject imports on prices of the domestic like product. Similarly, given the fact that demand for microdisks has been growing exponentially, evidence of increased domestic production does not resolve the question whether the subject imports caused a decline in sales by the domestic industry.

Ultimately, an assessment of the effects of subject imports on domestic prices and sales depends on understanding the markets for the domestic and imported products and especially consumers' reactions to these products. In particular, the effect of imports on the domestic like product's prices and sales is critically affected by the evidence bearing on three issues: the share of the domestic market held by the subject imports; the responsiveness of domestic demand to changes in the prices of the relevant products (i.e., the aggregate product category that includes both the imported and the domestic like product); and

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78/ See Petitioner's Posthearing Brief at Exhibit 1.

the substitutability of the domestic like product for the subject imports.79/ Each of these three issues is examined in turn.

The share of the domestic market for media held by subject imports of media, while significant, is notably smaller than the market penetration of imported Japanese finished microdisks. In 1987 and the first nine months of 1988, open market sales of media imported from Japan accounted for over [*]% of all domestic open market sales of media.80/ However, because open market sales of media were equal to only approximately [*] of all media consumed domestically 81/ and because there was, as far as the record reveals, essentially no captive consumption of Japanese media during the relevant period,82/ actual market penetration of subject imports of media in the

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79/ See, e.g., Microdisks Preliminary, supra, at 83-86; Certain Bimetallic Cylinders from Japan, USITC Pub. 2080, Inv. No. 731-TA-383 (Final) 44-47 (May 1988). The responsiveness of supply of the domestic like product to changes in the price of that product is another variable relevant in assessing the impact of subject imports on domestic prices and sales, but it is significant primarily in determining whether the impact of subject imports will fall most heavily on domestic prices, or will instead principally affect sales of the domestic like product. See Microdisks Preliminary, supra, at 85-86.

80/ Report at A-58, Table 32.

81/ See id. at A-58.

82/ The only captive consumption that may have occurred would have taken place in the latter part of 1988 after Sentinel Technologies was acquired by Kao Corp. of America and a new domestic facility was opened by a unit of Hitachi Maxell, Ltd. See id. at A-14.

domestic marketplace was only a small fraction of the open-market share.83/

Domestic demand for media (both imported and domestic) is relatively unresponsive to changes in the price of media.84/ Demand for media is derived totally from the demand for microdisks and there are no known substitutes for media in the manufacture of finished microdisks.85/ As discussed below, demand for microdisks, in turn, plainly is not highly responsive to changes in the price of that product.86/ Nonetheless, for reasons explained in more detail in the succeeding section of these Views,87/ I believe that demand for microdisks, while not highly sensitive to price, is at least reasonably responsive to changes in the prices of such disks. Accordingly, the record evidence on this issue weighs only marginally in favor of Petitioner.

83/ In that context, it is important to keep in mind that captive production and consumption must be considered in assessing the impact of subject imports on prices and sales of the domestic like product. See 64K Dynamic Random Access Memory Components from Japan, USITC Pub. 1862, Inv. No. 731-TA-270 (Final) 11 (June 1986). To note the obvious, captive domestic production of media affects prices and sales of media sold on the open market because such production can and will be sold on the open market if the open market price makes such sales an attractive alternative to captive use.

84/ OE Memorandum at 19; Respondents' Economic Submission at Part III at 10-12.

85/ OE Memorandum at 19.

86/ See discussion, infra, at 72-74.

87/ Id.

The record evidence concerning the third and final issue -- the substitutability of the domestic like product for the subject imports -- strongly indicates that imports of Japanese media did not significantly affect prices or sales of domestically made media. In this investigation, the Commission has been presented with substantial evidence that non-integrated domestic purchasers of media, i.e., "converters" of finished microdisks, overwhelmingly believe that domestically produced media, particularly Petitioner's media, is a poor quality, unreliable product, and therefore simply will not purchase it.88/ Although Petitioner argued that domestic and imported media are quite similar, the bulk of the evidence on record indicates that domestically made media and imported Japanese media are not close substitutes. This evidence, together with other evidence respecting the markers for these products, persuades me that imports of Japanese media at LTFV did not have any significant impact on prices and sales of the domestic like product.

b. Double Density Microdisks

As in the case of media, the price and production data pertaining to double density disks that have been collected by the Commission are ambiguous when viewed in isolation. Over the period covered by our investigation, prices of double density

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88/ See, e.g., Report at A-21, n. 2; Prehearing and Posthearing Briefs of Nashua Corporation; Transcript of 1/17/89 Hearing ("Tr.") at 238-243.

disks sold in the United States declined significantly,89/ while domestic production of media rose by a factor of [*] over the same period.90/ Throughout this period, there was more overselling than underselling of the imported Japanese double density disks.91/

For the reasons suggested in the preceding section of these Views, this information, by itself, does not form an adequate basis for drawing inferences respecting the effect of the subject imports on prices or sales of domestically produced double density disks: the price data are entirely consistent with possible "learning curve" effects, and the evidence of increased domestic production in the face of exploding domestic demand does not demonstrate what production would have been if there had been no dumping.

As is the case with media, assessment of the effects of the subject imports on prices and sales of domestically produced double density disks ultimately depends on understanding the markets for the domestic and imported products. The various factors discussed above in the context of media -- the import market share, the substitutability of the imported and domestic product, and the price responsiveness of domestic demand -- are also critically important here.

89/ See Report at A-70-A-71.

90/ Id. at A-31, Table 8.

91/ See id. at A-77e, Table 34.

During 1987 and the first nine months of 1988, when Commerce determined that dumping was occurring, the subject imports accounted for an admittedly substantial percentage of domestic consumption of double density microdisks. In 1987 the subject imports amounted to [*]% of the total domestic consumption of such disks and [*]% of the total value of such consumption.92/ In the first nine months of 1988, the comparable figures were lower, but still quite high: the subject imports accounted for [*]% of the total quantity of domestic consumption and [*]% of the total value.93/

While this large market share increases the likelihood that, as claimed by Petitioner, dumping of the subject imports produced significant adverse effects on prices and sales of the domestic like product, other evidence leads me to a contrary inference. Most probative on this score is evidence from Respondents, other parties, and other information developed by the Commission in this investigation that, in my view, demonstrates that there is only a very limited degree of substitutability between domestically produced double density disks and Japanese imported double density disks.

Respondents argue, inter alia, that the subject microdisks are imperfect substitutes for domestically produced disks because

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92/ Id. at A-62, Table 33.

93/ Id.

the quality of the imported product is far superior.94/ In that regard, Respondents note that many original equipment manufacturers of computers ("OEMs") require that their microdisk suppliers establish the quality of their disks for use with the OEM equipment to the OEM's satisfaction, and that many of the major domestic OEMs have refused to qualify the domestically made product precisely because they regard it as unacceptably inferior both in absolute terms and relative to the imported Japanese product.95/ OEMs testified that the failure rate of domestic microdisks was sufficiently high that use of them would have created problems for sale of the OEMs' equipment, as many consumers cannot readily distinguish between malfunctions attributable to the computer hardware and malfunctions attributable to a microdisk.96/ Respondents also adduced evidence that the domestic disks do not share some of the ancillary product features OEMs find useful to their marketing strategies, including matters such as the availability of disks in the desired colors.97/

Petitioner Verbatim argues that there is no basis for these arguments. Among other things, Petitioner asserts that its

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94/ Respondents' Prehearing Brief at 72-73.

95/ Id. See Report at A-66-A-67.

96/ See Prehearing Statement on Behalf of Apple Computer, Inc. ("Apple Prehearing Brief") at 4-10; Prehearing Brief of Tandy Corporation ("Tandy Prehearing Brief") at 7; Tr. 232-33.

97/ Respondents' Prehearing Brief at 72-73.

product has, in fact, qualified with various OEMs,98/ but also suggests that it has chosen, for business reasons, not to compete aggressively for the business of the OEMs.99/ Petitioner also asserts that branded sales, rather than OEM sales, are the most important segment of the market.100/

On this issue, I find that Respondents clearly have the better of the argument. The arguments advanced by Respondents on the issue find considerable independent support in the record, including testimony presented by various major purchasers of microdisks as well as voluminous corroborating evidence contained in our Report. There is compelling evidence that many OEMs -- including many, if not most, of the major domestic manufacturers of computers that use microdisks -- believe that the quality of domestically produced microdisks renders them unacceptable as substitutes for the imported Japanese product.101/ There is also persuasive evidence that a wide selection of colors is, in fact, important to OEMs, and that most OEMs believe that the domestic producers do not offer a sufficient array of color choices.102/

98/ Posthearing Brief of Verbatim Corporation ("Petitioner's Posthearing Brief") at 8.

99/ See Tr. 63, 65-66.

100/ See, e.g., Tr. 63.

101/ See Report at A-66-A-67; Tr. 232-37; 244-47; Apple Prehearing Brief; Tandy Prehearing Brief.

102/ See Report at A-66.

The picture may be somewhat less clear with respect to other purchasers of the domestic industry's product, especially branded product. Certain of these customers, including the distributors and mass merchandisers who sell microdisks, may not distinguish between microdisks on the basis of country of origin, and therefore perhaps do not draw sharp distinctions between domestic double density disks and the imported Japanese product.103/ However, it appears that many non-OEM customers also place a premium on quality.104/ To some extent, the non-OEM market may follow the OEMs in assessing microdisk quality, if not immediately, then within a relatively short time. In that context, the uncontroverted testimony offered by Apple Computer is particularly noteworthy. In this investigation, the Commission has been advised that qualification with Apple or other OEMs can produce a very large amount of additional business for a disk supplier from other customers who become aware that the supplier has achieved such status.105/

Finally, I note that information concerning responsiveness of domestic demand to changes in the price of microdisks does not offer an adequate basis for inferring that the subject imports had a significant adverse effect on prices and sales of domestically produced double density microdisks. Certainly, the

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103/ See OE Memorandum at 14-16.

104/ See OE Memorandum at 16.

105/ Tr. 233-34; Apple Prehearing Brief at 6.

evidence does suggest that, if the imported and domestic double density microdisks were seen by their consumers as reasonably good substitutes for one another, the large volume of the subject imports sold in the United States would have affected the domestic like product's prices and sales substantially. There is ample, largely uncontroverted evidence before us that demand for microdisks per se is not highly responsive to changes in the price of the product. This is so because demand for microdisks is derived from the demand for computer drives that use microdisks; microdisks represent a very small fraction of the value of the computers in which they are used; and once a computer is purchased, there are, effectively, no substitutes for microdisks.106/ Other things being equal, such limited consumer responsiveness to price changes will increase the effect of LTFV imports on the prices and sales of a competing domestic like product.

However, I believe that demand for double density microdisks is not so unresponsive to changes in price as to support a conclusion that the subject imports had a significant adverse impact on prices or sales of domestic double density disks. Changes in the price of double density disks clearly can affect demand for such disks even if there are no close substitutes for such disks. The basic use of a microdisk is not to perform computing functions but to store information. Computer users, in

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106/ See OE Memorandum at 18-21.

deciding whether to store information on a microdisk (or to keep information, rather than replacing it with other information that is "over-written" on the same disk), will consciously or unconsciously take into account the cost of doing so; this cost, in turn, is principally a function of the cost of the disk itself. This will invariably affect the responsiveness of demand to increases in the price of the product.107/

Given the marginal value that many uses of microdisk storage memory may have, as in "backing up" work in progress, and the frequency with which consumers can decide how much new disk memory to use, or how much old disk memory to replace, it appears to me that, as Respondents urged, demand responsiveness lies closer to the level of substitutability between imports and domestic disks than might first appear. Specifically, I believe that the evidence supports the conclusion that while substitutability falls toward the lower end of range estimated by the Commission's staff, consumer price responsiveness lies near the upper end of the staff's estimated range. Viewed in conjunction, the evidence on market share, substitutability, and consumer sensitivity to microdisk prices indicates that LTFV imports of double density microdisks did not significantly affect

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107/ I note that Respondents do not appear to have been taken this factor into account. See Respondents' Economic Submission at 10-11. Accordingly, I believe that Respondents have understated the extent to which demand for double density microdisks is price-responsive.

prices and sales of domestically made double density disks.

c. High Density Microdisks

The relevant record evidence concerning the impact of the subject imports on prices and sales of domestically produced high density disks is, for the most part, identical to that set forth above in my discussion of double density microdisks; so are the inferences that I have drawn from that evidence. Accordingly, I will discuss here only the record evidence that might warrant a conclusion respecting the effects of the subject imports on prices and sales of high density microdisks that is different from the one that I have reached in the case of double density disks.

Market penetration by the subject high density microdisks was admittedly higher than for double density disks. In 1987, the subject imports accounted for [*]% of domestic consumption on a quantity-measured basis, and [*]% measured on the basis of value.108/ In the first nine months of 1988, the subject imports amounted to [*]% of the total quantity of high density disks consumed domestically, and [*]% of the value of such disks.109/

At the same time, however, the substitutability of the domestic product for the subject Japanese microdisks appears to be even more limited in the case of high density microdisks than

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108/ Data derived from Report at A-59, Table 31.

109/ Id.

it is for double density microdisks. Currently, there is only [

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* * * * * *];110/

for domestic OEMs, the domestic like product apparently is not a good substitute for imported high density disks. Respondents have also argued, without contradiction, that the users of high density drive computers are among the most sophisticated computer users and therefore can be expected to be more sensitive than other users to the differences in the quality of the domestic and imported Japanese product, thus indicating a low likelihood that these consumers would shift their purchases readily among competing disks of different quality simply on the basis of price (the key factor distinguishing the subject imports from fairly traded imports).111/ Although this issue was not otherwise directly addressed by the parties in this investigation, I believe that this argument finds strong support in the evidence presented to us concerning the essential differences between high density drive and double density drive computers.

On balance, I can discern no basis in the record for concluding that the subject imports of high density microdisks, unlike the subject imports of double density microdisks, had a substantial adverse impact on prices and sales of the corresponding domestic like product.

110/ See Report at A-12; OE Memorandum at 14, n. 3.

111/ Respondents' Economic Submission at Part III at 13.

3. Employment and Investment

a. Media 112/

Our ability to analyze the employment and investment performance of the domestic industry producing media is impaired to some extent because only one domestic producer, Petitioner Verbatim, provided the Commission with separate financial data on its media operations.113/ The available employment data on media clearly provide no support for an inference that the domestic industry has been injured by reason of the subject LTFV imports. Total employment, hours worked, and wages and compensation paid, all rose sharply and consistently over the period covered by our investigation.114/ The average hourly wage paid appears to have fallen somewhat in the first nine months of 1988 after increasing in both 1986 and 1987, but the average hourly wage reported for the first nine months of 1988 was still higher than the average hourly wage reported for all of 1987.115/ Accordingly, the

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112/ As previously noted, because the only data on domestic production of media available to us is, without notable exception, data pertaining to all media used in the production of microdisks, rather than data on media used in the production in double or high density disks, I have examined the effects of the subject imports on all media, the narrowest product line for which data is available, in accordance with the direction of Title VII. See 19 U.S.C. § 1677(4)(D).

113/ Accordingly, to the extent that a product line analysis of this industry is appropriate under 19 U.S.C. § 1677(4)(d), such an analysis is set forth in Sections II.B.3.b and II.B.3.c, supra.

114/ Report at A-37, Table 15.

115/ Id.

average wage data can hardly be characterized as indicative of any adverse turn in the terms of employment in the industry.

The available financial data is, as previously noted, more limited, and it is also more difficult to analyze. Petitioner Verbatim reported significant operating [*] on its media production operations in both 1987 and during the first nine months of 1988.116/ However, the record evidence before us indicates that Petitioner's transfer sales price for media shipped to its overseas finishing operations, [* * * * * * * * * * * * *].117/ The record also indicates that these finishing operations generated [* * *] in both 1987 and the first nine months of 1988.118/ Although I have not looked at Petitioner's overseas operations in assessing the question of whether the domestic industry has been injured by reason of the subject LTFV imports,119/ I believe that this information casts doubt on

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116/ Id. at A-42, Table 22. In 1987, [* * * * * * * * *]; during the first nine months of 1988, [* * * * * * * * *].

117/ Id. at A-41.

118/ Id. at A-42.

119/ To do otherwise would be inconsistent with the Omnibus Trade and Competitiveness Act of 1988. See Pub. L. No. 100-418, § 1328(2), 102 Stat. 1107, 1205 (to be codified as 19 U.S.C. § 1677(7)(B)(iii)). While the 1988 Trade Act is not technically applicable to this proceeding, I believe that it is nevertheless relevant here to the extent that it reflects Congressional approval of the Commission's long-standing practice.

whether Petitioner's media operations can fairly be regarded as unprofitable.

Even taking Petitioner's data on its media operations at face value, these data do not support an inference that the domestic industry has suffered material injury by reason of LTFV imports. Petitioner's reported operating loss on its media operations declined sharply and consistently in each period covered by our investigations. As Respondents argued, such a trend of continuing, but declining losses is entirely consistent with the experience of industries producing products embodying new technology, which require heavy "up-front" capital, research and development, and process engineering expenditures.120/ In the context of such an industry, such a trend does not, standing alone, provide any basis for an inference of injury by reason of the subject LTFV imports.

b. Double Density Microdisks

The employment data collected by the Commission are not broken down separately for the domestic industry producing double density microdisks and the industry producing high density microdisks. However, the data collected for employment by domestic firms in operations producing all finished microdisks reveal employment trends that are quite favorable. While these trends do not in any way establish that the LTFV imports have not

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120/ See, e.g., Respondents' Prehearing Brief at 57.

injured the domestic industry,121/ they certainly do not demonstrate that, despite the evidence respecting LTFV imports' effects on domestic products' prices and sales, the imports have materially injured the domestic industry. Dating from 1986 through 1987 and the first nine months of 1988, when dumping was found to have occurred, the number of production and related workers producing finished microdisks has risen dramatically, as have, to an only slightly lesser extent, the hours worked by, and wages and compensation paid to, such workers.122/ The only measure that has not similarly improved is the average hourly wage paid, which has fluctuated in a relatively narrow range.123/

As in the case of media, the domestic industry has reported continuing operating losses on its double density disk operations, but these losses have, likewise, declined dramatically, beginning in 1987, when dumping occurred.124/ As previously noted in connection with the discussion of media, such a performance is no different than what one would normally expect for an industry making a product that embodies a new technology. Moreover, the industry's financial data also appear quite plainly to be at least in substantial measure the product of the

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121/ For a general discussion of the significance of such trends, see Nitrile Rubber from Japan, USITC Pub. 2090, Inv. No. 731-TA-384 (Final) (June 1988) (Additional Views of Commissioner Cass).

122/ Report at A-37, Table 15.

123/ Id.

124/ Id. at A-41, Table 18.

relatively low production yield achieved by the domestic industry.125/ Indeed, Respondents have contended that these deficient production yields entirely account for the losses reported by the domestic industry.126/ Petitioner has taken strong issue with Respondents' claim that Petitioner's financial data are distorted.127/ However, Petitioner has failed to present us with evidence that refutes the essential thrust of Respondents' argument; there is little question that the domestic industry's financial performance has been strongly impaired by the difficulties that it has experienced in producing a quality product. Under these circumstances, the reported losses by the domestic industry offer no basis for an inference of injury by reason of LTFV imports.

c. High Density Microdisks

The available employment and investment data pertaining to the domestic industry producing high density microdisks is, for the reasons previously suggested, quite limited. As previously noted, the only available employment data is for all finished microdisks. For the reasons previously stated, these data

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125/ Throughout the period covered by our investigation, the domestic industry has reported significantly lower production yields than those experienced by the subject Japanese producers. Report at A-29, Table 7. However, the gap has narrowed substantially in recent years (see id.), a fact that perhaps in large part explains the industry's recent improved financial performance.

126/ Respondents' Posthearing Brief at 32, 39-40.

127/ See, e.g. Tr. at 44-50.

provide no indication whatever of injury by reason of the subject LTFV imports.128/

The same is true for the financial data. Domestic production of high density microdisks only began in 1987. After a reported [* * * * * * * * * * * *] in the first nine months of 1988,129/ a performance that can only be regarded as quite impressive for such a new operation.

C. Application of the CADIC Model: 3.5" Microdisks and Media

In assessing the impact of the dumped imports on the various domestic industries, I considered, among other things, certain information that was presented to us by the parties and by Commission staff relating to the use in this case of the computable market-simulation "Comparative Analysis of the Domestic Industry's Condition Lotus Template System", commonly known as the "CADIC model".130/ The CADIC model generates estimates of changes in the prices and quantities sold of a domestic industry's like product that occurred, given various data relating to import volumes, dumping margins, and the markets

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128/ See discussion, supra, at 79-81.

129/ Report at A-41, Table 18.

130/ The analytical framework underlying the CADIC model is explained in detail in R. Boltuck, Assessing the Effects on the Domestic Industry of Price Dumping, USITC Memorandum EC-L-149 (May 10 & 18, 1988) (unpublished). The results of the Commission staff's use of the model in this case are set forth in USITC Memorandum EC-M-083 (March 13, 1989) from the Office of Economics ("OE CADIC Memorandum").

for the imports and the domestic like product. The CADIC model has been fully described in publicly available documents,131/ and copies of the computer program have been available for some time to interested members of the public.

This model does not of itself provide a basis for directly evaluating evidence respecting a variety of factual issues, but the information that may be developed through use of the CADIC model can assist the Commission in assessing the significance of different judgments respecting, inter alia, the substitutability of imported and domestic products and consumers' reactions to changes in prices of the products at issue. These are judgments that, for reasons previously discussed, critically affect our assessment of injury causation under the criteria set forth in Title VII. Of course, each commissioner must decide what factual inferences should be drawn from the record in a given investigation respecting these matters, and each commissioner must also decide what weight to give to the estimates generated through application of the model. When I do not believe that the information generated by the model is useful (that is, when I find that the assumptions upon which the model is based are unrealistic in light of the other evidence of record in a particular investigation or that the information necessary to employ the model cannot be reliably inferred from the other

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131/ See R. Boltuck, Assessing the Effects on the Domestic Industry of Price Dumping, USITC Memorandum EC-L-149 (May 10 & 18, 1988) (unpublished).

evidence of record), I do not rely upon the estimates that the model produces.132/

In this case, Respondents argued that "the model is not well-suited for application to this investigation".133/ Certain aspects of the argument advanced by Respondents are somewhat technical; these issues will be addressed below. Fundamentally, however, Respondents' argument appears to be that the model is designed to be used to estimate the effects of dumping on prices and sales of the domestic like product only in cases when the explanation for dumping lies in a difference in market power enjoyed by the subject producers in their home market and the U.S. market. In most cases, dumping by a foreign producer occurs because the producer enjoys more market power in the foreign market than in the United States and seeks to increase its overall profitability by charging more where the producer is able to and less where it faces more competition.134/ Respondents

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132/ See, e.g., Certain Granite from Italy and Spain, USITC Pub. 2110, Inv. Nos. 701-TA-289 and 731-TA-381 and 382 (Final) (Aug. 1988).

133/ Respondents' Economic Submission at Part IV at 1.

134/ See, e.g., Phone Systems, supra, at 75-76. Commentators who have studied differential pricing in international markets have long believed that this is the best explanation for most instances of dumping. See, e.g., G. von Haberler, The Theory of International Trade with its Application to Commercial Policy 296-317 (1936). See also J. Viner, Dumping: A Problem in International Trade (1923).

In that context, it is important to emphasize that it is the difference between the producer's market power that is of significance; no absolute judgment respecting the competitiveness of the U.S. market or the noncompetitiveness of the foreign

suggest, however, that this explanation for dumping does not fit the facts of this case.135/

The response to this argument is twofold. First, based upon the facts before us, it is somewhat unclear whether the explanation for the dumping that is the subject of this investigation lies in a differential in market power enjoyed by the subject foreign producers of the kind previously described. The Commission does not have evidence sufficient to confirm or reject this explanation and, indeed, the Commission investigation does not endeavor to establish a conclusive basis for such a determination.136/ However, as previously noted,137/ this explanation accounts for the vast majority of instances where dumping occurs, and no other alternative explanation has been offered for the dumping that took place in this case.138/

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market is necessary. See Phone Systems, supra, at 77. Accordingly, there is no basis for the suggestion, occasionally made by some, that dumping of the kind described can occur only when there is "one supplier producer acting as a monopolist". See Tr. 212.

135/ Respondents' Economic Submission at Part IV at 3.

136/ See OE CADIC Memorandum at 2. The Commission's Office of Economics has advised us that the number of firms selling microdisks in the Japanese market, and a measure of concentration in the Japanese market (known as the "Herfindahl index"), are consistent with an inference of competitive pricing, but they have also advised us that the Commission can not rule out the possibility of cooperative pricing or price leadership by the Japanese producers in their home market. Id.

137/ See discussion, supra, at n. 64.

138/ Alternative explanations of dumping, such as promotional pricing or predation, are particularly inapposite to the facts of this case, where the subject imports created the market for the

Furthermore, even if the explanation for the dumping under investigation lies elsewhere, the framework upon which the CADIC model is based nevertheless has broad application that extends to situations where dumping may be the product of various other explanations for dumping that are thought to be plausible explanations for the residuum of cases.139/ The information that the model takes into account would also be highly relevant in assessing the effect of dumped imports on prices and sales of the domestic like product in such cases, and the model would produce estimates of those effects that would be equally useful in most, if not all, cases where other explanations for dumping are thought to exist. In that context, it should be noted that, even when such other explanations appear plausible, just as in the case where dumping is a consequence of the foreign producer's differential market power, dumping will typically cause a decline in the price of subject imports that is a fraction of the dumping margin; that fraction depends on the share of the foreign producer's sales in the combined home market and U.S. market that is made in the United States.140/ Thus, even in cases where

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product categories at issue, preceded U.S. production and enjoy considerable brand recognition. Predation is, in general, a most improbable explanation for dumping. As the Supreme Court recognized in Matsushita Electric Industries Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986), "predatory pricing schemes are rarely tried, and even more rarely successful".

139/ See R. Boltuck, Assessing the Effects on the Domestic Industry of Price Dumping, USITC Memorandum EC-L-149 (May 10, 1988) (unpublished).

140/ Id.

dumping has resulted from causes other than a foreign producer's differential market power in its home and U.S. markets, the estimates that will be yielded by using the CADIC model nevertheless represent a good approximation of the effects of dumping on the price of subject imports and on prices and sales of the domestic like product.141/

Moreover, it should be emphasized that the model performs a very modest function assisting integration of judgments on facts before the Commission into analysis of LTFV imports' effects on prices and sales of a domestic like product. The model does not eliminate the need for judgment on the critical facts; it does not dictate which of the various factual inferences is best; but importantly, it does allow commissioners to see what relevance the choice among arguable inferences might have in a given factual setting. Further, the model does not specify when the estimated price and sales effects lead to effects on the domestic industry's employees and investors that should be considered material. This last point deserves special emphasis: given the nature of our ultimate judgment -- which does not quantify a specific level of money damage to be paid by one party to another, but only renders the qualitative judgment whether LTFV imports have caused material injury -- the numerical estimates generated by the CADIC model, predicated on various factual

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141/ Of course, I am not willing to preclude the possibility that there may be cases in which such an approximation would be incorrect. There is, however, no basis at this time for supposing that such a case is in fact before us.

inferences, cannot be thought to have any determinative effect on disposition of our investigations, even for commissioners who find those estimates to be a useful analytical tool.

These are important caveats to any assessment of the information derived from the CADIC model. In this investigation, I have evaluated the CADIC estimates that have been provided to us by the parties and the Commission staff with these considerations in mind. My ultimate conclusion is that Respondents' argument for rejection of the model here is groundless. The model is quite useful in this case, as in most others.

This does not mean, however, that the information derived from this model is as useful in this investigation as it is in many others. In this investigation, to an unusual extent, it is possible to derive quite different estimates of the effects of dumping on prices and volume of the domestic like product by using the CADIC model, depending upon the conclusions that one draws with respect to certain issues taken into account by the model.142/ This underscores the fact that the model does not determine the outcome of the investigation. It also highlights one of the major advantages of the model: the model draws the Commission's attention to those issues that are most critical in a particular investigation in determining the extent to which the particular subject imports affected prices and sales of the

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142/ See OE CADIC Memorandum, cited, supra, at n. 130.

domestic like product. Use of the model with varying factual inferences suggests that, in this investigation, the extent to which the subject imports are substitutable for the various domestic like products is of critical importance. For reasons previously indicated, I believe that the degree of substitutability is, in fact, quite limited -- more limited even than the Commission staff assumed in preparing various alternative CADIC model estimates for our consideration.143/

Finally, certain technical issues relating to the CADIC model that have been raised by Respondents warrant brief discussion here. Even though those issues are not directly relevant to my disposition of this investigation, discussion of these issues may promote a better understanding of certain aspects of the CADIC model that may not yet be well understood.

First, Respondents have suggested that the CADIC model is not useful in analyzing the facts presented in this case because the model "aggregates the multiple foreign producers into a single firm, and therefore disregards the variation among firms in their proportion of sales to the home market".144/ In fact, the CADIC model does not operate in this manner. As indicated by

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143/ See CADIC Memorandum, cited, supra, at n. 130. Although the issue may be of lesser importance, I have, as previously suggested, also concluded that demand for double density and high density microdisks is, in each case, more responsive to changes in the price of the product than is assumed in most of the CADIC estimates that have been provided to us. See discussion, supra, at 72-74.

144/ See Respondents' Economic Submission at Part IV at 1.

the estimates actually developed in this case by the staff, the CADIC model can be, and in this case was, used to analyze the effects of subject imports on a producer-by producer basis.145/

Respondents also assert that the CADIC model is not well-suited for this case because it is a "comparative statics exercise" that cannot "simulate a dynamic industry in which large shifts in supply and demand have occurred throughout the period of investigation".146/ I am not certain what thought Respondents meant to convey by this comment. If Respondents are arguing that the CADIC model cannot be used to assess the effects of dumping in this case because so many other things in the industry have been rapidly changing, this reflects a fundamental misapprehension of the purpose of the model; the CADIC model is useful precisely because it provides the Commission with a way of separating out the effects of LTFV imports from other factors that may be affecting the domestic industry, thereby allowing the Commission to determine whether the subject imports have caused material injury. If Respondents meant to suggest that a dynamic model might allow for a more precise measurement of the effects of dumping, this is, of course, a possibility. However, no such model has, to my knowledge, been developed, and no such model was suggested to the Commission by Respondents. Moreover, it should be noted that the CADIC model could be used, in appropriate

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145/ See OE CADIC Memorandum, cited, supra, at n. 130.

146/ Respondents' Economic Submission at Part IV at 1.

cases, to approximate the estimates that might be produced through use of a "dynamic" model.147/ This can be done simply by performing various runs of the model with varying time frames for the period over which certain changes in market conditions are expected to occur.148/

Finally, Respondents asserted that the model should not be used in this case because it assumes that the foreign producer "operated in the region of constant marginal costs of production".149/ This, according to Respondents, would suggest that the foreign producers were not at or near their capacity limit. To the contrary, Respondents declare, the subject foreign producers in this investigation actually "operated near practical capacity during the period of the investigation and faced sharply rising marginal costs at the margin".150/ The short answer to this argument is that, apart from any theoretical difficulties with the relation of marginal cost variance to production capacity, the Respondents' argument cannot be accepted as consistent with the factual record: throughout the period covered

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147/ Such an exercise was not, however, performed in this investigation, for there is no reason to believe, on the basis of the record before us, that it would have produced price and sales effects that were materially different from the various alternative estimates generated through the staff's use of the model. See OE CADIC Memorandum, cited, supra, at n. 130.

148/ In general, the Commission staff estimates elasticity ranges by using a one-year time frame in measuring demand and supply responses to changes in price. See OE Memorandum at 7.

149/ Respondents' Economic Submission at Part IV at 2.

150/ Id.

by our investigation, there have been substantial continuing increases in the capacity of the Japanese producers in response to changing market conditions.151/ Given these increases, a high level of capacity utilization, under any theory, is in no way inconsistent with the model's assumption that the foreign producers operated in the region of constant marginal costs of production. I also note that assumptions such as this, while necessary to operation of any computable model, seldom will have any significant effect on the estimated domestic price and sales consequences of LTFV imports. I remain, however, alert to those instances in which the facts before us suggest that a significant effect might result from such assumptions.

III. THREAT OF MATERIAL INJURY BY REASON OF LTFV IMPORTS

The starting point in any analysis of the issue of threat of material injury is the statutory command that the Commission make an affirmative determination only "on the basis of evidence that the threat of material injury is real and that actual injury is imminent".152/ Furthermore, such a determination may not be made on the basis of mere conjecture or supposition.153/

Title VII, as amended by the Omnibus Trade and Competitiveness Act of 1988, directs the Commission to consider a number of specifically enumerated factors in assessing whether

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151/ See Report at A-52, Table 27; OE Memorandum at 12-13.

152/ 19 U.S.C. § 1677(7)(F)(ii).

153/ Id.

there is a sufficient threat of material injury.154/ The listed factors that are relevant, or potentially relevant,155/ for our purposes are the following:

(1) the ability and likelihood of the foreign producers to increase the level of exports to the United States due to increased production capacity or unused capacity;

(2) any rapid increase in penetration of the U.S. market by imports and the likelihood that the penetration will increase to injurious levels;

(3) the probability that imports will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise;

(4) any substantial increase in inventories of the merchandise in the United States;

(5) underutilized capacity for producing the merchandise in the exporting country;

(6) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product;

(7) any other demonstrable adverse trends that indicate that importation of the merchandise will be the cause of actual injury.156/

In this investigation, I believe that there is no conceivable basis -- other than speculation of the kind in which

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154/ While the 1988 legislation is not technically applicable to to this investigation, I believe that the provisions in question are relevant here for the reasons stated in n. 51, supra.

155/ Certain other statutory factors are not relevant because they relate to facts not presented in this case, e.g., cases where subsidy allegations are made.

156/ See 19 U.S.C. § 1677(7)(F)(i).

we are prohibited from engaging -- upon which we might find that an analysis of these factors indicates that there is a threat of material injury to the domestic industries. Because the evidence bearing upon the existence of a threat to a domestic industry is similar or identical for all four domestic industries, for purposes of both convenience and clarity, the potential existence of a threat to the four industries is considered as part of a unified discussion below.

To begin, it must be acknowledged that the capacity of the Japanese producers to produce media, and both double density and high density microdisks, increased substantially over the period covered by our investigation.157/ However, the production capacity of the domestic industries increased, in percentage terms, far more substantially over the same period.158/ The record evidence in this investigation makes it quite clear that these increases have a common cause: the exploding domestic and worldwide demand for microdisks (and, derivatively, media used for the production of such disks). I do not find that the increases in Japanese capacity reflect or suggest an ability or likelihood by the Japanese producers to increase their share of the domestic market. In all cases -- for media, double density disks and high density disks -- the share of domestic consumption that is accounted for by the subject imports has been decreasing,

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157/ See Report at A-52, Table 27.

158/ Id. at A-31, Table 8.

not increasing.159/ While imports of these products have been increasing in absolute terms, I believe that it is plain that Congress did not intend that findings of threat of material injury be predicated upon such evidence for industries of the kind involved here. The microdisk market is growing at a enormous rate; absolute increases in imports in such a market are virtually inevitable and cannot be construed as evidence that imports imminently will inflict material injury on the domestic industries.160/

As previously discussed, there has been no rapid increase in the market penetration of the subject imports. To the contrary, all the trends are in the direction of reduced market penetration.

There also is no evidence before us suggesting a probability that the subject imports might have a depressing or suppressing effect on prices of the domestic like product. To the contrary, as previously discussed, the evidence that does exist indicates that those imports to date have had no significant effect of that kind. We have not been presented with any evidence indicating that this is likely to change.

159/ See id. at A-58, Table 32; A-61, Table 33.

160/ In that context, I note that the 1988 Trade Act specifically instructs us that we are to take into account the particular dynamics of industries and markets. Although this provision is not technically applicable to this investigation, I believe that it is relevant here for reasons explained in n. 51, supra.

Nor do inventories of imported microdisks or media therefor support a finding of threatened injury from dumping. U.S. inventories of the subject double density disks and high density disks have increased somewhat, but they are still relatively small relative to the overall level of subject imports of those products.161/ Inventories of media and double density disks held in Japan, measured as a percentage of shipments, fell in both 1987 and in the first nine months of 1988 (relative to the same period in 1987);162/ by the same measure, Japanese inventories of high density disks fell sharply in 1987, before rising in the first nine months of 1988 to a level that was still below the 1986 level.

The sixth threat factor likewise provides no support for an affirmative determination of threat of material injury. There is no reason to believe that the subject imports have had, or potentially will have, negative effects on any existing development and production efforts by the domestic industry. The record evidence indicates that the production yields of the domestic industry have been improving substantially,163/ suggesting that the subject imports have not been an obstacle to the industries' efforts to develop and improve existing products. Petitioner argued in general terms that current profit levels are

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161/ See Report at A-56. No inventories of media imports have been reported to the Commission.

162/ Report at A-52, Table 27.

163/ Id. at A-29, Table 7.

insufficient to sustain an adequate level of research and development by Petitioner and other domestic firms.164/ However, Petitioner did not point to any specific R&D projects that are being impeded due to insufficient funds, nor did it offer any estimates of the amount of needed research and development for which funds are unavailable.165/ R&D expenditures by domestic producers of microdisks and media have fallen somewhat in the most recent periods covered by the Commission's investigation,166/ but this trend is in large part attributable to a natural falloff in outlays by [* * * * *].167/ Further, it is noteworthy that a number of domestic producers, including [* * *], take issue with Petitioner's argument respecting the impact of the subject imports on the industry's development and production efforts.168/ Finally, I note that I have, for the reasons previously discussed, concluded that, to the extent that the industries have

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164/ See Petitioner's Prehearing Brief at 86-87; Tr. 33.

165/ Petitioner stated only that 4 megabit disk drives "are reportedly awaiting commercial production", (see Petitioner's Prehearing Brief at 87), and noted that "industry efforts are . . . under way to develop future generations of 3.5" microdisks featuring greater memory capacity . . . ." (see Report at A-105).

166/ Report at A-45.

167/ Id. at A-44-A-45.

168/ See Report at A-106.

experienced financial problems,169/ these are in no way traceable to the subject imports. Accordingly, for all of these reasons, I am unable to discern any basis in the record for a conclusion that the subject imports threaten imminent material harm to the industries' existing and potential development efforts.

CONCLUSION

On the basis of the record before us, I am compelled to dissent from the Commission's affirmative determination in this investigation. Even assuming that this investigation was properly initiated, I find that the subject imports have not caused material injury to the domestic industries and do not threaten the industries with such injury.

169/ I have also noted that it is not apparent that the industries' performances are, in fact, out of line with the performance that one would expect for industries producing a new technology product.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On September 29, 1988, the U. S. Department of Commerce (Commerce) published in the Federal Register (53 F.R. 38045) its preliminary determination that 3.5" microdisks and coated media thereof from Japan are being, or are likely to be, sold in the United States at less than fair value (LTFV). 1/ Accordingly, effective September 29, 1988, the U. S. International Trade Commission (Commission) instituted final investigation No. 731-TA-389 under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry is materially retarded, by reason of imports of the subject merchandise into the United States.

On February 10, 1989, Commerce issued a final affirmative determination that 3.5" microdisks and coated media thereof from Japan are being, or are likely to be, sold in the United States at LTFV. 2/

Notice of the institution of the Commission's final antidumping investigation and of a public hearing to be held in connection with this investigation was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register (53 F.R. 40972, October 19, 1988). 3/ The Commission's public hearing held in connection with this investigation took place in Washington, DC, on February 9, 1989. 4/ The briefing and vote was held in Washington, DC, on March 15, 1989.

Background

On February 26, 1988, a petition was filed with the Commission and Commerce by counsel on behalf of Verbatim Corp., Charlotte, NC, alleging that an industry in the United States is materially injured and threatened with material injury by reason of imports from Japan of 3.5" microdisks and media therefor that were alleged to be sold in the United States at LTFV. Accordingly, effective February 26, 1988, the Commission instituted preliminary investigation No. 731-TA-389, under section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), to determine whether or not there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry is

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1/ The products covered in this investigation are 3.5" microdisks and coated media thereof from Japan provided for in HTS item 8523.20.00, and previously reported under TSUSA item number 724.4570.

2/ In its final determination, Commerce excluded from the scope of its investigation 3.5" media produced in Japan and assembled into finished 3.5" microdisks in third countries prior to importation into the United States from those countries (indirect imports).

3/ Copies of the Commission's and Commerce's notices are presented in app. A and app. B.

4/ On Nov. 7, 1988, Commerce postponed the date for making its final antidumping determination to Feb. 6, 1989. Therefore, the Commission issued a revised schedule for the subject investigation (53 F.R. 47589).

materially retarded, by reason of such imports. On April 11, 1988, the Commission notified Commerce of its affirmative determination with respect to its preliminary investigation (53 F.R. 12999, April 20, 1988).

The Commission has not conducted previous or related investigations concerning 3.5" micro floppy disks.

Nature and Extent of Sales at LTFV

In making its determination of sales at LTFV, Commerce compared the United States price (using both purchase price and exporter's sales price) with the foreign market value, for the period September 1, 1987, through February 29, 1988. The weighted-average dumping margins (in percent ad valorem) and value of sales at LTFV (in percent) found by Commerce for the subject products are as follows:

Manufacturer/exporter	Margin	Sales at LTFV (Quantity)	Sales at LTFV (Value)
Fuji.....	50.52	***	***
Hitachi.....	27.73	***	***
Sony.....	51.00	***	***
All other companies 1/....	42.95	***	***

1/ Weighted-average based on sales by Fuji, Hitachi, and Sony.

The LTFV margins on the individual sales examined by Commerce ranged from *** percent to *** percent.

The Product

The floppy disk is a type of flexible magnetic recording medium used to record and store digitally encoded computer information for access by a floppy disk drive. The disk serves as a system memory device for computers and data processing equipment. A disk consists of a piece of circular magnetic media, or "cookie," encased in a protective covering. Three sizes of flexible disks are currently available for use in conjunction with personal computers: 8" and 5.25" diskettes, and 3.5" microdisks. 1/ 2/

Description and uses

Product description.--The products that are the subject of this investigation are 3.5" microdisks and media therefor, which include double-density (DD) and high-density (HD) formats. 3/

1/ The term "microdisk" refers generally to the class of floppy disks smaller than 5.25".
2/ A 2" format for use in cameras, and a 2.8" quick disk for low-end home computers, typewriters, and game systems are also on the market.
3/ Double density microdisks may be either single-sided (SS DD) or double-sided (DS DD). In essence, SS DD and DS DD disks differ only in that SS DD diskettes have been tested and have passed certification on only one side, whereas DS DD have been tested and have passed certification on both.

Media for 3.5" microdisks is composed of (1) oxide particles that hold the magnetic recording, (2) the base or substrate upon which the oxide is coated (usually polyester film or clear mylar), and (3) the binder which holds the oxide particles to the base. The media is encased in a hard plastic jacket or shell containing a friction pad, liner, hub, adhesive ring, wiper spring, write protect tab, shutter spring, and shutter (see figure 1). When the finished microdisk is placed in a disk drive, individual "bits" of digital information that have been "written" or recorded on the magnetically charged coating of the disk's surface may then be "read" by the computer operating system.

History of the 3.5" microdisk.--Sony Corp. developed and manufactured the 3.5" disk drive and micro floppy disk in Japan, where the 3.5" disk drive has been commercially available since the early 1980s. 1/ In 1982, a number of new flexible-disk drive formats were being developed and promoted in the United States, including the 3", the 3.25", the 3.5", and the 4" flexible drives. American National Standards Institute (ANSI) committees were established to set forth industry standards for the various formats. 2/ By 1984 two principal groups were promoting their standards; the 3.5" group (including Sony, Verbatim, BASF, Hewlett Packard, and Apple) and the 3.25" group (including 3M, Dysan, Maxell, and Panasonic). 3/ In April 1987, IBM introduced its new PS/2 line of personal computers, which incorporated the 3.5" disk drive. It is generally agreed by industry analysts that IBM's acceptance of the 3.5" format has established this format as the industry standard, so that the next generation of floppy disks will provide enhancements using the 3.5" diskette. 4/

Physical and magnetic characteristics.--The data storage capacity of a magnetic disk is determined largely by two physical properties of the recording surface of its media--coating thickness and coercivity. 5/ Coercivity, expressed in oersteds, is a measure of magnetic energy. In general, the higher the coercivity, the more data can be recorded per unit of disk surface area. Coercivity is determined by a number of factors, primarily the type of magnetic material used (in the case of microdisks it is iron), the shape and size of the magnetic particles, and the packing density of the material. 6/ Coating thickness influences the resolution of the media. In general, as the packing

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1/ Sony holds patents for the manufacturing of 3.5" finished microdisks that are subject to this investigation, and has licensed firms worldwide since 1982 (see "Threat of material injury" section of this report for a list of Sony licensees). The manufacturing of 3.5" media is protected by trade secret rather than patent.

2/ In 1982 Sony sought a position on the 3.5" committee, which was led by Verbatim (Electronics Newsletter, Aug. 28, 1982).

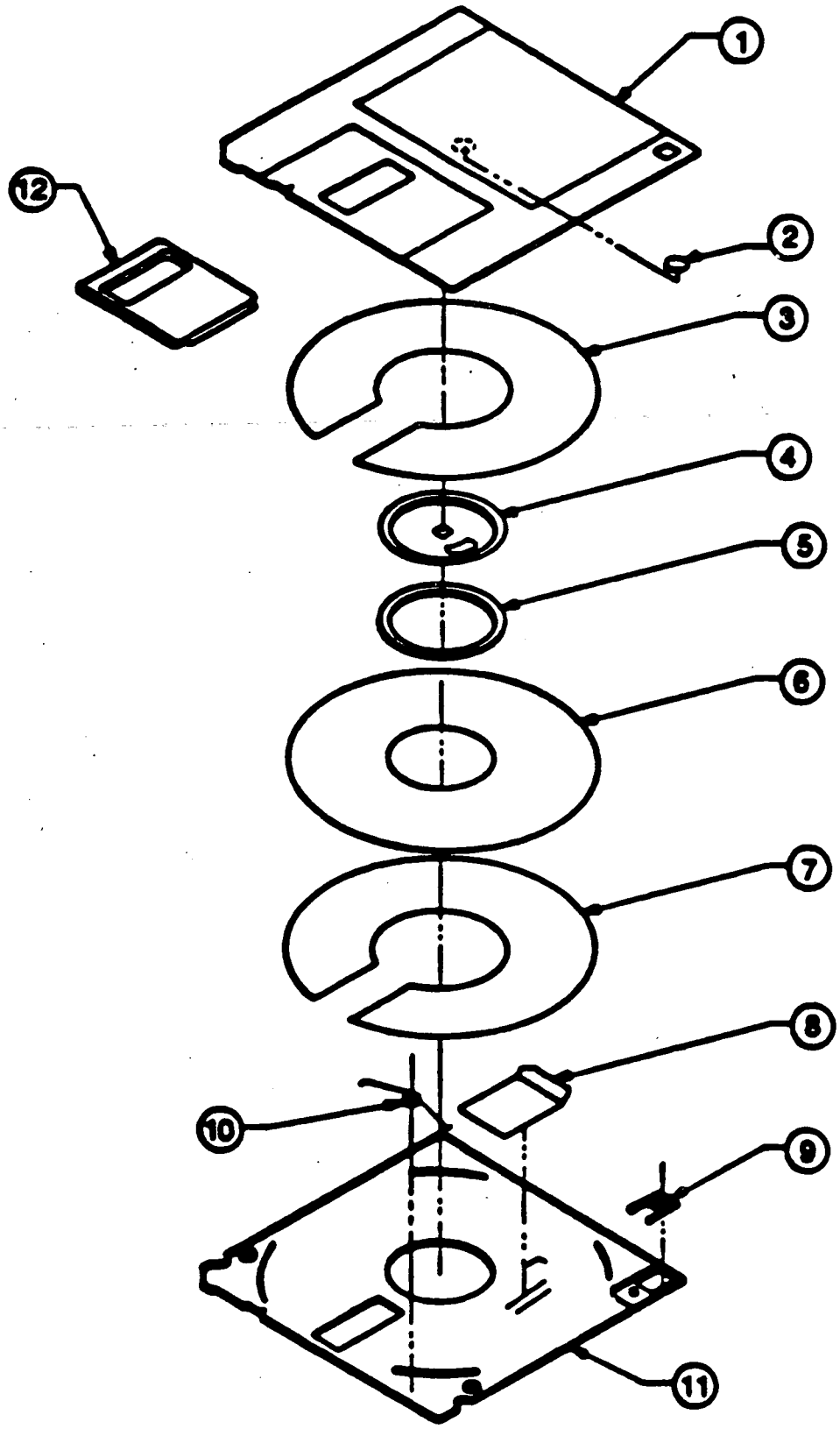
3/ During this period IBM was developing the 4" flexible disk drive.

4/ International Tape and Disc Association (ITA) seminar proceedings, November 1987, p. 22.

5/ Disk drive manufacturers specify the parameters of coercivity and coating thickness required for each type of drive. In addition, storage capacity is determined by the number of tracks per inch (TPI) that the disk drive head is able to record on the surface of the disk.

6/ For example, a DD Verbatim diskette contains 310 magnetic particles per inch, with coercivity of 620 oersted; its HD diskette contains 670 magnetic particles per inch, with a coercivity of 720 oersteds (Roberta Hardaker, "Erroneously Formatted Diskettes," Captial PC User Monitor, November 1987).

Figure 1. **MICRODISK**
(Assembly Drawing)



1. Top Shell
2. Friction Pad
3. Top Liner
4. Hub
5. Adhesive Ring
6. Media
7. Bottom Liner
8. Wiper Spring
9. Write Protect
10. Shutter Spring
11. Bottom Shell
12. Shutter

density of the material used to coat the disk increases, the layer of coating must be thinner. For example, to achieve satisfactory resolution (clarity of signal) in high-density media, coating thickness had to be cut in half. 1/

The physical differences between 3.5" media and microdisks are obvious. 2/ 3.5" media is contained in a rigid plastic case, called a clamshell. The shell is fitted with a shutter, which opens and shuts automatically over the read-write slot when the disk is inserted into a drive, and a stainless steel hub, which connects magnetically to the drive shaft when the disk is inserted. Another feature unique to the 3.5" microdisk is a write protect. Industry sources state that the design of the microdisk allows the disk to be more harmoniously accepted into the disk drive than other formats, facilitates centering of the hub, and enables use of more tracks per inch. 3/ With respect to the densities of these 3.5" finished microdisks, the physical design of the DD and HD products is similar. However, counsel for Sony argues that to insure optimal functioning of an HD disk, a manufacturer should use a smaller hub and a-ring, an identification hole allowing the drive to determine if the inserted disk is HD or DD, and finer liner material. 4/

The following tabulation summarizes the physical and electromagnetic characteristics of DD and HD 3.5" media and microdisks: 5/

	Double density	High density
Media:		
Coating thickness	2 microns	1 micron
Coercivity	600-650 oersted	700-750 oersted
Capacity (unformatted)	0.5MB (SS) 1.0MB (DS)	2.0MB
Magnetic composition	--	Cobalt adhered iron oxide

--continued.

1/ According to counsel for Sony, the higher coercivity and thinner coating of high-density media require that other changes be made to the overall composition of the coating material (Sony postconference brief, p. 15).
2/ However, the petitioner argues that these obvious physical differences are inconsequential because media constitutes the physical and technological heart of the disk. Counsel for Sony argues that the essential patents for the microdisk cover the case and shutter, not the media (Sony prehearing brief to Commerce, Nov. 30, 1988, p. 7); as an example, in preparing to start up a 3.5" microdisk manufacturing line in early 1989, engineers and attorneys for Nashua Corp. spent 6 months procuring equipment and reviewing in excess of 350 patents pertaining only to the design and assembly of microdisks (Jan. 6, 1989, Nashua letter to Commerce, pp. 3-4; and Nashua prehearing brief, exh. 3).
3/ However, the Sony design has recently been questioned as fairly expensive, requiring precise moldings, automated assembly equipment, and a number of parts that are not only troublesome to handle but may really contribute nothing to the successful use of the diskette by the end user (Magnetic Media Information Services (MMIS), International newsletter, Feb. 2, 1988, p. 55).
4/ Sony postconference brief, pp. 14-16.
5/ Respondents argue that separate like products exist with respect to DD and HD 3.5" media; in that 3.5" HD media is more similar to 5.25" HD media in coating formulation, coercivity, and coating thickness (Transcript (TR) pp. 161-162, and respondents posthearing brief, pp. 19-20).

Finished disk:	Double Density	High density
Track density (TPI)	135	135
Maximum recording density (BPI)	8,720	17,434
Components	Approx. 12	Same components, with an "I.D." hole.

Interchangeability

HD 3.5" microdisks were designed to be formatted to a capacity of 1.44MB and to be used in conjunction with an HD disk drive. During the preliminary investigation various parties argued that an HD disk cannot be used with a DD disk drive without risking read and/or write errors. It appears always to be true that a HD diskette formatted as such on an HD disk drive cannot be read or written to by a non-HD drive. It is possible to format an HD diskette on a non-HD disk drive for use with standard drives, although this does not make much practical sense, given the much greater cost of an HD diskette and the fact that a diskette formatted in this way would have only one-half the intended capacity. 1/ However, industry sources have noted that as experience with the 3.5" format increases, 3.5" DD mircrodisks are favored by many users of IBM PS/2 systems because they provide "half of the storage capability for 35% of the price, offering a better cost performance ratio." 2/

Petitioner has argued that the disks are "backward compatible" in that DD disks can function in HD drives. Petitioner argues that drives have been designed to be compatible to the greatest extent possible with prior generations of 3.5" media in order to meet the demands of drive users for flexibility. DD microdisks function in HD drives and are less expensive than HD, so software vendors generally release 3.5" software intended for use on HD drives on DD microdisks. 3/

However, respondents have argued that "backward compatibility" is not "compatible" in that true compatibility requires that data be interchanged in four ways: HD disks could be read and written upon by DD drives; and DD disks could be read and written upon by HD drives. 4/

Summary comments on the "interchangeability" of 3.5" products as provided by purchasers in response to the Commission's questionnaire include:

1/ A computer analyst recently conducted an extensive study on the results of formatting a diskette to a capacity for which that diskette was not designed and concluded that although such diskettes may work for a while, there is the risk that at some point in time data will not be read properly. As such, diskettes formatted in this way should be considered unreliable (Roberta Hardaker, op. cit.).

2/ This industry analyst also notes that the "HD is often purchased by users naively who think it is required for use in the PS/2 system." (Santa Clara Consulting Group (SCCG), European Market, January 1989, pp. 13-14.)

3/ Verbatim prehearing brief to Commerce, Nov. 30, 1988, p. 8.

4/ Sony prehearing brief to Commerce, Nov. 30, 1988, p. 22.

Firm	Comment
* * *	"Approximately 90% of all SS DD microdisks...are useable as DSDD. SS DD and DS DD cannot be utilized as HD microdisks. HD microdisks are useable in a HD (2.0MB) technology only."
* * *	"HD is not interchangeable."
* * *	"Entirely interchangeable."
* * *	"Somewhat interchangeable."
* * *	"All are interchangeable."
* * *	"We do not consider the various types interchangeable."
* * *	"Some * * * Systems use only DS/DD microdisks. Others use both DS/DD and HD. * * * uses DS/DD microdisks for program products unless the program requires more space. DS/DD must be used if compatability with all * * * systems is required."
* * *	"Not interchangeable."
* * *	"Not very interchangeable."

Future generations

Will new technologies be evolutionary or revolutionary? Industry analysts look for continuing developments in the 3.5" format; i.e., 4MB, 10MB, 12MB, and 20MB capacities. 1/ Toshiba began marketing 4MB 3.5" drives and barium ferrite microdisks in 1987, and licensed four companies (3M, Fuji, Hitachi, and Sony) to produce similar products. 2/ Hitachi reportedly produced special 3.5" metal pigment (MP) diskettes in 1987 for use in NEC's 12.5MB (unformatted) drive. 3/

Industry experts believe that doubling density will no longer satisfy pressing market needs. The future of higher density floppy disk products depends upon storage capabilities of 20-50MB capacity, so long as the drive and media are both reasonably priced. As densities increase for flexible magnetic media, problems of soft error generation and slow transfer rates will be more pronounced. For 20-50MB storage capacity in a removable medium, better alternative technologies may include a Bernoulli-principle system (higher cost drives and media), "stretched surface recording" disks developed by 3M, "optical floppy disks" that use thermo-magneto-optical recording principles,

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1/ It seems unlikely that a smaller sized diskette will gain acceptance because the lost surface area would significantly reduce the benefits of the smaller form factor (SCCG, Global Market, 1988, p. 29).
2/ MMIS Industry Monograph, Sept. 5, 1988, p. 39.
3/ Ibid., p. 18.

and video floppies (VF) (Sony and Sharp have small portable word-processors/computers on market in Japan). 1/

Manufacturing considerations

Manufacturing process.--Although the sequence at certain stages of the manufacturing process for 3.5" microdisks may vary according to individual producers, basic manufacturing principles are common.

3.5" media.--The basic phases in media manufacturing are as follows: formulation and dispersion (including filtering), coating and curing, drying and calendering, and "slit and punch."

Formulation and dispersion.--The first part of this process involves melding the raw materials (including a binder system, iron oxide particles, general constituents for wear enhancement, and pigments for conductivity). Media components are carefully selected and formulated according to a precise ratio to ensure the disk's physical and electrical properties. Factors such as the magnetic and physical properties of the particle, as well as the parameters of its coercivity and size, are considered in this formulation. Further, the types of oxide particles, binder elements, coating lubricants, and carbon that go into the production of magnetic media are specifically chosen according to the intended size and capacity of the finished disk.

This step is followed by a dispersion or magnetic distribution of the particles, during which lubricants, binders, and a solvent for viscosity are added. * * *.

Coating and curing.--

* * * * * * *

Drying and calendering.--

* * * * * * *

Slit and punch.--

* * * * * * *

3.5" finished microdisks.--At the most basic level, the 3.5" microdisk finishing process consists of two steps--burnishing and assembly. Parties have disagreed as to the complexity and importance of each step in the finishing process.

Burnishing.--The cookie undergoes burnishing, or the polishing of its surface with fine lapping tape, to achieve optimum smoothness. Successful burnishing requires the proper mix of air knife pressure, burnishing

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1/ Ibid., p. 41.

time, amount of tape, and grit of tape. 1/ Burnishing has been described as a polishing process by the petitioner and as a highly sophisticated and delicate process by the respondents. 2/

Assembly. 3/--Assembly of the 3.5" microdisk consists of applying a steel hub to the media with an adhesive ring (A-ring), attaching a soft synthetic liner to both halves of the hard plastic shell, installing a wiper spring (lifter) and friction pad, and inserting the media between the two shell halves and spot-welding the halves together. A shutter, shutter spring, and write protect are also attached to the shell of the 3.5" diskette. 4/ The significance of each of the components used in a microdisk are detailed as follows: 5/

- o plastic shell--provides protection and proper positioning in drive
- o liner--separates media from jacket and wipes media clean with rotation
- o lifter--enhances cleaning with slight pressure against liner
- o friction pad--protects shell from friction of rotating drive shaft
- o center hub--wear resistant metal hub that maintains concentricity
- o A-ring--adheres center hub to media
- o write-protect--sliding switch to protect against erasure
- o shutter and spring assembly--opens to expose media when in disk drive

In summary, the automated assembly of a 3.5" microdisk has been described as an "expensive packaging" operation by those in support of the petition, 6/ and as a "precise and highly technical" process by respondents. 7/

1/ In its "Request for exclusion" to Commerce, KAO-Didak described the burnishing process as a precise combination of the following: the mesh size of the tape surface; the pounds-per-square-inch pressure exerted on the cookie surface; the "feed speed" of the tape over the cookie surface, measured in fractions of seconds; the number of revolutions (thousands per minute) of each cookie being burnished; the thickness, width, and inside diameter of the tape roll; the clearance between the tips of the air knives; and the oscillation distance and oscillation speed of the burnishing tape (Kao-Didak submission to Commerce, June 27, 1988, pp. 8 and 9).

2/ Petitioner has noted that Sony did not burnish media prior to a cross-license agreement with Verbatim in 1982. An industry newspaper has also reported that Fuji believes that in the future, burnishing could be omitted from the manufacturing process altogether, as it is bad for the disk (PC Week, Apr. 5, 1988, p. 101). Verbatim has indicated that it has successfully produced an unburnished 1MB microdisk, for introduction to the U.S. market in 1989 (Verbatim prehearing brief, p. 23).

3/ The more integrated producer of 3.5" microdisks will also produce the plastic shells for 3.5" microdisk finishing, with an injection molding process. In such an operation dry resin is injected into molds and heated to melt into the shape of the mold, with upper and lower shells produced separately.

4/ Finishing 5.25" and 8" diskettes also involves burnishing, assembly of three parts, attaching the liner material, and inserting the cookie into a soft covering (typically made of a vinyl chloride polymer).

5/ Joint prehearing brief of respondents, pp. 25-27.

6/ Transcript of the hearing (TR), p. 57.

7/ Joint posthearing brief of respondents, p.10.

Certification.--Certification is the testing of a magnetic disk to determine whether the media meets specific industry standards. A signal is written on the diskette and read back off. The percentage of the signal that is retained is used in the industry as a measure of the quality of the product. Greater signal retention commands a higher price in the market, although markets do exist for microdisks that test at lesser levels. A minimum threshold or "clipping level" of 45 percent has been set by ANSI, although individual producers and purchasers typically require that microdisks pass certification at a higher clipping level. Cyclic-wear tests are also carried out by exposing the media to extreme temperatures, and each track is tested for average speed. These procedures are usually conducted at various stages during the finishing process; the exact point(s) is/are determined by individual manufacturers. Stringent retesting of finished diskettes by original equipment manufacturers (OEMs) is also performed in order to approve, or "qualify," manufacturers' products for purchase.

Machinery and equipment.--The following is a brief description of the machinery and equipment employed by manufacturers in the production of 3.5" media and 3.5" finished microdisks.

3.5" media.--Coating operations are generally capital intensive, relate to the general category of magnetic media (including audio tape, video tape, as well as, 3.5", 5.25", and 8" floppy disk media), and require large volumes of different product mix to achieve efficiency. Basic equipment on a coating line includes a coater, mills, pumps, drying equipment, web cleaner section, calendar rolls, and compliant rolls, housed in a clean-room environment. With operational adjustments (e.g., a change of formulation and rolls), a magnetic-media producer can manufacture audio tape and 3.5" media on the same coating line. 1/

3.5" finished microdisks.--The manufacturing of 3.5" finished microdisks involves assembly or converting operations that occur on a spectrum from fully automated, to semiautomated, and to manual, with combinations thereof. Manufacturing of 3.5" finished microdisks has been undertaken by firms with investments that range from $*** for a manual converting operation producing *** million microdisks per year in an existing plant, to a $*** investment in plant and equipment for a fully automated assembly operation producing *** million microdisks per year.

At the "high-technology" end of microdisk finishing spectrum are the vertically integrated manufacturers that not only coat the media, but also produce the injection-molded plastic shells, stamp shutters, produce the liner, as well as assemble and test the product. These automated manufacturers employ customized, pick-and-place robotics in a "clean room" environment, with a continuous motion assembly line whereby the product is untouched by human hands. 2/ Once a microdisk assembly line has been constructed, both DD and HD products can be produced on that line with operational adjustments. 3/

1/ Sony Magnetic Products Co. began production of 3.5" media in 1988 at its Dothan, AL, plant, which had been Sony's U.S. manufacturing site for audio tape.
2/ In a class 100 "clean room", a special air-filtering system keeps the level of dust and air particles at approximately 1/100 the level in a normal room ("Request to exclude" submission of Kao-Didak to Commerce, June 27, 1988, p. 5).
3/ Jan. 13, 1989, submission to the Commission from counsel for Hitachi Maxell.

At the "low-technology" or manual end of microdisk finishing are the converters of pre-assembled clamshells. 1/ Manual operations for such a converter would include the following items of machinery and equipment: manual burnishers, hubbers (which apply the adhesive ring to the hub and the hub to the media), certifiers, and welders. 2/ Insertion of the shutter and shutter spring requires no equipment. The microdisk product is physically handled at each stage of the process in a "white room" where temperature and humidity are controlled.

U.S. tariff treatment

Imports of the subject products are classified in subheading 8523.20.00 of the Harmonized Tariff Schedule of the United States (HTS), a residual or "basket" category that covers unrecorded magnetic discs, including coated media in cookie form. The applicable column 1 general (most favored nation) duty rate is 4.2 percent ad valorem, and has applied since January 1, 1987. During the period of this investigation imports were reported under previous item 724.4570 of the Tariff Schedule of the United States (TSUS), which also included numerous other unrecorded magnetic-recording media products (except those for audio or video recording) at the same duty rate.

During the period of this investigation imports of 3.5" microdisks were also entered under HTS subheading 9802.00.80 (former TSUS item 807.00), which includes foreign-assembled goods containing U.S.-made components. The tariff schedule calls for a duty upon the full value of the imported article, less the cost or value of the U.S.-made components.

The U.S. Industry

U.S. producers

For the purposes of this report, the U.S. 3.5" microdisk industry includes companies that produce 3.5" media (coaters), companies that purchase media from coaters and assemble it into finished microdisks (converters), 3/ and vertically integrated companies that both coat and convert. U.S. coaters

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1/ Preassembled clamshells contain all the components of the finished microdisk except for the hub, A-ring, and cookie; where two corners of the plastic shell are welded together. A converter inserts the media with hub and A-ring into the clamshell, welds the remaining two corners of the plastic shell, certifies, and packages.

2/ Petitioner has indicated that such equipment is relatively simple to operate, inexpensive, and may be purchased new or secondhand (Verbatim prehearing brief, exh. 6, p. 2).

3/ Converters vary in the nature of their assembly operations--some manufacture the injection-molded plastic shells (also called clamshells), assemble the component parts, burnish and insert the media, and finally, certify and package the microdisks; others purchase all components, including the clamshell, and assemble, certify, and package the finished microdisk. Still others purchase "subassemblies" (clamshells with all component parts already attached) and merely burnish and insert the media and certify and package the finished microdisk.

vertically integrated companies that both coat and convert. U.S. coaters produce in the United States 3.5" media that is finished domestically or in a foreign country. U.S. converters perform assembly operations in the United States using media coated in the United States or offshore. Eleven known firms coated and/or finished 3.5" media in the United States during January 1985-September 1988. 1/ As presented in table 1, six firms produced 3.5" media in the United States, two of which have fully integrated finishing operations in this country. Five firms converted 3.5" microdisks in the United States, all of which imported from Japan some amount of the media used in the production of such diskettes. Of these firms, three have operations capable of molding shells, assembling component parts, and testing and packaging finished microdisks, and three firms purchase subassemblies. During the period of investigation, no firm in the United States was purchasing the injection-molded clamshell unassembled and conducting U.S. assembly and testing operations, although this is the nature of Verbatim's finishing operation in Mexico.

Minnesota Mining and Manufacturing Co. (3M), St.Paul, MN, * * *. In addition, 3M was * * *. 3M produces * * *. During January-September 1988, 3M was * * *. * * *.

Verbatim Corp., Charlotte, NC, was purchased by Eastman Kodak Co. in June 1985 and now operates as an independent but wholly owned subsidiary of Kodak. From 1984, when it began producing 3.5" microdisks, until mid-1986, Verbatim, the petitioner in this investigation, both coated and finished 3.5" media at its facilities in Sunnyvale, CA. In March 1986, Verbatim moved its finishing operations to Guadalajara, Mexico, where it now converts microdisks destined for the U.S. market at Industria Fotografica InterAmericana S.A. de C.V. (IFISA), a Kodak film manufacturing plant. In addition to these facilities, Verbatim finishes 3.5" microdisks and coats and finishes 5.25" floppy disks at its plant in Limerick, Ireland. Verbatim also imports 3.5" finished microdisks from Kasei-Verbatim, a joint venture with Mitsubishi Kasei in Japan, that coats and finishes both 3.5" and 5.25" floppy disks. During January-September 1988, Verbatim began * * *. * * *.

Shape, Inc., Biddeford, ME, is * * * of 3.5" microdisks in the United States. Shape West, a wholly owned subsidiary located in Tucson, AZ, * * *. During January-September 1988, Shape was * * *. 2/ * * *.

Xidex Magnetics Corp., Palo Alto, CA, is the largest U.S. producer of 5.25" floppy disks and currently * * * for 3.5" microdisks in the United States. During January-September 1988, Xidex was * * *. During the period of investigation Xidex's operations were * * *.

BASF Corp., Bedford, MA, is a wholly owned subsidiary of BASFIN Corp. of Parsippany, NJ, which is itself wholly owned by BASF Aktiengesellschaft, West Germany. BASF * * * 3.5" microdisks in the United States * * *. During January-September 1988, BASF was * * *.

Wabash Datatech, Inc., Huntley, IL, was acquired by Shape in June 1986. * * *. During the period of investigation Wabash * * *.

1/ * * * .
2/ * * *.

Table 1
3.5" microdisks and media therefor: U.S. producers' operations and their shares of U.S. production, January-September 1988

Firm name and plant location	Owns and operates U.S. establishment(s) performing:				Share of Jan.-Sept. 1988 U.S. production of--	
	Media coating	Shell fabrication	Shell assembly	Microdisk finishing	3.5" media	finished microdisks
					--In percent--	
Athana						
Torrance, CA.....						
BASF Corp.						
Bedford, MA.....						
Maxell of America						
San Diego, CA.....						
3M						
Weatherford, OK.....						
Sentinel Technologies/KAO						
Hyannis, MA 2/.....						
Shape, Inc. 3/						
Tucson, AZ.....	*	*	*	*	*	*
Sony Magnetic Products						
Dothan, AL.....						
Syncom Technologies						
Mitchell, SD.....						
Verbatim Corp. 5/						
Sunnyvale, CA.....						
Wabash Datatech						
Folsom, CA.....						
Xidex						
Omaha, NE.....						
Santa Clara, CA.....						
Total U.S. production.....					100.0	100.0

1/ Not available.
2/ Sentinel Technologies was acquired by KAO Corporation of America in July 1988.
3/ Shape * * *.
4/ Sony began production of * * *.
5/ In 1988, Verbatim began * * *.

Note.--Because of rounding, figures may not add to the totals shown.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Computer Resources, Inc. (CRI), Cleveland, OH, finishes * * * 3.5" microdisks along with 8" and 5.25" diskettes and computer tape at its facility in Cleveland. * * *.

Sentinel Technologies, Hyannis, MA, was * * *. In July 1988 Sentinel was purchased by KAO Corp. of America, and is completing construction of a $*** state-of-the-art microdisk assembly plant in Plymouth, MA, which is expected to be in full production by * * *.

New entrants.--As noted by industry analysts, the dramatic growth in demand during 1987 and 1988 provided an opportunity for non-Japanese producers to enter the industry. 1/ During 1988 and 1989 a number of firms began U.S. operations manufacturing 3.5" microdisks and/or media therefor. These firms include:

Maxell America, Inc., Conyers, GA, owned by Hitachi Maxell, Ltd. and Maxell Corp. of America, began production of 3.5" microdisks in May 1988 at a facility in San Diego, CA. Maxell's fully automated operations include * * *. During January-September 1988, Maxell * * *.

Cenna Technology, Inc., West Jordan, UT, began production of 3.5" microdisks in * * *. * * *.

Sony Magnetic Products, Dothan, AL, began production of * * *. During January-September 1988, Sony produced approximately * * *.

Polaroid Corp., Cambridge, MA, began commercial production runs of 3.5" media in the fourth quarter of 1988 at its Massachusetts facilities. Polaroid and its subsidiary, Mag Media, have also invested $*** in machinery and equipment for 3.5" microdisk * * * operations in Santa Rosa, CA, using * * *. Polaroid expects to be in full commercial production of 3.5" finished microdisks by * * *.

Nashua Corp., Nashua, NH, has invested approximately $*** in capital equipment for the manufacturing of 3.5" microdisks * * *. Nashua expects production of *** units per year.

Syncom Technologies, Mitchell, SD, a "low-cost integrated producer" of 3.5" microdisks, began production of 3.5" microdisks * * *. During January-September 1988, Syncom produced approximately * * *.

Other new entrants.--The Commission has not received a producers' questionnaire response from * * *. In addition, Mitsubishi Kasei of Japan has announced plans for the establishment of a U.S. 3.5" manufacturing plant to open in Chesapeake, VA, in 1989. * * *.

1/ While the growth in demand during 1987 and 1988 has provided opportunities for manufacturers to enter the market, there were two notable failed attempts to establish U.S. 3.5" finishing operations in 1984; (a) Nashua's unsuccessful pilot line experiment with a manual 3.5" microdisk assembly operation (Nashua prehearing brief, p. 3), and (b) Polaroid's $*** unsuccessful venture with Mag Media to establish 3.5" clamshell assembly operations (Polaroid prehearing brief, p. 2).

Position on petition.--As of September 30, 1988, five U.S. producers supported the petition, three were opposed, and two took no position. The firms and their positions are listed below:

In support 1/	Opposed 2/	No position
*	*	*
*	*	*
*	*	*
*	*	*
*	*	*

The share of U.S. production of 3.5" microdisks and/or media that each of the above groups represents is presented in table 2.

Table 2
3.5" finished microdisks and media therefor: U.S. producers' shares of production by position on the petition, 1985-87, January-September 1987-88

*	*	*	*	*	*	*

U.S. Importers

The Commission sent importer questionnaires to 19 firms believed to import 3.5" microdisks and/or media from Japan and received responses from 18 firms. Of those firms reporting imports of 3.5" microdisks and/or media therefor from Japan, six firms are related to Japanese producers of microdisks. During January-September 1988 these six firms accounted for *** percent of reported imports of 3.5" media, and *** percent of reported imports of 3.5" finished microdisks from Japan. In addition, during January-September 1987 two U.S. producers imported 3.5" media from Japan to convert into 3.5" finished microdisks; this number increased to six firms during January-September 1988 as Maxell and Sony established U.S. operations. U.S. importers and their respective shares of imports from Japan are shown in table 3.

1/ Two additional firms have indicated support for the petition: (1) * * *; and (2) Polaroid, which began production of both 3.5" media and microdisks in * * *.

2/ Two additional firms have indicated opposition to the petition: (1) Athana, which began * * *, indicated its opposition during the preliminary and final investigations, and * * *; and (2) Nashua, which began 3.5" assembly operations in 1989.

Table 3
3.5" microdisks and media therefor: U.S. importers and their shares of imports from Japan, January-September 1987-88

(In percent)

Firm name and location	Share of imports from Japan			
	Media		Finished disks	
	January-September--		January-September--	
	1987	1988	1987	1988
* * *				
* * *.....				
CI Tech				
Elmsford, NY.....				
Fuji Photo Film U.S.A.				
Elmsford, NY.....				
* * *				
* * *.....				
* * *				
* * *.....				
JVC				
Santa Clara, CA.....				
Kao Corp.				
Mountain View, CA.....				
Maxell Corp. of America				
Fair Lawn, NJ.....				
Memorex	*	*	*	*
Santa Clara, CA.....				
Nashua Corp.				
Nashua, NH.....				
Polaroid/Magmedia				
Cambridge, MA.....				
* * *				
* * *.....				
Sony Corp. of America				
Park Ridge, NJ.....				
TDK Electronics				
Port Washington, NY.....				
* * *				
* * *.....				
Verbatim Corp.				
Charlotte, NC.....				
* * *				
* * *.....				
Total.....	100.0	100.0	100.0	100.0

Note.--Because of rounding, figures may not add to the totals shown.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The Domestic Market

Apparent U.S. consumption

Data on apparent consumption of 3.5" microdisks and media therefor were compiled from information submitted in response to questionnaires of the U.S. International Trade Commission. Data for apparent consumption are presented separately for 3.5" finished microdisks and media therefor and are composed of the following items:

3.5" media:
- --Domestic shipments of media that were reported as "arms length" transactions (shipments of media under toll arrangements have been excluded); and
- --Imports of 3.5" media from unrelated parties in Japan and third countries, and imports of 3.5" media from related parties for resale to third parties (imports from related parties for internal consumption by a U.S. subsidiary have been excluded).

3.5" finished microdisks:
- --Domestic shipments and company transfers of U.S.-produced microdisks, including shipments of purchases under toll arrangements; shipments from * * * ; and
- --Imports of 3.5" finished microdisks from Japan and third countries.

Apparent U.S. consumption of 3.5" finished microdisks, by quantity, increased fivefold from 1985 to 1987 and continued to increase, by *** percent, during January-September 1988 when compared to the same period in 1987 (see table 4). Apparent U.S. consumption of 3.5" media increased by 21 percent from 1985 to 1987, and increased by *** percent during January-September 1988 when compared to the same period in 1987.

Channels of distribution

3.5" media.--Open-market sales (i.e., arms-length transactions) to unrelated parties of media for 3.5" microdisks are factory-direct sales to converters that assemble it into finished microdisks. Generally, converters enter into informal but ongoing relationships with suppliers of media that they have certified and can rely on for good quality and for compatibility with the converter's particular finishing process. 1/ The open market for media enjoyed a ***-percent share of total U.S. consumption of media in 1985, and decreased to a ***-percent share during January-September 1988 (calculated from data presented in table 4). 2/

1/ Burnishing equipment is sensitive to subtle differences among media produced by individual coaters. Therefore, converters generally like to restrict their supply to one or a few sources of cookies to insure good yields.
2/ Total media consumption assumes a 90-percent yield for finished microdisks.

Table 4
3.5" finished microdisks and media therefor: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87, January-September 1987-88

(In thousands of units)

Item	1985	1986	1987	January-September 1987	January-September 1988
3.5" media:					
600-650 oersted--					
U.S. imports					
U.S.-produced domestic shipments 1/					
Apparent U.S. consumption					
700-750 oersted--					
U.S. imports	*	*	*	*	*
U.S.-produced domestic shipments 1/					
Apparent U.S. consumption					
Total 3.5" media--					
U.S. imports					
U.S.-produced domestic shipments 1/					
Apparent U.S. consumption					
3.5" finished microdisks:					
DD--					
U.S. imports					
U.S.-produced domestic shipments 2/					
Apparent U.S. consumption					
HD--					
U.S. imports					
U.S.-produced domestic shipments 2/					
Apparent U.S. consumption					
Total 3.5" densities--					
U.S. imports	19,747	53,904	117,031	71,652	***
U.S.-produced domestic shipments 2/	4,573	8,058	26,384	14,912	***
Apparent U.S. consumption	24,320	61,962	143,415	86,564	***

1/ Includes only "open market" shipments of 3.5" media sold in arms-length transactions.
2/ Includes company transfers.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

3.5" finished microdisks.--During the preliminary investigation it was determined that producers of finished microdisks supply the market through three channels of distribution: (1) sales to distributors, (2) sales to mass merchandisers, and (3) sales to original equipment manufacturers (OEM's). During this final investigation, additional information was gathered from producers and importers as to discrete markets for 3.5 microdisks. The shares of U.S.-produced shipments and U.S. shipments of imports, by type of market, are presented in table 5.

For purposes of this investigation, an OEM includes OEM hardware customers (e.g., IBM and Apple), OEM fabricators (e.g., 3M and Cenna Tech), software houses (e.g., Lotus and Microsoft), and duplicators (e.g., Memcon and Formats Unlimited). 1/ 2/ Within this broad OEM category, U.S.-produced domestic shipments were concentrated in shipments to software houses (at a decreasing rate) and duplicators (at an increasing rate). Shipments of imports were concentrated in shipments to OEM hardware customers (decreasing irregularly as IBM requirements peaked in 1987) and duplicators (at an increasing rate). U.S. importers also supplied the bulk of OEM fabricator requirements, with * * *. U.S.-produced domestic shipments to all OEMs decreased irrregularly from 32.5 percent of total domestic shipments of U.S.-produced 3.5" microdisks in 1985 to 27.0 percent in 1987, while shipments of imports to all OEMs increased from 30.0 to 50.4 percent of total shipments of imports of 3.5" microdisks during the same period.

Most sales to distributors are of branded product, sold in boxes of 10, and labeled with the manufacturer's brand name. 3/ Distributors offer diskette manufacturers access to the office and computer supply markets through both catalogue and retail sales. In addition, distributors sell product to the government, educational institutions, and other organizations that purchase the branded product in large quantities. U.S.-produced domestic shipments to distributors represented the largest market segment for U.S.-produced microdisks, and increased irregularly to 41.5 percent of total domestic shipments of U.S.-produced 3.5" microdisks during January-September 1988. Shipments of imports to distributors represented the second largest market segment for imports, and increased irregularly to 33.8 percent of total shipments of imports of 3.5" microdisks during the period.

1/ OEM hardware manufacturers use microdisks to record computer programs that they include with sales of hardware or that they use internally in product and software development. * * *.

2/ According to industry sources, software publishers and duplicators represent the fastest growing segment of the market. As a result of the widespread acceptance of the 3.5" format, much of the software that has been developed and published over the past 10 years in the 5.25" format is now being reproduced on 3.5" diskettes. This one-time duplication of pre-existing software has led to unprecedented growth in this market during the past year. Although growth will slow as duplicators complete the conversion process, growth is likely to remain healthy, as newly published software will be offered in the 3.5" format from the outset.

3/ Manufacturers that sell to the branded market typically offer more than one grade of product that they sell under different brand names, such as Verbatim's top-of-the-line "Datalife" and its second grade, "Bonus" products.

Table 5
3.5" finished microdisks: U.S.-produced domestic shipments and U.S. shipments of imports as a share of total U.S. shipments, by channels of distribution, 1985-87, January-September 1987-88

(In percent)

Item	1985	1986	1987	January-September 1987	January-September 1988
U.S.-produced domestic shipments:					
OEM hardware customers	***	***	***	***	***
OEM fabricator, reseller	***	***	***	***	***
Software houses	***	***	***	***	***
Duplicators	***	***	***	***	***
Distributors	36.4	39.8	37.3	34.9	***
Mass merchandisers	***	***	***	***	***
Direct mail houses	***	***	***	***	***
Direct retailers	***	***	***	***	***
Office supply houses	***	***	***	***	***
All others	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0
U.S. shipments of imports:					
OEM hardware customers	***	***	***	***	***
OEM fabricator, reseller	***	***	***	***	***
Software houses	***	***	***	***	***
Duplicators	***	***	***	***	***
Distributors	31.6	36.5	30.4	33.4	***
Mass merchandisers	***	***	***	***	***
Direct mail houses	***	***	***	***	***
Direct retailers	***	***	***	***	***
Office supply houses	***	***	***	***	***
All others	***	***	***	***	***
Total	100.0	100.0	100.0	100.0	100.0

1/ Includes company transfers.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Below the distributor level are sales to mass merchandisers, direct mail house, direct retailers, and office supply houses. These channels include sales of second brands, such as Verbatim's "Bonus" or Xidex's "Precision", which offer lower pricing than the top-of the-line products, as well as * * *. U.S.-produced domestic shipments to these categories of customers decreased irregularly to *** percent of total domestic shipments of U.S.-produced 3.5" microdisks during January-September 1988; shipments of imports to these customers also decreased irregularly to 18.7 percent of total shipments of imports of 3.5" microdisks during the period.

U.S. producers generally sell through a sales division of their own organization, which offers a whole line of magnetic media products, including 8" and 5.25" diskettes and computer tape. U.S. manufacturers of these products that have opted not to go into 3.5" microdisk production depend on purchases of imported or domestic 3.5" microdisks to maintain customers who prefer to do business with one vendor for all their diskette needs. 1/

Quality considerations.--Sales of 3.5" microdisks to OEM hardware manufacturers usually involve a qualification process whereby a given producer's microdisks are approved for use with that OEM's product or for sale under the OEM's label as an accessory item. Each OEM's qualification process differs in the rigor of its standards, its methodology, and therefore the time and cost involved in becoming qualified. 2/ From a technical standpoint, qualification generally involves many of the same tests that manufacturers use internally when they certify their product before shipping, as described in the section of this report entitled "Manufacturing process." Most qualification programs, however, put a great deal of emphasis on consistency of performance

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1/ Several such firms reported that they are unable to get good quality microdisks in the United States with any kind of consistency and have thus begun purchasing imports from Japan.

2/ During the course of this investigation, the Commission has heard numerous accounts and received extensive documentation from major OEM's, and smaller converters that produce finished microdisks for OEM's, stating that Verbatim has been unable to become qualified as a supplier for their firm. According to officials at Apple Computer, Verbatim has failed to become a qualified supplier to that OEM. In early 1986, after repeated efforts by both parties, Apple decided to qualify Verbatim. That same week, Verbatim moved its finishing operations to Mexico and Apple had to begin the qualification process from scratch using product finished in Mexico. As yet, Apple has not qualified Verbatim's 3.5" microdisks and has been waiting for more than three years to obtain test samples from Verbatim to continue the qualification process (TR, p. 234).

Various U.S. converters, including * * *, will not purchase Verbatim 3.5" media because of poor quality and unreliability (staff interviews with officials from these firms). * * *.

In its briefs and in testimony at the hearing, Verbatim has argued that (a) since the acquistion by Kodak it has given priority to branded products customers, and it did ration scarce R & D resources to qualify OEMs (TR, p. 63), (b) OEM requirements do not always relate to media quality but to customized requirements, which can impose substantial costs on a manufacturer (Verbatim posthearing brief, p. 9), (c) media sold to converters has been in amounts so small as to be insufficient for conducting effective tests (Verbatim prehearing brief, exh. 29), and (d) that the quality of Verbatim media is best demonstrated by the list of 7 OEMs (including IBM) that have qualified microdisks containing Verbatim media (Verbatim posthearing brief, exh. 3).

programs, however, put a great deal of emphasis on consistency of performance and therefore require numerous and repeated tests of a finisher's product over a period of time. In addition, many OEM's qualify by plant location as well as producer. 1/

Industry testing performed on various brands/suppliers has resulted in distinct differences in performance and "quality", as reported in response to the Commission's questionnaires. 2/ However, these results should be viewed with caution as they are both limited 3/ and at times contradictory. 4/ In addition, industry experts have concluded that "the only valid thing that can be said about diskette quality is that, under the general conditions in which end users work with diskettes, any of the better known names will be completely acceptable". 5/

Market factors

Demand factors.--Demand for floppy disks is derived from the demand for disk drives and the computers in which they are installed. The actual level of demand for microdisks will depend upon the recording- and storage-capacity requirements of consumers such as software duplicators, hardware manufacturers, and owners of computers with 3.5" disk drives. Consequently, the market for 3.5" microdisks continues to grow as more computer manufacturers introduce PCs with 3.5" disk drives. In 1984, Hewlett Packard introduced the first computer containing the 3.5" format. More recently, demand for 3.5" microdisks has been spurred by the introduction of IBM's PS/2 computer in April 1987, which was seen by many as the signal that the 3.5" format is here to stay.

In estimating market demand, U.S. producers and industry analysts will project market requirements based on estimates of the "burn rate" or average disk usage per installed base of 3.5" disk drives; or based on customer requirements for internal use, software duplication, and blank data storage

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1/ For example, when Sony began finishing microdisks in Nuevo Laredo, Apple had to qualify product coming out of that plant, even though Sony had been a long-time supplier to Apple of microdisks produced in Japan.
2/ See "non-price factors" section of this report, and app. E.
3/ The six OEMs that did provide ratings of 3.5" microdisks (app. E) represent approximately 10 percent of total sales of 3.5" microdisks and 25 percent of sales to OEMs. In response to the Commission's questionnaires, the remaining OEMs have reported that they do not have rating systems, and that qualified suppliers are "equally rated with respect to quality" and the brands are completely interchangeable.
4/ * * *.
5/ Magnetic Media Information Services, International newsletter, Feb. 22, 1988, p. 36.

microdisks. Estimating 3.5" microdisk demand would be based on computer system requirements of disks per drive as presented in the tabulation below:

Drives	1987 Installed Base (1,000 units)	1987 Disks/drive	1988 Shipments (1,000 units)	1988 Disks/drive	1988 Installed Base (1,000 units)	1988 Disks/drive
IBM	1,380	29	2,100	56	3,480	45
Apple	1,970	38	1,680	73	3,650	54
Laptop	560	18	800	23	1,360	21
Commodore	320	15	400	27	720	22
Atari	290	18	170	49	460	29
Other	350	20	320	38	670	29
Totals	4,870		5,470		10,340	
Average		29		53		42

Source: Santa Clara Consulting Group, 3.5" Diskette Market-Global, July, 1988.

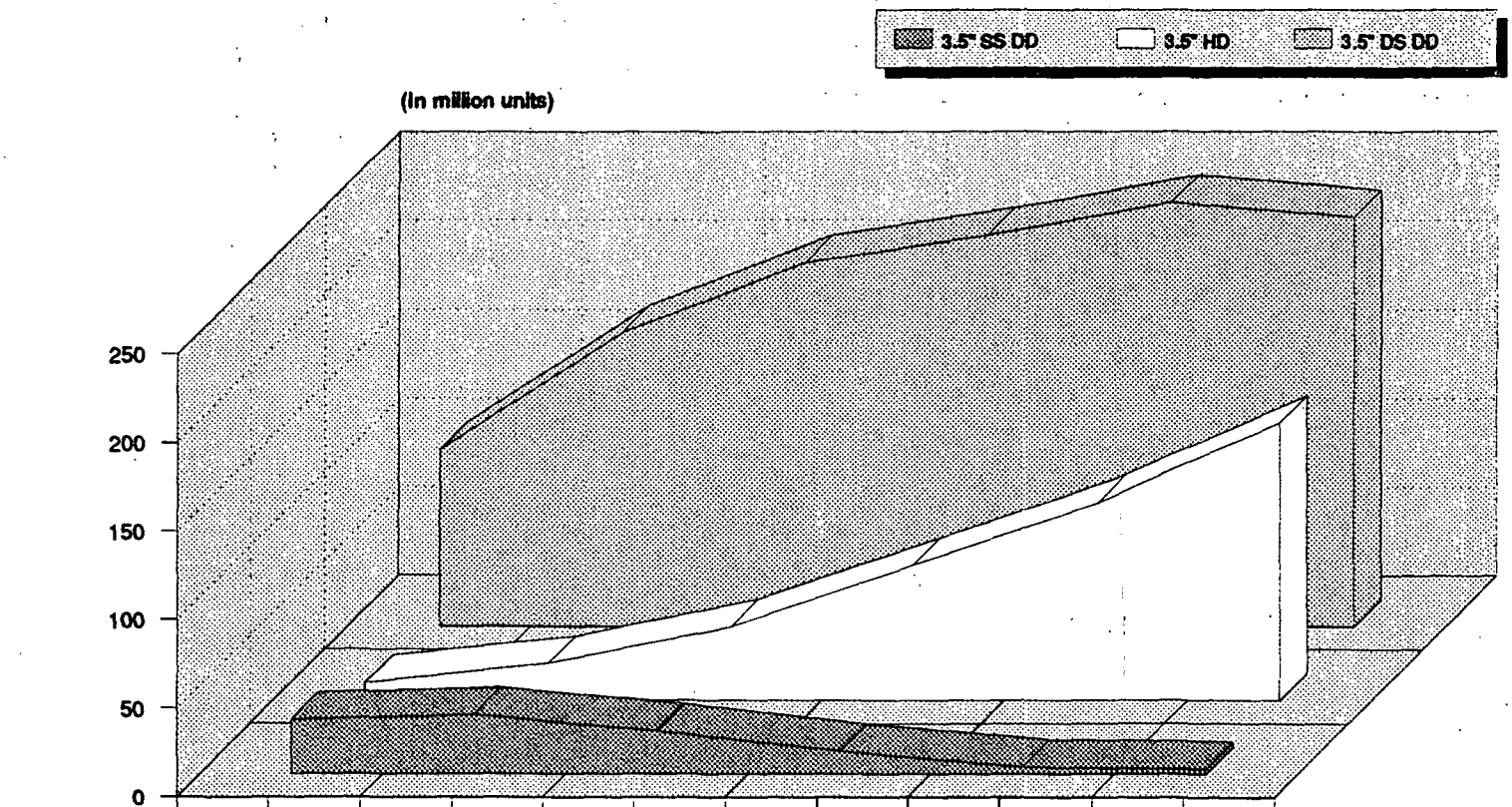
Projecting demand for the 3.5" microdisk market has been described as an exercise in crystal ball reading, with various estimates being close in the first 2 years, but varying dramatically in later years. 1/ Nonetheless, data prepared in June 1988 on projected growth of the 3.5" microdisk market through 1992 is presented in figure 2. 2/ Such data and graphics for the period 1987-92 indicate the following:

- o demand for SS DD microdisks will fade fast, decreasing by 91 percent from 1987 to 1992;
- o growth in demand for DS DD will be modest (131 percent), with this segment maintaining its dominant share of the market but at a decreasing rate; and
- o demand for HD microdisks will be the fastest growing segment, increasing to 40 percent of the 3.5" market by 1992, as software publishers use HD microdisks to reduce the number of disks in a software package.

Supply factors.--Producers of 3.5" microdisks and components apparently did not anticipate so rapid an acceptance of the new format, which led to a supply shortage during the period of investigation. Through the Commission's questionnaires, producers and importers have provided data on the magnitude of unfilled orders during the growth period of 1987-88, and a summary is presented in table 6.

1/ Industry experts caution that trends in product mix for the later years could change dramatically as future generations and alternative technologies come on stream. For example, a full-scale IBM endorsement of a 10MB floppy drive in 1989 could change growth rates for all types of diskettes considerably (MMIS, Industry Monograph, Sept. 5, 1988, p. 43).
2/ SCCG, United States Market, June 1988, p. 100.

FIGURE 2.--3.5" Microdisks:
Total United States Market, 1987-1992



	1987	1988	1989	1990	1991	1992
3.5" DS DD	99.91	165.63	204.93	220.32	238.62	230.47
3.5" HD	9.78	20.7	41.47	75.94	111.3	156.66
3.5" SS DD	30.66	33.44	24.37	13.06	3.97	2.77

Source: Santa Clara Consulting Group

Table 6
3.5" finished microdisks: Unfilled orders of U.S. producers and importers, 1986-88

(In 1,000 units)

Item	1986	1987	1988
U.S.-producers' backorders:			
January			
February			
March			
April			
May			
June	* * *	* * *	* * *
July			
August			
September			
October			
November			
December			
Average	61	305	2,037
U.S. importers' backorders:			
January			
February			
March			
April			
May			
June	* * *	* * *	* * *
July			
August			
September			
October			
November			
December			
Average	229	2,835	6,021

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Additional comments concerning the shortage were provided in questionnaire responses and are presented below:

Firm	Comment
***	*** reported "minimal" unfilled orders stating that "The only difficulties which we experienced were a result of internal production processes and were not related in any way to external forces."
***	"Although the demand for microdiskettes was great, the continuously decreasing market value precluded the purchase of costly production equipment."
***	"Difficulties in providing product to customers stemmed from firms internal financial constraints in providing capacity and insufficient availability and high price of outside sourced finished product."
***	"...the demand for 3.5" microdisks (particularly double-sided, double-density) grew significantly, causing a buildup of back orders to a number of customers."
***	"The dramatic escalation in demand and sales orders far exceeded our ability to rampup production during the period mid-1987 to mid-1988."
***	"Existing Japanese supplier stopped shipping to us and went direct into the retail market. Because of our verbal contract with them we were not prepared and had to start up our own manufacturing."
***	"*** currently has unusually high inventories because of the unexpected shift in demand. Prior to June, 1988, demand was high, and...in July, demand suddenly dropped below forecasted levels, and it became apparent that the prior demand was artifically inflated as customers duplicated orders to multiple suppliers in an attempt to obtain the product."
***	"Large OEM orders and increased branded business created a shortage of supply. Priority customers were shipped and prices were raised..."

Firm	Comment
***	"*** experienced many difficulties in providing 3.5" microdisks to our customers...Our major problem has consistently been a severe lack of product availability from our parent company..."
***	"*** could not import as many disks as the market demanded."

Legal environment.--Firms in support of the petition have argued that media coating technologies are the critical element in the manufacture of a 3.5" microdisk, as is evidenced by the fact that these technologies are protected by trade secret rather than by patent. 1/ Nonetheless, a list of patents governing the manufacture of 3.5" microdisks numbers in the hundreds. 2/ In terms of commercial significance, information gathered during this final investigation indicates that Sony licenses (1MB and 2MB) and an IBM patent are the major legal and commercial concerns for producers of 3.5" microdisks, and a description of each follows.

Sony licenses.--Sony has granted non-exclusive licenses to manufacturers worldwide to make, have made, lease, use, and/or sell the subject microdisks. 3/ Technical information provided to licensees includes (a) minimum specifications that Sony deems necessary in order to maintain interchangeability with micro floppy-disk systems developed by Sony; (b) performance specifications for microdisks, including electrical properties and other performance data and methods of measurement thereof; and (c) present and future drawings of the component parts used by Sony in the manufacture of the subject microdisks. 4/ Sony assesses a minimal, one-time charge of about $20,000 for its license.

IBM patents.--IBM holds certain "generic" patents governing the method of manufacturing magnetic flexible disks, and uncertainty as to the applicability of IBM patents to the manufacture of 3.5" microdisks has recently occurred. In particular, IBM has begun to protect its patent No. 3,668,658, entitled "Magnetic recording disk cover", by requiring licenses of certain 3.5" microdisk manufacturers. The IBM license requires royalty payments amounting to 1 percent of a licensee's sales of 3.5" finished microdisks. 5/

1/ Prehearing brief of Polaroid Corp., p. 11.
2/ Nashua posthearing brief, exh. 3.
3/ Sony grants separate licenses for DD (1MB unformatted) and HD (2MB unformatted) microdisks.
4/ In addition to technical information, Sony's licensing agreements refer to "licensed patents" that Sony has the right to grant without the payment of royalties or other consideration to third parties (* * *).
5/ * * *.

Production yields

During the preliminary investigation, respondents argued that the petitioner's 3.5" media and finished microdisks were produced with high yield-loss and low product quality, which had a direct negative impact on its production costs, sales, and profitability. Production yields, the ratio of usable output to maximum possible output, 1/ are a critical cost factor in the manufacture of both 3.5" media and finished microdisks. Low-quality output that either cannot be sold, or that must be sold in very low-priced markets, raises the unit cost of a finished microdisk. 2/ Consequently, the profitability of a producer of microdisks and/or media is in large measure determined by (1) its standard costs, (2) its yields, and (3) the "quality" of the yields, e.g., the "clipping level" at which a microdisk is certified. 3/

Pursuant to these issues, the Commission requested all questionnaire respondents to supply data on their firms' finished microdisk production yields, and the clipping levels of their shipments of 3.5" microdisks. Those data are presented in table 7.

The data for production yields as presented in table 7 do not measure yields on a comparative basis as individual companies reported yield at various stages of production, but have been presented for informational purposes. If yield were measured consistently as the number of microdisks passing certification compared to the number of cookies burnished, then four U.S. producers (representing approximately *** percent of production during January-September 1988) and two Japanese producers (representing approximately *** percent of exports to the United States during January-September 1988) provided the following comparative information on production yields (in percent):

1/ In the production of media and finished microdisks, yield most commonly refers to the number of 3.5" microdisks that certify out of the total number finished. However, yield may also be measured after production of the media and after the media has been burnished, which is reportedly the most difficult step in finishing a microdisk. Some producers only do statistical quality control during media production and therefore do not measure the yield until the burnishing stage.

2/ Most microdisk producers sell output according to a "cascade system," based on the premise that while a certain number of disks can fail completely during certification, or "fall out," those that pass do so with a particular level of success. Diskettes are generally sold to markets according to the level at which they certify. At Verbatim, for example, microdisks that test at the IBM "zero-defect" level would go to OEM's that require very high quality. Microdisks that qualify on the second rung, below zero-defect but above ANSI standards, are typically sold to distributors as Verbatim's top-of-the line Datalife product. Microdisks that qualify to ANSI standards are generally sold as Verbatim's second grade BONUS brand. And finally, microdisks that test below ANSI standards are sold as unbranded bulk at very low prices.

3/ Clipping levels measure the electromagnetic performance of each microdisk to achieve minimum levels for certification. For example, a 40-percent clipping level means that the amplitude or signal level of a given bit is at least 40 percent of the average signal level of the entire track; the higher the clipping level, the more signal is retained.

Period	U.S.-produced product	Japanese-produced product
1985	***	***
1986	***	***
1987	***	***
Jan.-Sept.--		
1987	***	***
1988	***	***

Petitioner argues that the respondents are attempting to hold U.S. producers of 3.5" microdisks to an "efficient producer" standard, and it does not accept the argument that lack of efficiency and poor quality are the causes of any injury to the U.S. industry. Petitioner further argues that even if U.S. producers were as efficient as their Japanese counterparts, the U.S. industry could not compete with the price declines in Japanese product that have exceeded reductions in costs (as accounted for by the learning curve, efficiencies of scale, and reductions in raw material costs). 1/ The following tabulation provides a comparison of the index of prices (in yen) and the index of unit costs (in yen) for 3.5" microdisks from Japan: 2/

Year	Unit price	Unit cost
1985	100.0	100.0
1986	39.7	74.3
1987	23.3	51.5

Table 7
3.5" microdisks: Production yields and clipping levels of U.S. and Japanese products, 1985-87, January-September 1987-88

* * * * * * *

Consideration of Material Injury to an Industry in the United States

In order to evaluate the condition of the U.S. industry producing 3.5" microdisks and media therefor, the Commission surveyed all known U.S. manufacturers of the products. Data in this section of the report were compiled from questionnaire responses submitted by seven firms, accounting for approximately 95 percent of total known U.S. production of 3.5" finished microdisks and/or media in the United States.

1/ Verbatim posthearing brief, exh. 1.
2/ Index of unit price derived from respondents' prehearing brief, p. 53; and the index of unit costs represents an average based on data provided by * * * in response to the Commission's questionnaires.

U.S. production, capacity, and capacity utilization

U.S. production of 3.5" finished microdisks increased more than fourfold from 1985 to 1987; production nearly tripled during January-September 1988 when compared to the same period in 1987 (table 8). Capacity to produce such finished microdisks more than tripled between 1985 and 1987, and continued to increase during January-September 1988. As a result of this rapid increase in production, capacity utilization jumped from 41.8 percent in 1985 to 66.0 percent in 1987, continuing to increase to *** percent during January-September 1988.

Similarly, production of 3.5" media demonstrated rapid growth, increasing fourfold from 1985 to 1987, and *** during January-September 1988 over 1987. Capacity to produce media increased fivefold during 1985-87 and * * * from January-September 1987 to the same period in 1988. However, capacity utilization declined irregularly from 64.8 percent in 1985 to 53.8 percent in 1987, with the addition of large amounts of new capacity by existing producers and the entry of Wabash; during January-September 1988, capacity utilization rose to *** percent.

As determined in the preliminary investigation, the vast majority of microdisks finished in the United States contain media coated either in the United States or in Japan. The ratio of U.S.-produced microdisks containing media coated in Japan to total U.S.-produced microdisks dropped from *** percent in 1985 to *** percent in 1987 (table 9).

U.S. producers' shipments

Domestic shipments (including company transfers) of U.S.-produced 3.5" finished microdisks climbed steadily during the period of investigation, increasing nearly fivefold from 1985 to 1987, and increased by *** percent during January-September 1988 when compared to the comparable 1987 period (tables 10 and 11). Company transfers became a factor in 1987, reflecting * * *. * * *. Export shipments of U.S.-produced finished microdisks, which accounted for *** percent of total shipments during 1987, increased *** from 1985 to 1987, and increased by *** percent during January-September 1988 when compared to the similar period of 1987. * * * accounted for virtually all exports during this period. * * *.

Table 8
3.5" microdisks and media therefor: U.S. production, capacity, and capacity utilization, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-September 1987	January-September 1988
3.5" media:					
600-650 oersted--					
Production					
Capacity					
Capacity utilization: --in percent					
700-750 oersted--					
Production	*	*	*	*	*
Capacity 1/					
Capacity utilization: --in percent					
Total 3.5" media--					
Production	16,872	31,098	85,916	57,587	***
Capacity 2/	26,000	78,100	159,600	117,900	***
Capacity utilization: --in percent	64.8	39.8	53.8	48.8	***
3.5" finished microdisks:					
DD--					
Production					
Capacity					
Capacity utilization: --in percent					
HD--					
Production					
Capacity					
Capacity utilization: --in percent					
All 3.5" densities--					
Production	6,726	17,199	38,612	23,189	***
Capacity 2/	16,072	31,700	58,500	40,125	***
Capacity utilization: --in percent	41.8	54.3	66.0	57.8	***

1/ * * *.
2/ Capacity to produce 3.5" media and 3.5" finished microdisks are understated, as * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 9
3.5" finished microdisks: U.S. production and shares of total, by sources of media, 1985-87, and January-September 1987-88

* * * * * * *

Table 10
3.5" finished microdisks and media therefor: U.S.-produced domestic shipments, 1985-87, January-September 1987-88 1/

Item	1985	1986	1987	January-September 1987	January-September 1988
	Quantity (1,000 units)				
3.5" media:					
* * * 2/					
3.5" finished microdisks:	*	*	*	*	*
DD					
HD					
Total 3.5" finished disks	4,573	8,058	26,384	14,912	***
	Value (1,000 dollars)				
3.5" media:					
600-650 oersted					
3.5" finished microdisks:	*	*	*	*	*
DD					
HD					
Total 3.5" finished disks	8,555	10,203	28,319	16,834	***
	Unit value				
3.5" media:					
600-650 oersted					
3.5" finished microdisks:	*	*	*	*	*
DD					
HD					
Total 3.5" finished disks	1.87	1.27	1.07	1.13	***
	Share of total shipments (quantity)				
3.5" finished microdisks:					
DD	*	*	*	*	*
HD					
Total 3.5" finished disks	100.0	100.0	100.0	100.0	100.0

1/ Includes trade sales of 3.5" media, and company transfers of 3.5" finished microdisks.
2/ * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 11
3.5" finished microdisks and media therefor: U.S.-produced domestic shipments, export shipments, and total shipments, 1985-87, January-September 1987-88

* * * * * * *

In an effort to further understand the dynamics of the 3.5" microdisk market, additional data on domestic shipments by density and type of product were gathered through Commission questionnaires, and are presented in table 12. When compared to shipments of imports of 3.5" microdisks during 1985, shares of U.S.-produced domestic shipments were greater in the lower priced unbranded, SS DD product category. During 1986 and 1987, shipments of U.S.-produced product shifted significantly to branded, DS DD, and HD products as * * *. During January-September 1988, shares of U.S.-produced domestic shipments represented by branded, DS DD product * * *; however, the share of U.S.-produced shipments representing higher priced, HD product * * * shipments of imported HD product.

U.S. producers' inventories

From 1985 to 1987, end-of-period inventories of 3.5" finished microdisks decreased steadily from *** percent to *** percent as a ratio to total shipments of U.S.-produced 3.5" microdisks; this inventory ratio * * * to *** percent during January-September 1988 (table 13). From 1985 to 1987 end-of-period inventories of 3.5" media as a ratio to total production increased irregularly from *** percent to *** percent, and * * * to *** percent during January-September 1988.

Table 13
3.5" finished microdisks and media therefor: U.S.-producers' end-of-period inventories, and shares of production or total shipments 1985-87, and January-September 1987-88

* * * * * * *

Table 12

3.5" finished microdisks: U.S.-produced domestic shipments and U.S. shipments of imports, unit value and as a share of total U.S. shipments, by type of product, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-Sept. 1987	January-Sept. 1988	1985	1986	1987	January-Sept. 1987	January-Sept. 1988
	Unit Value					Share of total (in percent)				
U.S.-produced domestic shipments:										
SS, DD—										
Branded	*	*	*	*		*	*	*		
Unbranded										
Avg./total SS	1.89	1.03	0.79	0.83	***	***	***	***	***	***
DS DD—										
Branded	*	*	*	*		*	*	*		
Unbranded										
Avg./total DS	2.09	1.58	1.11	1.18	***	***	***	***	***	***
HD—										
Branded	*	*	*	*		*	*	*		
Unbranded										
Avg./total HD	***	***	***	***	***	***	***	***	***	***
All densities—										
Branded	$ 2.18	$ 1.50	$ 1.47	$ 1.49	$ ***	55.8	57.7	56.0	64.7	***
Unbranded	1.62	1.07	0.83	0.83	***	44.2	42.3	44.0	35.3	***
Avg./total All	1.93	1.32	1.19	1.25	***	100.0	100.0	100.0	100.0	100.0
U.S. shipments of imports:										
SS, DD—										
Branded	*	*	*	*		*	*	*		
Unbranded										
Avg./total SS	1.85	1.16	1.09	0.82	***	***	***	***	***	***
DS DD—										
Branded	*	*	*	*		*	*	*		
Unbranded										
Avg./total DS	2.34	1.67	1.15	1.13	***	***	***	***	***	***
HD—										
Branded	*	*	*	*		*	*	*		
Unbranded										
Avg./total HD	***	***	***	***	***	***	***	***	***	***
All densities—										
Branded	$ 2.21	$ 1.65	$ 1.63	$ 1.40	$ ***	62.6	52.2	44.7	45.3	***
Unbranded	1.61	1.20	0.93	0.92	***	37.4	47.8	55.3	54.7	***
Avg./total All	1.98	1.44	1.24	1.14	***	100.0	100.0	100.0	100.0	100.0

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

U.S. producers' domestic purchases and imports

During the period covered by this investigation, U.S. manufacturers of 3.5" finished microdisks reported minimal purchases of finished diskettes from other U.S. producers, except for those diskettes finished * * *.

With the exception of * * *, all U.S. producers of 3.5" finished microdisks imported finished 3.5" microdisks and/or media therefor during the period of investigation. During 1985, U.S. producers' ratio of imports from Japan to U.S. production/shipments was *** percent for 3.5" media, and *** percent for 3.5" finished microdisks (see table 14). During January-September 1988 U.S. producers decreased their ratio of imports of Japanese product to *** percent for 3.5" media, and *** percent for 3.5" finished microdisks. U.S. producers also import the subject products from third countries, and Verbatim alone accounted for nearly *** percent of all finished microdisks imported by U.S. microdisk manufacturers in 1987. The vast majority of Verbatim's imports were of diskettes containing media produced in its Sunnyvale, CA, facility, and finished by affiliates in Mexico, Japan, and Ireland, as indicated in the following tabulation:

Source of finished microdisks	Affiliation	Percent of Verbatim's total imports in 1987
IFISA Guadalajara, Mexico	Wholly owned by Kodak	***
Verbatim, Ltd. Limerick, Ireland	Wholly owned by Verbatim	***
Kasei-Verbatim Corp. Japan	50-percent joint venture	***
* * * * * *	* * *	***

Table 14
3.5" finished microdisks and media therefor: U.S. producers' imports and purchases of imports from Japan, and ratio of imports to total production or shipments, 1985-87, January-September 1987-88

* * * * * * *

Employment and productivity

From 1985 to 1987 the number of production and related workers producing 3.5" microdisks and media therefor, accounting for 9.1 to 14.1 percent of all establishment production and related workers, increased irregularly by 40.1 percent (table 15). The number of production and related workers producing 3.5" finished microdisks increased irregularly from 1985 to 1987, representing an overall gain of 27.9 percent; during January-September 1988 the number of such workers increased by *** percent when compared to the corresponding period of 1987. Production and related workers involved in coating 3.5" media represented a small but growing share (from *** to *** percent) of all 3.5" production workers, and employment of these workers increased almost *** during the period of investigation.

Declines in employment activity of 3.5" media and finished microdisks production workers during the period of investigation, have been attributed * * *. Verbatim attributed the first series of employment reductions, amounting to *** workers in 1985, to a downturn in business and continuing operating losses resulting from price depression caused by imports from Japan. In 1986, Verbatim reported further workforce reductions of *** workers. These reductions occurred when Verbatim transferred its finishing operations to Mexico, which, Verbatim argues, was necessary to improve cost competitiveness in the face of the aforementioned price depression. 1/ Verbatim claims that * * * were permanently laid off during 1985-86 and a large number of * * *.

* * * reported temporary reductions of *** production and related workers in April 1985, *** workers in November 1985, and *** workers in February 1986, which it attributes to declining sales. * * * also reported *** permanent layoffs in 1988. However, data provided by the firm in response to the Commission's questionnaire show an increase of more than *** production and related workers involved in finishing 3.5" microdisks from 1985 to 1987.

Total wages and total compensation paid to production and related workers producing 3.5" finished microdisks each decreased irregularly by 4 to 9 percent from 1985 to 1987. Conversely, total wages and total compensation paid to production and related workers producing 3.5" media each tripled during the same period. Average hourly wages paid to production and related workers producing 3.5" finished microdisks rose by 1.3 percent from 1985 to 1987 and

---

1/ Respondents have provided a copy of a press release, dated Oct. 23, 1984, 8 months prior to Kodak's acquisition of Verbatim, announcing Kodak's plans to introduce a complete line of computer diskettes and form a new Electronic Media Manufacturing Division. While the release does not mention Verbatim specifically, it does outline Kodak's intentions to utilize an existing Kodak film manufacturing plant in Guadalajara for the finishing and formatting of magnetic media, in order "to achieve the goals of becoming both a producer of high-quality media as well as a low cost producer."

Petitioner argues that these statements were made prior to Kodak's acquisition of Verbatim, and with the acquistion, Kodak's resources and options changed critically (TR, pp. 21-22). During the preliminary investigation, Verbatim also supplied a copy of an internal memorandum documenting the formation of a committee to prepare a plan of action for relocating from Sunnyvale, CA, to Charlotte, NC (Verbatim postconference brief, exh. 5).

Table 15
Average number of employees in U.S. establishments producing 3.5" microdisks and media therefor, hours worked, wages and total compensation paid, and productivity, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-September 1987	January-September 1988
Average employment:					
All employees	5,585	4,714	5,214	5,152	***
Production and related workers producing--					
All products	4,045	3,556	4,116	4,058	***
Finished microdisks					
Media					
Hours worked:					
Finished microdisks (1,000 hours)					
Media (1,000 hours)					
Wages paid:	*	*	*	*	*	*	*
Finished microdisks (1,000 dollars)					
Media (1,000 dollars)					
Total compensation paid:					
Finished microdisks (1,000 dollars)					
Media (1,000 dollars)					
Average hourly wages paid:					
Finished microdisks	$ 8.45	$ 8.80	$ 8.56	$ 8.85	$ ***
Media	10.33	11.93	12.07	14.58	***
Productivity:					
Finished microdisks (units per hour)	10.9	38.1	66.1	64.6	***
Media (units per hour)	319.6	493.7	705.7	704.0	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

average hourly wages paid to those involved in coating operations increased by 41.3 percent from 1985 to 1987.

The productivity of workers producing both finished microdisks and media showed strong gains between 1985 and 1987, increasing fivefold for finished disks and more than doubling for media. Workers producing microdisks and media therefor are not represented by any union.

Financial experience of U.S producers

Seven producers furnished usable income-and-loss data on the overall operations of their establishments within which 3.5" microdisks and/or media are produced. Six producers supplied usable income-and-loss data on their production of 3.5" microdisks and/or media. 1/ Production cost data are also presented in this section.

The domestic 3.5" finished microdisk and/or media industry is approximately 5 years old (1983). Several companies began production subsequent to the initial period of investigation (January 1, 1985). Despite the newness of the industry, several acquisitions and company consolidations have occurred throughout its history. Some companies do not maintain detailed financial and cost data for specific products or had difficulty reconstructing past operating activity into reliable product data. In addition, the industry consists of companies with several different fiscal years, including some firms that have changed fiscal years. As a result, some financial data are skewed on a comparative year-to-year basis. Individual company data have been included in some of the financial and cost areas in order to aid the Commission in interpreting financial trends.

Overall establishment operations.--The overall establishment operations of the 3.5" microdisk and/or media producers generally consist of products such as 5.25" and 8" flexible diskettes, cassettes, audio products, tapes, cartridges, etc. For most companies, the subject products represent a relatively small proportion of their overall operations. The overall establishment operations of all producers are presented in table 16.

Several of the producers are foreign-owned--BASF (Germany); and Kao, Sony, and Maxell (Japan). Two of the U.S. producers, Verbatim (Eastman Kodak) and 3M, are well known major corporations that produce many products. Xidex recently purchased Dysan Corp., and certain assets of Control Data in 1985; the firm indicated that it is the number one producer of floppy disks worldwide. 2/

Operations on 3.5" microdisks and/or media.--As previously indicated, most companies in the industry have different fiscal years and entrance dates into the industry. A listing of the companies and their fiscal years and initial production dates is shown below:

* * * * * * *

Producers were asked to provide separate income-and-loss data on their media and/or finished microdisk operations for both double-density and high-density operations. Verbatim was the only producer that supplied separate income-and-loss data on its media operations. * * *.

1/ * * *.

2/ Xidex Corp. 1987 Annual Report, p. 1. The firm is known as the leading producer of 5.25" disks, not necessarily 3.5" and/or 8" disks.

Table 16
Income-and-loss experience of U.S. producers on the overall operations of their establishments within which microdisks and media therefor are produced, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988 1/

Item	1985	1986	1987	Interim period ended Sept. 30-- 1987	1988
	Value (1,000 dollars)				
Net sales	638,430	636,296	748,326	427,564	***
Cost of goods sold	565,508	584,739	695,278	396,105	***
Gross profit	72,922	51,557	53,048	31,459	***
General, selling, and administrative expenses	91,258	82,547	82,889	53,532	***
Operating (loss)	(18,336)	(30,990)	(29,841)	(22,073)	***
Startup or shutdown expense	21,433	11,722	1,777	825	***
Interest expense	3,452	2,918	2,112	1,073	***
Other expense, net	8,899	3,943	6,547	4,972	***
Net (loss) before income taxes	(52,120)	(49,573)	(40,277)	(28,943)	***
Depreciation and amortization included above	43,871	40,677	45,484	28,775	***
Cash flow 2/	(8,249)	(8,896)	5,207	(168)	***
	Share of net sales (percent)				
Cost of goods sold	88.6	91.9	92.9	92.6	***
Gross profit	11.4	8.1	7.1	7.4	***
General, selling, and administrative expenses	14.3	13.0	11.1	12.5	***
Operating (loss)	(2.9)	(4.9)	(4.0)	(5.2)	***
Net (loss) before income taxes	(8.2)	(7.8)	(5.4)	(6.8)	***
	Number of firms reporting				
Operating losses	3	3	3	3	***
Net losses	4	4	5	4	***
Data	7	7	7	7	7

1/ * * *.
2/ Cash flow is defined as net income or loss plus depreciation and amortization.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The principal income-and-loss tables included in this report that concern U.S. operations in producing 3.5" microdisks and media therefor are as follows:

Table 17	All media and microdisk producers
Table 18	All media and microdisk producers, by product
Table 19	All media and microdisk producers, by producer
Table 20	All media and microdisk producers, * * *

An examination of tables 17 through 19 indicates a large increase in sales for 1987. * * *. The other major companies have fiscal years that end in December. Since industry growth generally accelerated in 1988, * * *. Shipments are a more reliable indicator of industry sales trends because the data are provided on a calendar year basis.

The aggregate industry sustained operating losses through all periods of the investigation. * * *. * * *, an income-and-loss table that * * * is presented in table 20. This table is believed to be the most reliable for an analysis of the industry.

Net sales (* * *) increased by *** percent from $*** in 1985 to $*** in 1986. Sales in 1987 rose to $***, or by *** percent. Operating losses were $*** in 1985, $*** in 1986, and $*** in 1987. Operating (loss) margins, as a percent of sales, were (***) in 1985, (***) in 1986, and (***) in 1987. Four companies incurred operating losses in 1985 and 1986 and five companies did s[redacted] in 1987.

Interim 1988 sales were $***, an increase of *** percent over interim 1987 sales of $***. Operating losses were $*** in interim 1987 and $*** in interim 1988. Operating (loss) margins were (***) in interim 1987 and (***) in interim 1988. Operating losses were incurred by five firms in interim 1987 and three firms in interim 1988.

The industry income-and-loss experience was generally the same for each product or subproduct grouping (table 18). Sales accelerated, and operating losses, as a percent of sales, declined. However, the segregation between media and finished microdisks was indistinct for some companies. Therefore, for analytical purposes, totals are more reliable.

Table 17
Income-and-loss experience of U.S. producers on their operations producing 3.5" media and/or finished microdisks, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988

* * * * * * *

Table 18
Income-and-loss experience of U.S. producers on their operations producing 3.5" media and/or finished microdisks, by products, accounting years 1985-87 and interim periods ended September 30, 1987, and September 30, 1988

* * * * * * *

Table 19
Income-and-loss experience of U.S. producers on their operations producing 3.5" media and/or finished microdisks, by producers, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988

* * * * * * *

Table 20
Income-and-loss experience of U.S. producers, (* * *) on their operations producing 3.5" media and/or finished microdisks, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988

* * * * * * *

Verbatim.--The overall establishment operations of the petitioner reflect * * * (table 21). * * * (table 22). * * * (table 23).

Table 21
Income-and-loss experience of Verbatim on the overall operations of its establishments within which microdisks and media therefor are produced, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988

* * * * * * *

Table 22
Income-and-loss experience of Verbatim on its operations producing 3.5" microdisks and media therefor, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988

* * * * * * *

Table 23
Income-and-loss experience of Verbatim on its U.S. operations producing 3.5" media and microdisks and its offshore operations producing microdisks incorporating U.S.-made media, accounting years 1985-87 and interim periods ended Sept. 30, 1987 and Sept. 30, 1988

* * * * * * *

Eastman Kodak acquired Verbatim in May 1985 for $***. The 1985 and 1986 annual reports of the parent company discussed a reorganization of Kodak's operations, including a realignment of the research function. The direct impact on Verbatim of some of these changes is uncertain. Shown below are some comments from the annual reports.

> [Concerning its research function, Kodak stated that] "As part of this reorganization, we have identified a group of people who will pursue technology outside the range of current Kodak activity in a laboratory at the corporate level. The remainder will work in research laboratories or in product development departments directed by operating groups and business units. In this way, Kodak expects to attain the best from its technical investments." 1/

> "Restructuring the Company - In January of 1986, we embarked on an aggressive program to bring about a more favorable relationship between costs and revenues. . . . Workforce reduction was a difficult but necessary element in the program. . . . At the same time, expense budgets were reduced by 5 percent, as managers drove for permanent savings in all aspects of the business. . . . In keeping with our goal of maximizing value, we did much last year to improve future rates of return. Production of magnetic disks was moved to a more efficient location in North Carolina, along with our Verbatim headquarters. . . ." 2/

* * * * * * *

1/ Eastman Kodak 1985 Annual Report, p. 2. Annual reports are issued in subsequent years, thus the 1985 annual report was issued in early 1986.
2/ Eastman Kodak 1986 Annual Report, p. 2.

In reviewing Verbatim's operations, it appears that separating media and microdisk finishing, at least for income-and-loss purposes, may be unsound because of the relationship between both functions and the sharing of common cost elements. Moreover, Verbatim is but one company within the complete industry, and its U.S.-based operations were relatively small compared with the total (see table 19).

Unit cost analysis.--The producers provided a unit cost breakdown of their production costs; these data exclude research and development costs. Unit production costs were lower in interim 1988 than in 1985 for all producers. * * * in the industry. A summary of the unit costs of production for each producer is shown below (all expenses are for double-density products, except as noted):

* * * * * * *

Investment in productive facilities.--The value of property, plant, and equipment for the U.S. producers of microdisks and/or media is shown in table 24. The concept of current return on investment for a relatively new industry with high initial startup costs may not be a reliable measure of profitability, since it is not unusual for companies to incur losses during the first few years of a new product's introduction. 1/

1/ Quality control, low initial volume, research and development, and various start-up costs can affect the operating results on a new product. At the conference in the preliminary investigation, Mr. Ervin of the Commission's staff discussed various factors relating to the ability of Verbatim to recover its investment in 2-1/2 years of production. The petitioner responded that it did not yet see any progress in recovering its cumulative costs (transcript, p. 52). During the staff's verification visit to Verbatim in February 1989, * * *.

Table 24
Microdisks and media therefor: Value of property, plant, and equipment of U.S. producers, accounting years 1985-87 and interim periods ended Sept. 30, 1987, and Sept. 30, 1988

(In thousands of dollars)

Item	As of end of accounting year-- 1985	1986	1987	Interim period ended Sept. 30-- 1987	1988
All products of establishments:					
Original cost	405,718	432,700	480,418	443,339	***
Book value	222,144	210,868	234,574	208,801	***
Total assets 1/	428,049	410,994	501,296	471,849	***
Microdisks and media therefor:					
Original cost	18,543	18,446	***	***	***
Book value	14,543	11,400	***	***	***

1/ Defined as book value of fixed assets plus current assets.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

The total amount of assets (valued at original cost) for this industry, by producer, is shown below (in thousands of dollars):

* * * * * * *

Capital expenditures.--Seven producers furnished information on their capital expenditures. All of these producers reported outlays for the 1988 interim period. A summary of each firm's capital expenditures is shown below (in thousands of dollars):

* * * * * * *

In December 1988, subsequent to the period of investigation, Verbatim purchased $*** of microdisk finishing equipment for its Charlotte, NC, location. 1/

Research and development expenses.--As indicated previously, the industry sustained large, but declining, losses during the investigative period. Research and development (R&D) expenditures were an important factor influencing the operating results of U.S. producers during the period under investigation. To a certain extent, the nature of each individual company determines its cost structure. * * *. Most companies generally charge R&D outlays to expenses as incurred. * * *. However, the benefits of these research studies, in terms of increased production and higher sales, occur in

1/ * * *.

subsequent years (accounting periods). Thus, research expenditures for derivative 3.5" products such as high-density products generally precede revenue streams generated by those products. Interpreting trends in R&D expense for this industry is problematic since it is not certain whether research studies on derivative products require more, less, or equal expenditures. * * *.

* * * reported * * * in R&D expenditures during interim 1988; * * *. A summary of each firm's R&D expenses is shown below (in thousands of dollars):

* * * * * * *

* * * provided a breakout of their R&D costs by product. These costs are shown below (in thousands of dollars):

* * * * * * *

* * *. Multinational corporations like * * * usually conduct research in their home countries for the benefit of their worldwide operations. For accounting purposes, these costs are generally charged to the headquarters' operations. Companies that submit questionnaire financial data to the Commission often do not provide data on various headquarters' costs such as research, other general and administrative costs, and interest. Many companies do not allocate these costs, and those individuals who work at the subsidiary or product level do not know specific details, especially in cases of foreign ownership.

In light of provisions in the 1988 Trade Act, the Commission's questionnaire asked the producers if their research and development efforts, including efforts to develop a derivative or more advanced version of the like product, were affected by imports from Japan. 1/ The companies that responded affirmatively were * * *. All other companies either responded negatively (* * *) or did not respond. The producers' replies are shown in appendix C.

Capital and investment.--The Commission also requested U.S. producers to describe any actual or potential negative effects of imports of microdisks and/or media from Japan on their firm's production, growth, investment, and ability to raise capital. Their responses are shown in appendix C.

1/ Producer questionnaire, p. 51.

The Question of Threat of Material Injury to an Industry in the United States

Section 771(7)(F)(i) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(F)(i)) provides that--

> In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of any merchandise, the Commission shall consider, among other relevant factors 1/--
>
> > (I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),
> >
> > (II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,
> >
> > (III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,
> >
> > (IV) the probability that imports of the merchandise will enter the United States at prices that will have a depressing or suppressing effect on domestic prices of the merchandise,
> >
> > (V) any substantial increase in inventories of the merchandise in the United States,
> >
> > (VI) the presence of underutilized capacity for producing the merchandise in the exporting country,
> >
> > (VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury, and
> >
> > (VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or

---

1/ Section 771(7)(F)(ii) of the act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."

to final orders under section 736, are also used to produce the merchandise under investigation.

(IX) Item does not apply in this case.

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product. 1/

Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above); and negative effects on research and development activity (item (IX) above); is presented in the section entitled "Consideration of the Causal Relationship Between LTFV Imports and the Alleged Material Injury." The potential for "product-shifting" (item VIII) is not an issue in this investigation since there are no known products subject to investigation(s) or to final orders which use production facilities that can be shifted to produce 3.5" microdisks and/or media therefor. The available data on foreign producers' operations (items (II) and (VI) above), information on the existence of dumping in GATT member markets, and information on U.S. inventories of the subject product (item (V)) follow.

World demand

This section of the report has been prepared in order to provide a perspective on the world market for 3.5" microdisks, as well as the position the United States holds in that market.

A review of the world market for floppy disks as presented in table 25 indicates that:

--growth rates for 3.5" are similar to those of 5.25"
--3.5" units will exceed 5.25" in 1990
--8" dollars continue to slide
--U.S. demand for 3.5" microdisk will increase but at a decreasing rate
--European demand for 3.5" microdisks will take greater market share, and then decline
--Other markets such as Australia will start slower, but continue to grow during the period

---

1/ Section 771(7)(F)(iii) of the act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

Table 25
Floppy disks: Worldwide shipments by product, and shipments of 3.5" product by region, 1986-87, and projections for 1988-92

Item	1986	1987	1988	1989	1990	1991	1992
By all product types: 1/							
8" floppy disks:							
Quantity (million units)..	112	92	61	37	20	11	7
Value (1,000 dollars).....	153	112	66	65	17	8	7
Unit value.....	$1.36	$ 1.22	$1.08	$1.76	$ 0.85	$ 0.73	$ 1.00
5.25" floppy disks:							
Quantity (million units)..	822	1,071	1,265	1,272	1,226	1,056	900
Value (1,000 dollars).....	748	787	801	740	645	501	480
Unit value.....	$0.91	$0.73	$0.63	$0.58	$ 0.53	$ 0.47	$ 0.53
3.5":							
Quantity (million units)..	105	203	419	866	1,391	2,269	2,700
Value (1,000 dollars).....	156	233	430	832	1,225	1,632	2,265
Unit value.....	$1.50	$1.15	$1.02	$0.96	$ 0.88	$ 0.81	$ 0.84
			Quantity (in millions of units)				
3.5" product type: 2/							
SALES BY REGION—							
United States.....	3/	140	241	274	315	345	369
Canada.....	3/	9	17	23	28	32	36
Europe.....	3/	37	82	104	120	130	137
Pacific area.....	3/	35	46	60	76	93	113
Other.....	3/	—	2	9	25	35	55
Total world.....	3/	223	389	473	565	638	711
			Share (in percent)				
SHARE OF SALES BY REGION—							
United States.....	—	62.9	61.9	58.0	55.7	54.2	51.9
Canada.....	—	4.4	4.5	5.0	5.0	5.2	5.1
Europe.....	—	16.7	21.2	22.1	21.3	20.5	19.3
Pacific area.....	—	16.0	11.9	12.9	13.5	14.7	16.0
Other.....	—	—	0.5	2.1	4.4	5.5	7.7
Total world.....	—	100.0	100.0	100.0	100.0	100.0	100.0

1/ Data available from ITA seminar proceedings, Nov. 1987, p. 23.
2/ Data available from SCCG, United States Market, June 1988.
3/ Data not available.

Background

Sony Corporation licenses firms to produce both 1MB and 2MB 3.5" microdisks under patents it holds. In summary, since 1982 Sony has licensed *** firms worldwide to produce 1MB 3.5" microdisks (and *** firms to produce 2MB 3.5" microdisks). By region, Sony has licensed *** firms in Japan, *** firms in the United States, *** firms in Southeast Asia, *** firms in Europe, and *** firms in Mexico. A listing of firms that Sony has licensed to produce microdisks follows.

* * * * * * *

The industry in Japan

The Commission requested data on Japanese production of 3.5" microdisks and media therefor from nine Japanese producers/exporters represented by counsel in this investigation, and responses were received from eight firms. 1/ Six of these companies are fully integrated producers of 3.5" finished microdisks (and other magnetic media products); one firm produces 3.5" media only; and one firm is a Japanese trading company that exports 3.5" finished microdisks. Although some media may be sold to independent converters, the vast majority is used internally in the production of finished microdisks. The seven producers/exporters and their respective shares of total Japanese shipments of 3.5" finished microdisks reported by MITI in 1987 are presented in the following tabulation:

Company name	Share of total 1987 Japanese shipments of finished microdisks (percent)
C. Itoh	3.0
Fuji Photo Film Co., Ltd	10.5
Hitachi Maxell, Ltd	15.6
Kao Corp	3.8
Sony Corp	22.8
Victor Company of Japan (JVC)	1.3
TDK Corp	12.2
Total	69.2

Information on Japanese shipments of 3.5" microdisks was provided to the American embassy in Tokyo by MITI, and is presented in table 26. Based on MITI's survey of Japanese producers, the 6 Japanese respondents providing foreign industry data to the Commission accounted for *** percent of exports to

1/ Kasei-Verbatim, a 50-50 joint venture between Verbatim and Mitsubishi Kasei, chose not to responsd to the Commission's request for information (letter from counsel for Kasei Verbatim, dated Dec. 1, 1988).

Table 26
3.5" finished microdisks: Japanese producers total shipments, 1986-87

Firm	1986 Exports to U.S	1986 Third country	1986 Home market	1986 Total	1987 Exports to U.S	1987 Third country	1987 Home market	1987 Total
	Millions of units							
Respondent firms:								
Sony	21	3	3	27	35	7	12	54
Hitachi	9	1	7	17	15	3	19	37
Fuji Photo Film	6	3	2	11	7	4	14	25
TDK	3	2	4	9	8	15	6	29
C. Itoh	4	--	--	4	5	2	--	7
Kao	1	--	--	1	5	--	--	9
JVC	1	--	--	1	--	1	3	3
Teijin	--	--	--	--	--	--	--	--
Subtotal	45	9	16	70	75	32	54	161
Other Japanese exporters:								
Fuji Chemical	4	--	1	5	4	4	5	13
Kasei Verbatim	--	1	--	1	4	3	5	12
Toyo Spinning	--	--	--	--	5	--	--	5
All other firms 1/	1	12	14	27	--	13	30	43
Subtotal	5	13	15	33	13	20	40	73
Total	50	22	31	103	88	52	94	234
	In percent							
Share of market:								
Respondent firms	90	41	52	68	85	62	57	69
Other exporters	10	59	48	32	15	38	43	31
Total	100	100	100	100	100	100	100	100

1/ Other Japanese firms include Konica, Nippon Columbia, Toshiba, Ube, Matshushita, Sumitomo 3M, and Kuboto. These firms did not export to the U.S. in 1987; but data submitted in response to Commission questionnaires indicate that Konica, Ube, Matshusita, and Kuboto did begin export to the U.S. in 1988.

Source: Compiled from data submitted by U.S. embassy in Tokyo to the Department of Commerce.

the United States in 1986, and *** percent in 1987. 1/ Although data for 1988 were not available to the Commission from MITI, information gathered in response to the Commission's questionnaires indicate that *** additional Japanese firms exported or attempted to export 3.5" finished microdisks to the United States in 1988, and include * * *. 2/

According to data supplied by counsel for six of these eight Japanese producers of 3.5" microdisks and media, production and shipments have expanded at a very rapid pace, as they have in the United States (table 27). Between 1985 and 1987, production of finished microdisks more than quintupled, and it almost doubled during January-September 1988 when compared to the same period in 1987. Japanese capacity to produce 3.5" finished microdisks has grown at a somewhat slower pace. Capacity utilization for 3.5" microdisks in Japan increased from 58.9 percent in 1985 to 85.2 percent in 1987, and decreased to 87.6 percent during January-September 1988. Export shipments to the United States accounted for 63.0 percent of total shipments of Japanese 3.5" finished microdisks in 1985, and this share of shipments decreased to 56.3 percent during January-September 1988 (table 28). However, absolute exports to the United States increased by 338 percent from 1985 to 1987, and by 75 percent during January-September 1988 compared to the like period in 1987.

Japanese inventories of 3.5" microdisks tripled from 1985 to 1987, but decreased irregularly as a share of total shipments from 7.7 percent in 1985 to 6.7 percent in 1987.

Production of 3.5" media increased nearly 300 percent between 1985 and 1987, and tripled during January-September 1988 when compared to the same period in 1987. Capacity to produce 3.5" media more than doubled between 1985 and 1987.

Exports of 3.5" media to the United States grew by *** percent from 1985 to 1987, and nearly *** during January-September 1988 as * * * (see table 28). Exports to all other countries jumped elevenfold, with the vast share of this increase due to * * *.

1/ During the preliminary phases of this investigation, the Commission and Commerce requested information from the U.S. embassy in Tokyo regarding Japanese producers of 3.5" microdisks, particularly information on total shipments. On March 25, 1988, Commerce received complete information as presented in table 26 that had been provided by MITI (unclassified Department of Commerce cable, #05384, available from Commerce's public file of this investigation). On March 28, 1988, the Commission received a response from our embassy in Tokyo indicating that the information regarding the Japanese 3.5" microdisk industry "is not readily available", but that MITI had provided "other information" (unclassifed Department of State cable #05445).

On February 17, 1989, the Commission requested an update of the Commerce cable for the period 1988. On March 2, 1989, the U.S. embassy in Tokyo responded that "MITI told emboff on February 22 that update of company information regarding sales of subject products for 1988 is not readily available and not obtainable by the March 7 due date set by USITC" (unclassifed Department of State cable #03698).

2/ *** additional firms, * * *, were licensed by Sony Corp. in 1988 to produce 3.5" microdisks.

Table 27
3.5" media and finished microdisks: Japan's production, capacity, 1/ capacity utilization, and inventories, 1985-87, January-September 1987-88

(In 1,000 units, except as noted)

Item	1985	1986	1987	January-September 1987	January-September 1988
3.5" media:					
End-of-period capacity--					
600-650 oersted.....	*	*	*	*	*
700-750 oersted.....					
Total capacity.....	199,860	304,380	447,684	310,087	436,883
Production--					
All oersteds.....	55,229	113,001	217,221	132,938	346,138
Capacity utilization--					
All oersteds.....	27.6	37.1	48.5	42.9	79.4
Inventories--					
All oersteds.....	*	*	*	*	*
Inventory/shipments ratio--					
All oersteds.....	*	*	*	*	*
3.5" finished microdisks:					
End-of-period capacity--					
Double density.....	*	*	*	*	*
High density.....					
Total capacity.....	57,816	100,296	186,456	136,512	219,114
Production--					
Double density.....	*	*	*	*	*
High density.....					
Total production.....	34,061	79,885	158,930	99,071	191,938
Capacity utilization--					
Double density.....	*	*	*	*	*
High density.....					
Total capacity utilization...	58.9	79.6	85.2	72.6	87.6
Inventories--					
Double density.....	*	*	*	*	*
High density.....					
Total inventories.....	2,801	8,726	10,814	9,530	17,189
Inventory/shipments ratio--					
Double density-----in percent..	*	*	*	*	*
High density-------in percent..					
Total inventory/shipments....	7.7	11.3	6.7	9.5	8.9

1/ Of the 6 Japanese producers represented in these data, *** reported capacity based on increasing hours of operation per year since 1985 and now operating 24 hours a day, 7 days per week. Of the remaining *** firms, *** expects to increase to this level in 1988, and the other reported capacity figures based on operating *** hours per week, *** weeks per year throughout the reporting period.

Source: Compiled from data submitted by counsel for Sony Corp., Kao Corp., Hitachi Maxell, Ltd., Victor, TDK Corp., Fuji Corp., C. Itoh, and Teijin.

Table 28
3.5" media and finished microdisks: Japan's home market sales, exports to the United States, and exports to third countries, 1987-88, January-September 1987-88

(In 1,000 units, except as noted)

Item	1985	1986	1987	January-September 1987	January-September 1988
3.5" media:					
Home market sales	*	*	*	*	*
Exports to the U.S.					
Exports to third countries	310	3,279	11,466	5,703	71,556
Total shipments	16,580	25,891	43,394	24,074	137,402
Ratio of exports to the U.S. to total shipments--in percent	*	*	*	*	*
3.5" finished microdisks:					
Home market sales--					
Double density	*	*	*	*	*
High density					
Total home market sales	4,261	12,181	25,983	14,290	31,878
Exports to the U.S.--					
Double density	*	*	*	*	*
High density					
Total exports to the U.S.	22,861	54,542	103,819	64,790	109,080
Exports to third countries--					
Double density	*	*	*	*	*
High density					
Total third country exports	9,157	10,493	32,784	21,205	52,961
Total shipments--					
Double density	*	*	*	*	*
High density					
Total shipments	36,279	77,216	162,586	100,285	193,919
Ratio of exports to the U.S. to total shipments:					
Double denstiy----in percent	*	*	*	*	*
High density------in percent					
Total	63.0	70.6	63.9	64.6	56.3

Source: Compiled from data submitted by counsel for Sony Corp., Kao Corp., Hitachi Maxell, Ltd., Victor, TDK Corp., Fuji Corp., C. Itoh, and Teijin.

Japanese producer profiles. 1/--Company specific information on Japanese producers of 3.5" microdisks, is available from industry sources. The following are excerpts from industry studies prepared in June 1988, and January 1989:

> Fuji Photo Film Company.--Fuji is a $3 billion company with interests in photographic film, coated papers, office equipment, medical equipment, and magnetic media products....Fuji has been cautious with its 3.5" business for the past six months. The company has been waiting to see the outcome of the ITC hearing before deciding any major changes or expansions to its 3.5" diskette program.
>
> Fujitsu Kasei.--An operating group of Fujitsu General Ltd., a $7 billion diversified electronic goods manufacturer. FK was established as a precision plastics manufacturer to support the parent company....significant manufacturer of 3.5" diskettes...marketing activities through a trading company, C. Itoh...Fujitsu Kasei has aggressive expansion plans, and the resources to support these efforts. FK relies on its plastics expertise to produce 3.5" components, but is not expected to coat media.
>
> Japan Victor.--A $3.5 billion company, originally founded as the Japanese operation for RCA Corporation....JVC is expanding 3.5" production with expectations that this product will allow the company to be a greater factor in the global diskette market....JVC has invested a significant amount of resources into magnetic media products...continuing this effort in 3.5" diskettes...JVC is developing new coating technologies that could be used on future generation media...JVC is considering alternative manufacturing locations for diskette manufacturing. If the U.S. maintains duties for JVC at 38% for 3.5" diskettes, the company will consider a North American manufacturing location. If this duty is 20% or lower the company will continue to manufacture in Japan.
>
> Kao Corporation.--Kao is a large diversified consumer goods manufacturer with sales of over $3 billion...manufactures a line of cosmetics, soaps, and detergents...The company has been concentrating on expanding production in North America.
>
> Konica.--A $2 billion company with interests in photographic film, photocopiers, and audio/videotape....Konica does not plan to establish a manufacturing facility in the U.S....will be forced to shift its business to Europe if the ITC establishes tariffs on the 3.5" diskette market...If duties are established in the U.S., Konica will probably delay expansion plans, while attempting to establish volume sales in other world markets.

1/ SCCG, Global Market, pp. 111-212.

Matsushita Electric.--A $25 billion company with interests in consumer electronics (National Panasonic)...became involved in the magnetic media industry to support their computer peripherals group...Matsushita is building 3.5" diskette volume to support domestic and international markets.

Hitachi Maxell.--A $990 million manufacturer of magnetic media, dry cell batteries, and electronic equipment....Maxell has been concentrating on expanding production of 3.5" media...Maxell has production in the U.S. and Japan which can alternately support Maxell depending on cost and currency exchange factors.

Memorex.--A $1.7 billion company with interests in data processing equipment, communication equipment, and computer supplies...MCC is expanding production to meet the needs of the domestic Japanese market...expects to increase volume to the Japanese market to over 50 percent of production in 1988.

Mitsubishi Kasei.--A $3.6 billion group under the large Japanese trading company Mitsubishi Group...involved in the diskette market since 1984 through Kasei Verbatim, a 50-50 joint venture with Verbatim...MK is not manufacturing 3.5" diskettes at this point and relies on Kasei Verbatim for part of its 3.5" diskettes....reselling to other manufacturers...MK will establish a 3.5" diskette manufacturing operation in the U.S. in 1989.

Nippon Columbia.--A $450 million company with interests in music recording, magnetic media, and entertainment products....will limit sales to the U.S. until there is a decision on the ITC tariffs for 3.5" diskettes.

Sony.--A diversified consumer and professional electronics manufacturer with sales of $8.5 billion in 1987....has had capacity to supply product when many other manufacturers were allocating 3.5" diskettes...has potential to convert in Europe if this is necessary...Sony's U.S. based production will satisfy the U.S. market. This leaves a significant manufacturing operation in Japan that will be underutilized unless the European market can be developed.

TDK.--A $2 billion corporation with interests in magnetic recording products....planning a U.S. manufacturing operation for 3.5" media to be located in Irvine, CA, where the company is already producing other magnetic media products...The company expects minimal expansion in its Chikumagawa manufacturing operation through the end of 1988, choosing outside suppliers to support excess requirements, and focusing future production on a planned facility in the U.S.

Toshiba.--A $12 billion diversified manufacturer of electrical, electronic, and communication equipment...not a significant producer of 3.5" diskettes in 1987...entered manufacturing to support its efforts to establish a high-capacity diskette and drive using barium ferrite coating technology.

Toyobo.--A $2.5 billion company with interests in textiles, films biotechnology, and electronics...invested in the diskette market to diversify from its textile business...production will stop in August 1988...Production equipment will be sold to another manufacturer, shifting this capacity to North America.

Ube Memory Disc.--Operating group under Ube Kosan, a $2.8 billion company involved in plastics, chemicals, construction, and cement...established converting operations in 1987...UMD sells to other companies that distribute 3.5" diskettes into the market.

Third-country production

Mexico.--

* * * * * * *

Canada.--

* * * * * * *

U.S. inventories of 3.5" microdisks from Japan

Importers of 3.5" microdisks from Japan reported relatively small end-of-period inventories during the period of investigation. From 1985 to 1987, end-of-period inventories of imports of 3.5" microdisks from Japan increased irregularly, nearly quadrupling from 1985 to 1986, then falling by 7.7 percent from 1986 to 1987 (table 29). The ratio of end-of-period inventories to reported imports from Japan rose from 18.4 percent in 1985 to 25.3 percent in 1986, before falling to 10.6 percent in 1987. During January-September 1988, inventories of imports rose to *** percent of total reported imports from Japan, when compared to the 16.7 percent level of the corresponding period in 1987. There were no reported end-of-period inventories of media from Japan.

Table 29
3.5" finished microdisks: End-of-period inventories of imports held in the United States, reported imports, and ratios of end-of-period inventories to reported imports, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-September-- 1987	1988
	Quantity (1,000 units)				
End-of-period inventories:					
Double density	*	*	*	*	*
High density	*	*	*	*	*
All densities	3,622	13,150	11,604	11,364	***
	Ratio (in percent)				
Ratio of end-of-period inventories to reported imports:					
Double density	*	*	*	*	*
High density	*	*	*	*	*
All densities	18.4	25.3	10.6	16.7	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Consideration of the Causal Relationship Between LTFV Imports and the Alleged Material Injury

U.S. imports

U.S. imports of 3.5" microdisks and media therefor covered by this investigation are provided for in HTS item 8523.20. This tariff classification also applies to numerous unrecorded magnetic media products not within the scope of the investigation. For the purposes of this report, data on U.S. imports were compiled from responses to the Commission's questionnaires.

U.S. imports of 3.5" media from related parties in Japan decreased by 88 percent from 1985 to 1987, whereas imports from related parties in all other countries were stopped entirely (due to * * *); imports from affiliated firms in Japan rose dramatically during January-September 1988 as * * * (table 30). Imports of 3.5" media from unrelated parties in Japan increased by *** percent during 1985-87, and then *** during January-September 1988 when compared to the same period in 1987. Imports of 3.5" media from unrelated parties in countries other than Japan were all brought from * * *.

Imports of 3.5" finished microdisks from Japan increased by just over 450 percent, in terms of quantity, and approximately 200 percent, in terms of value, from 1985 to 1987 (table 31). Total imports increased by a slightly greater amount due to imports from * * *.

Table 30
3.5" media: U.S. imports from Japan and all other countries, 1985-87, January-September 1987-88

* * * * * * *

Market penetration of imports

Data on shares of apparent consumption held by imports of 3.5" microdisks and media thereof from Japan and all other countries, as well as shares held by U.S. producers, are presented in tables 32 and 33 and figure 3.

Table 32
3.5" media: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87, January-September 1987-88

* * * * * * *

Imports of open-market 3.5" media as a share of U.S. apparent consumption increased irregularly from 1985 to 1987 (table 32). The share of U.S. consumption held by imports of media from Japan, in terms of quantity, dropped irregularly over the period of investigation, from *** percent in 1985, to *** percent during January-September 1988. The share held by imports from all other countries, * * *, declined from *** percent in 1985 to *** percent during January-September 1988. As a result, the ratio of U.S. open-market shipments of domestically produced 3.5" media to U.S. apparent consumption of such media increased from *** percent in 1985 to *** percent in 1987. 1/

During the period of investigation, the ratio of imports of 3.5" finished microdisks from Japan to U.S. apparent consumption, in terms of quantity, increased from *** percent in 1985 to *** percent in 1986. This 2.9 point gain was offset by a loss of approximately 8 percentage points between 1986 and 1987, resulting in a 1987 market penetration of *** percent. During January-September 1988, the share of apparent consumption held by imports of the subject product from Japan declined to *** percent, or a *** point decrease from the corresponding period in 1987. The share of U.S. apparent consumption held by imports from all other countries increased from *** percent in 1985 to *** percent in 1987; during January-September 1988, this share *** to *** percent of apparent consumption when compared to the same period in 1987. * * * of this increase is attributable to U.S. producers of 3.5" microdisks; and in particular * * *. In sum, while the market penetration of imports from Japan increased between 1985 and 1986, it dropped in 1987 to a level below that reported in 1985. The trends in the shares of U.S. consumption of imports of 3.5" microdisks in terms of value were similar in direction and magnitude of change, but were generally lower than those measured in terms of quantity.

1/ * * *.

Table 31
3.5" finished microdisks: U.S. imports from Japan, Canada, Mexico, and all other countries, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-September 1987	January-September 1988
	Quantity (in 1,000 units)				
Double density:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries					
High density:					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Total all countries					
All densities:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries	19,719	53,606	116,369	71,341	***
	Value (in 1,000 dollars)				
Double density:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries					
High density:					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Total all countries					
All densities:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries	35,839	63,212	116,307	75,895	***

Continued on next page--

Table 31--continued
3.5" finished microdisks: U.S. imports from Japan, Canada, Mexico, and all other countries, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-September 1987	January-September 1988
	Unit value				
Double density:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Average, all countries					
High density:					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Average, all countries					
All densities:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Average, all countries	1.82	1.17	0.97	1.01	***
	Share of total based on quantity (in percent)				
Double density:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries					
High density:					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Total all countries					
All densities:					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries	100.0	100.0	100.0	100.0	100.0

1/ Less than 0.1 percent.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 33
3.5" finished microdisks: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-September 1987	January-September 1988
	Quantity (in 1,000 units)				
Double density:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
Apparent U.S. consumption					
High density:					
U.S. imports from--					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
Apparent U.S. consumption					
All densities:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries	19,747	53,904	117,031	71,652	***
U.S.-produced domestic shipments	4,573	8,058	26,384	14,912	***
Apparent U.S. consumption	24,320	61,962	143,415	86,564	***
	Value (in 1,000 dollars)				
Double density:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
Apparent U.S. consumption					
High density:					
U.S. imports from--					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
Apparent U.S. consumption					
All densities:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries	35,839	63,212	116,307	75,895	***
U.S.-produced domestic shipments	8,555	10,203	28,319	16,834	***
Apparent U.S. consumption	44,394	73,415	144,626	92,729	***

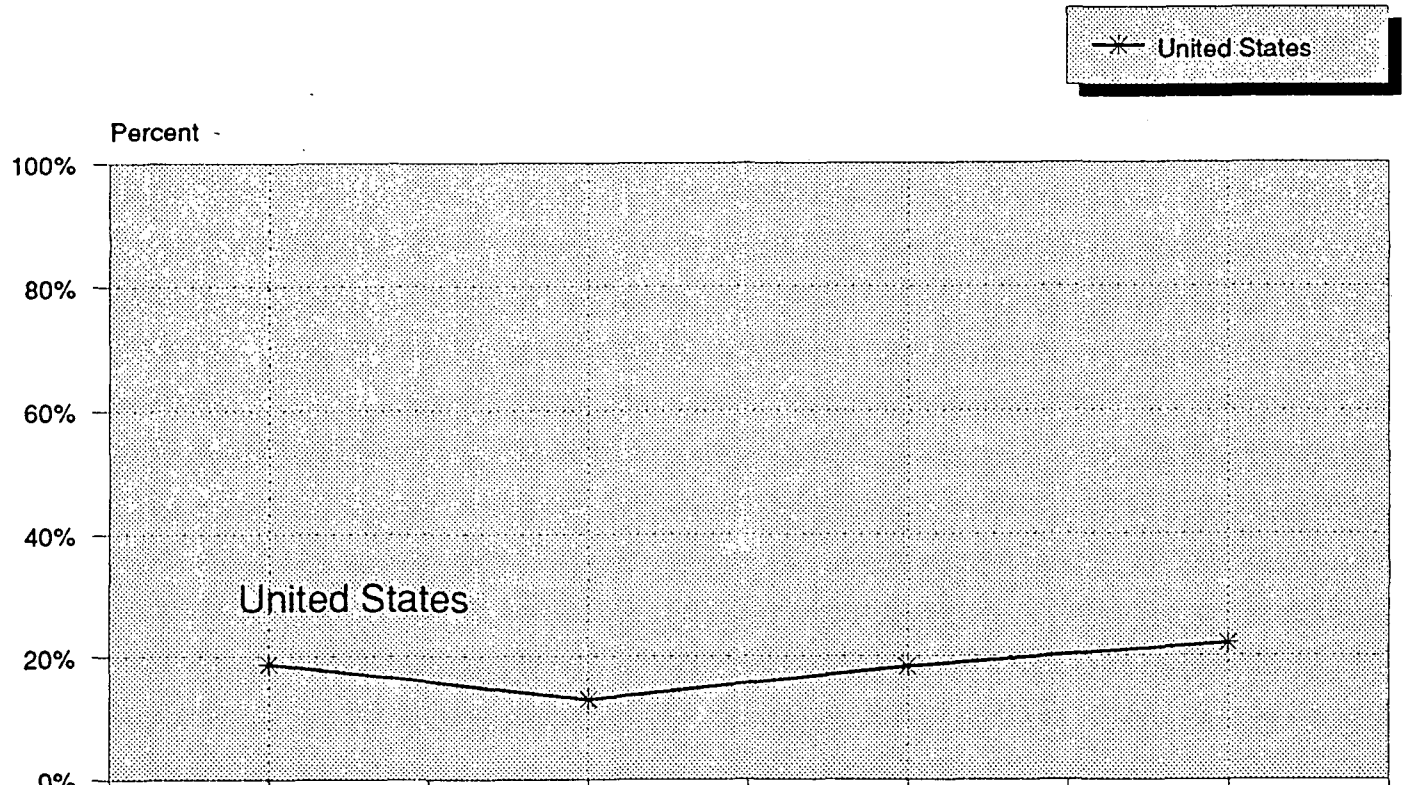
Continued on next page

Table 33--continued
3.5" finished microdisks: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87, January-September 1987-88

Item	1985	1986	1987	January-September 1987	January-September 1988
	Share based on quantity (in percent)				
Double density:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
High density:					
U.S. imports from--					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
All densities:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries	81.2	87.0	81.6	82.8	***
U.S.-produced domestic shipments	18.8	13.0	18.4	17.2	***
	Share based on value (in percent)				
Double density:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
High density:					
U.S. imports from--					
Japan					
Canada	*	*	*	*	*	*	*
Mexico					
All other countries					
Subtotal all others					
Total all countries					
U.S.-produced domestic shipments					
All densities:					
U.S. imports from--					
Japan					
Canada					
Mexico					
All other countries					
Subtotal all others					
Total all countries	80.7	86.1	80.4	81.8	***
U.S.-produced domestic shipments	19.3	13.9	19.6	18.2	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

FIGURE 3.-- 3.5" Finished Microdisks:
Apparent U.S. Consumption, 1985-88



	1985	1986	1987	1988
United States	18.8%	13%	18.4%	22.1%
Japan	***	***	***	***
Other	***	***	***	***

Source: Table 33--All densities

Prices

Demand for microdisks depends on the existing stock of computers with 3.5 inch drives, the expected increase in this stock, and the demand for software programs. Although the determination of whether a specific software program will be distributed on a microdisk depends on the stock of 3.5-inch drives, fluctuations in the level of demand for software programs will influence the demand for microdisks. 1/ With the growing acceptance of this data storage device in the computer industry, demand for microdisks has substantially increased. Demand for media is derived from the demand for microdisks. 2/

Microdisks and media are priced on a unit basis. Although both U.S. producers and importers quote their prices delivered, the purchase must surpass a nominal value or unit level to receive the delivered price. 3/ Since this level is very close to the companies' minimum purchase requirements, most sales exceed it and are made on a delivered basis. Transportation costs for microdisks are relatively insignificant due to their small size and light weight. 4/

There are several characteristics that determine the price for finished 3.5" microdisks: double density or high density (coercivity level), single-sided or double-sided, branded or non-branded, 5/ and pre-packaged in boxes or sold in bulk. Prices for media are determined by the coercivity level only.

In general, HD diskettes are more expensive than DD diskettes, DS diskettes are more expensive than SS diskettes, 6/ branded products are more expensive than unbranded products, and boxed products are more expensive than bulk-packaged products. Unbranded microdisks are generally sold in bulk

---

1/ Demand for microdisks of a specific density, e.g., double density or high density, depends on the mix of high density and double density drives.
2/ Each disk must use a single media unit or "cookie".
3/ *** U.S. producers, * * *, and *** importers, * * *, reported that for most of their shipments, they charged freight to customers. For 1987, * * * reported that *** percent of its microdisk sales were f.o.b. factory, while * * * reported that *** percent of its microdisk sales were f.o.b. factory. Most of these sales were made to original equipment manufacturers. * * * switched to a policy of charging freight in 1986-87 to help recover some of its costs as market prices fell. This policy applied to * * *'s full product line, including U.S.-produced 5.25" diskettes. * * * reported that approximately *** percent of its microdisk sales were f.o.b. factory.
4/ Microdisks are usually shipped by truck. If alternative forms of transportation are used, e.g., air, the purchaser will be charged a portion of this expense.
5/ *** U.S. producers, * * *, reported that they assign different brand names (and different prices) to their diskettes according to the degree of quality as measured by the diskette's clipping level. The clipping level measures the ability of the diskette to read back information. The higher the clipping level, the better the ability. Forty percent is the minimum ANSI standard clipping level that defines a microdisk. * * *. Although 40 percent is considered the minimum standard, * * * also sells microdisks between 35 percent and 40 percent clipping level. These sales represented *** percent of * * *'s total domestic shipments during January-September 1988.
6/ SS microdisks are primarily DS rejects, i.e. those that fail certification on one side of the disk (see Conference transcript, p. 177).

packaging (200 to 500 diskettes per package), while branded microdisks are usually pre-packaged in boxes of 10, although boxes of 1, 2, 5, 15, 20 and 50 disks are also available from certain suppliers. Sony of America, the U.S. importer of Sony products, offers different packaging for specific customers, e.g., boxes of 10 units are sold to dealers, while boxes of 5 units are sold to mass merchandisers.

Sales practices.--As explained in the section entitled "channels of distribution," finished microdisks are sold primarily to distributors, mass merchandisers such as K-Mart and Sears, and OEMs such as computer hardware companies and software duplicators. Different pricing structures exist for each market segment. In general, prices to OEMs are lower than prices to distributors or mass merchandisers. Most unbranded bulk product is sold to OEMs, although some also goes to distributors. While OEMs account for a major share of microdisk sales, they also provide the lowest margin to the supplier, making them less desirable purchasers to some producers. During the preliminary investigation, * * *, a U.S. producer of 5.25" disks and an importer of Japanese microdisks, reported that before the investigation when excess product was available and the margin to OEMs was higher, it sold to OEMs such as * * *, that are less strict on their quality requirements. However, under the tight market that existed during the preliminary investigation, * * * preferred to sell branded products, which have higher margins, to non-OEM customers. 1/

Incentive programs for finished microdisks.--U.S. producers and importers of microdisks offer a variety of incentive programs to encourage sales of their product. These programs are generally used in conjunction with sales of other products, including 5.25" and 8" floppy diskettes, and may vary depending on the specific market segment although they are primarily offered with sales of branded product. Qualifying purchase levels for these programs may be based on (1) an annual amount or a specific sales order of all goods purchased by the customer, (2) a specific quantity of floppy disks purchased by the customer in an order or a time period, (3) a specific quantity or sales order of only microdisks, or (4) a specific percentage of growth for any of the above standards.

The incentive programs offered by reporting U.S. producers and importers are very similar. In addition, the programs do not distinguish between country of origin; programs applied to U.S. product are virtually the same as those for imported product. 2/ The incentive programs offered by U.S. producers and importers include price protection, free goods, rebates, market development funds, co-operative advertising allowance, spiffs, cash/credit terms, warehouse allowances, and pallet allowances. These programs are described in appendix D.

1/ Conversation with * * *. In its questionnaire response during the final investigation, * * * reported that in January-September 1988 over *** percent of its sales of microdisks were branded product sold to distributors.

2/ U.S. producers of microdisks, such as * * *, have imported microdisks and/or media from Japan during the period of investigation. Domestic producers of 5.25" diskettes, such as * * *, have also imported microdisks. And U.S. importers with no domestic diskette production facilities, such as * * *, have imported 5.25" diskettes. The incentive programs offered by these suppliers generally include all diskette products (3.5", 5.25" and 8").

Non-price factors.--U.S. producers and importers both agree that offering a full line of disk products (primarily the 5.25" and the 3.5") is very important for sales of branded product to distributors and mass merchandisers. 1/ These purchasers prefer to deal with only a small number of suppliers in order to "cut down on paperwork,. . .invoices, and billings." 2/ During the preliminary investigation, * * *, an importer of Japanese microdisks, argued that a full product line is critical to optimize a firm's sales potential. According to * * *, when Sony first entered the U.S. dealer market in 1984 to sell its 3.5" product, dealers were not very receptive. It was only after Sony offered a full product line that it successfully entered that specific market.

The availability of microdisks in a wide range of colors is a factor in purchasing decisions of some OEMs. Software companies and software duplicating companies seek suppliers who produce a wide selection of colored microdisks. During the preliminary investigation, * * *, a software duplicator, explained that software companies will sometimes demand that a specific color be used for the diskettes they purchase. Colors are an important component in these companies' marketing decisions to increase sales of their software programs. Some software companies will even base their reputation on a specific color that they will continually use, i.e., "Apple" white, or "IBM" gray. * * * states that while he may be able to persuade a company to temporarily select a different color, that company will make it known that they expect it to be temporary; otherwise they will find a new duplicator. Of the OEMs contacted in the preliminary investigation who specified color as a purchasing criteria, most remarked that domestic companies do not have the type of colors they needed, or that the importer had a wider selection and better availability of colors. During the current final investigation, three microdisk suppliers, * * *, reported that they now offer a larger variety of colors. 3/

The quality of the microdisk is a significant factor in the purchasing decisions of OEMs. There are many different quality standards for microdisks by OEMs. Some OEMs have established formal requirements for microdisks that a supplier must pass before it can sell the OEM its product. Software duplicating companies have less stringent procedures, but demand a quality product as well. Respondents have argued that Verbatim and the other domestic manufacturers produce an inferior product. The proof, they state, is that during the period of investigation, the petitioner, Verbatim, was not qualified to sell to such major OEMs as Apple and IBM. 4/ Verbatim has argued that the standards of some OEMs do not properly reflect the quality of its product. 5/ Verbatim reports that it is qualified to sell to a number of other OEMs who also have qualification procedures. However, * * *, commented that being an Apple-qualified supplier meant that * * * produced a high-quality microdisk. He estimates the value of this accreditation represents a 30-percent increase in * * *'s microdisk sales beyond its actual sales to Apple.

The Commission requested U.S. producers and U.S. importers to provide a list of OEMs with formal qualification procedures to whom they have been qualified to sell microdisks, including the date of their qualification. U.S.

1/ Due to their large requirements for diskette products, OEMs are more likely to select separate vendors for the 5.25" and the 3.5" product.
2/ Conference transcript, p. 105.
3/ * * * have U.S. production facilities.
4/ Verbatim * * *.
5/ Conference transcript, p. 57.

importers listed *** OEMs to whom they are qualified to sell 3.5" microdisks, whereas U.S. producers listed *** OEMs to whom they are qualified to sell U.S.-finished microdisks. 1/ OEMs that have qualified both imported and U.S. finished product include * * *. OEMs that have qualified only imported product include * * *. 2/ Although both U.S. producers and importers have met different OEMs quality criteria, imported product was qualified earlier than U.S. finished microdisks or microdisks finished in third countries with U.S. media. U.S. producers report that their earliest OEM qualification occurred in April 1987, whereas U.S. importers report that they have been qualified for some OEMs since January 1985.

The Commission requested OEMs to rate their certified manufacturers in terms of the quality of their microdisks. Although the OEMs contacted during the investigation reported that once they have qualified the supplier, the product is considered highly substitutable with all other qualified microdisks regardless of the country of origin, six OEMs, * * *, did provide ratings of the various manufacturers. 3/ They indicated that more Japanese microdisk producers supplied a better product than U.S. microdisk producers. * * *. The specific OEMs ratings are presented in appendix E.

Questionnaire price data.--The Commission requested U.S. producers and importers to provide quarterly price data for their sales of media and monthly price data from January 1986 through September 1988 for their sales of 3.5" microdisks to customers in the United States. Price data were requested for sales of media, branded and unbranded microdisks to distributors, microdisks to mass merchandisers, and microdisks to OEMs. 4/

For media sales, producers and importers were requested to provide quarterly price data for their largest two customers in each year. For microdisk sales, U.S. producers and importers were requested to provide monthly price data for their two largest purchasers of microdisks in each year, by customer type, and by product. Price data were requested separately for the three microdisk products: SS DD; DS DD; and HD microdisks. Moreover, U.S. producers and importers were requested to report all incentives given to the two largest purchasers of microdisks, by customer type. For media sales, price data were requested separately for the two types of media: DD and HD. For each product within each customer category, U.S. producers and importers were requested to provide the total quantity sold for each month. 5/

1/ This number would increase to *** OEMs if Verbatim's Mexican-finished microdisks with U.S. media are included.
2/ Verbatim has qualified its Mexican-finished microdisks with * * *.
3/ During the period of investigation, * * * purchased only Japanese-produced microdisks.
4/ Tolling price data were requested by the Commission during this investigation. * * *.
5/ U.S. producers and importers do not keep separate inventories of imported and domestic microdisks. For each product type, imported and domestic microdisks are mixed together and sold at the same price. For example, DS DD Verbatim microdisks are priced the same regardless of whether they are finished in the United States * * *, Ireland, or Mexico. Due to this problem, domestic producers were unable to distinguish between imported and domestic product on shipments to individual purchasers. However, they did provide estimates of their imported shipments. Commission staff used these quantity estimates in developing the relevant weights for the price series.

Nineteen suppliers of microdisks or media reported price data during the current investigation, although not for all periods or for each category/product requested. *** suppliers are solely U.S. producers and do not import, *** suppliers are both U.S. producers and importers of the Japanese product, and *** suppliers are solely U.S. importers of the Japanese product. The responding suppliers accounted for over 95 percent of the total reported U.S. domestic shipments to unrelated purchasers of microdisks and of media during 1987 and January-September 1988. The pricing data reported by these suppliers represented over 35 percent of total reported U.S. domestic shipments during 1987 and January-September 1988. The responding U.S. producers accounted for nearly all of the total reported U.S.-produced domestic shipments to unrelated purchasers of microdisks and of media in 1987. The responding U.S. importers accounted for nearly all of domestic shipments to unrelated purchasers of Japanese 3.5" microdisks and of Japanese media in 1987.

Price trends for media.--U.S. producers and importers of Japanese media, sold only DD media to unrelated purchasers during the period of the investigation. Although there are not many observations for 1986, the price for media fell between 1986 and 1987 for both the U.S.-produced and Japanese-produced product, and stayed relatively level during 1987-88 (table 34). 1/ In all *** quarters in which prices of U.S. and Japanese media could be compared, the price for imported Japanese media ranged between * * * per cookie higher than the price for U.S. media. 2/

Table 34
3.5" media: Weighted-average net unit values of DD media sold to unrelated purchasers and margins of under/(over) selling, by U.S. producers and importers of Japanese media, by quarters, January 1986-September 1988

* * * * * * *

Price trends for suppliers of microdisks.--Average unit-value pricing information is presented for the top suppliers of U.S.- and Japanese-produced microdisks sold to each channel of distribution (distributors, mass merchandisers, and OEMs) in the U.S. market during 1987-88 (tables 35-38). 3/ The importance of these channels is reflected in their share of

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1/ See app. F, table F-1 for the quantity of media cookies sold. Media sales to unrelated U.S. purchasers represent approximately *** percent of U.S. apparent consumption of media in 1987. See section of this report entitled U.S. imports for unit-value information on direct media imports.
2/ During the preliminary investigation, * * *.
3/ Supplier pricing information is presented for branded DS DD and HD microdisks sold to distributors, DS DD microdisks sold to mass merchandisers, and DS DD microdisks sold to OEMs. Pricing information by the suppliers of microdisks was the most complete for these products and sales channels. See app. F, tables F-2 and F-3 for pricing information of unbranded DS DD and branded SS DD microdisks sold to distributors. Prices for these products were less complete, but follow the same general trends.

[redacted]e market. 1/ Total sales of microdisks to distributors and to OEMs constituted relatively equal shares of the U.S. market during the period of investigation, although OEMs constituted a greater percentage of U.S. importers' sales of Japanese-produced microdisks and distributors constituted a greater percentage of U.S. producers' sales of microdisks. 2/ The relative importance of each market segment may differ for each supplier. Some suppliers concentrate on one segment of the microdisk market, e.g., during January-September 1988, * * *. Other suppliers are relatively equally concentrated in two market segments, e.g., during January-September 1988, * * *. Still other suppliers shifted their efforts during the period of investigation, e.g., * * *.

The top eight suppliers of branded product to distributors represented approximately 89 percent of total shipments to this channel during 1987 and January-September 1988. 3/ The top seven suppliers of microdisks to mass merchandisers represented over 96 percent of U.S. domestic shipments to that channel during 1987 and January-September 1988. 4/ The top nine suppliers of microdisks to OEMs represented over 90 percent of U.S. domestic shipments to this channel during 1987 and January-September 1988. 5/

During the period of investigation, *** of the top suppliers listed in the following tables, * * *, imported Japanese-finished microdisks; *** suppliers produced U.S.-finished microdisks; 6/ *** suppliers have produced finished microdisks in third-countries for sale in the U.S. market. 7/ As stated earlier, suppliers generally mix together imported and domestic microdisks of a specific type and sell them at the same price. In general, prices for microdisks of these suppliers declined between January 1986 and mid-1987 but then remained steady or increased slightly through September 1988. The lowest price suppliers were * * *.

Prices for branded DS DD microdisks sold to distributors declined for the top eight suppliers of branded product from 1986 to late 1987 and then remained relatively stable through September 1988 (table 35). 8/ 9/ During 1986 the low

---

1/ Market shares estimates were derived by taking each supplier's U.S. domestic shipments to unrelated purchasers as a percentage of those by the 19 suppliers who responded to the Commission's questionnaire. As stated earlier, these 19 suppliers represent nearly all U.S. domestic shipments to unrelated purchasers during 1987-88.
2/ See section of this report entitled, channels of distribution.
3/ According to questionnaire data, during January-September 1988 the approximate U.S.-market shares for branded sales to distributors by these suppliers were: * * *. For 1987 the market shares were: * * *.
4/ According to questionnaire data, for January-September 1988 the approximate U.S.-market shares for sales to mass merchandisers by these suppliers were: * * *. During 1987 these 7 suppliers market shares were: * * *.
5/ According to questionnaire data, for January-September 1988 the approximate U.S.-market shares for sales to OEMs by these suppliers were: * * *. During 1987 these 9 suppliers' market shares were: * * *.
6/ * * * have produced U.S.-finished microdisks during the period of investigation, January 1985-September 1988. * * *.
7/ * * *.
8/ * * *.
9/* * *.

price supplier for branded DS DD microdisks was a U.S. importer, * * *. 1/ During 1987-88 the low price suppliers for branded DS DD microdisks were two U.S. producers, * * *. 2/

Table 35
Finished 3.5" DS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988

* * * * * * *

* * * offered more than one brand name of diskettes to distributors during the period of investigation. The brand names reflect quality differences. * * * brands have minimum clipping levels of *** percent and *** percent, respectively. 3/ * * * brands have minimum clipping level of *** percent and *** percent, respectively. 4/ Both these suppliers sell the lower-quality diskettes at lower prices. * * * promote these lower-priced brands as "price fighters." Pricing information reported by * * * indicates that its * * * brand DS DD microdisks ranged between * * * less expensive than its * * * brand product. * * * reported that its * * * brand DS DD microdisks generally ranged between * * * less expensive than its * * * brand product. 5/ Although sales of * * * brand represents a relatively small proportion of * * * total sales of branded product to distributors, sales of * * * brand are * * *'s largest-selling branded product (approximately *** percent). 6/ 7/

Prices for sales of DS DD microdisks to mass merchandisers by the top seven suppliers declined from January 1986 through late 1987 and then remained relatively stable in 1988 (table 36). During 1986-87 the low price supplier was * * *. During 1988 the low price suppliers were * * *, two U.S. producers of finished microdisks, and the high price supplier was * * *, a U.S. importer of Japanese microdisks. 8/ * * * reported selling *** different brand names of microdisks to mass merchandisers, * * *. Sales of the * * * brands to mass merchandisers represented relatively * * * amounts for * * * during January-

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1/ During 1986 the relative volumes associated with U.S. importers were much greater than those associated with U.S. producers. For example, * * *. The ratio of U.S. producers' purchases of microdisks and direct imports of microdisks from Japan to U.S. production of microdisks in 1986 was also quite large. See section of this report entitled U.S. producers' domestic purchases and imports.
2/ * * *.
3/ * * *.
4/ * * *.
5/ * * *. See app. F, table F-4.
6/ * * *.
7/ According to questionnaire data, the minimum clipping levels for the other suppliers of branded product to distributors listed in table 35 are: * * *.
8/ * * *.

September 1988, * * *. * * * started selling the * * *. 1/ Sales of the * * * brands to mass merchandisers were phased out by * * *.

Prices for DS DD microdisks to OEMs likewise declined for the top nine suppliers for 1986-87, before sightly increasing in 1988 (table 37). 2/ During 1986, the low-price suppliers were primarily * * *. During 1987, the low-price suppliers were * * *. During 1988, the low-price suppliers were * * *. 3/ The high-price suppliers during the entire period of investigation were * * *.

* * *. It does so because established suppliers, e.g., the Japanese, have advantages other than price and the offer of * * * prices by new, unestablished suppliers is a means of inducing some OEMs to add or switch suppliers, even after they have been qualified. 4/ OEMs accounted for *** percent and *** percent of * * *'s sales during 1987 and January-September 1988.

Prices for branded HD microdisks sold to distributors by the top eight suppliers generally declined during the period of investigation (table 38). 5/ The low price suppliers were generally * * * and the high-price supplier was usually * * *. * * * were the only integrated U.S. producers of HD microdisks during 1987-88. 6/ All other suppliers sold Japanese-finished HD microdisks. * * *.

Table 36
Finished 3.5" DS DD microdisks: Unit values of microdisks sold to unrelated mass merchandisers by the top 7 suppliers of microdisks to mass merchandisers, by suppliers and by months, January 1986-September 1988

*	*	*	*	*	*	*

Table 37
Finished 3.5" DS DD microdisks: Unit values of microdisks sold to unrelated OEMs by the top 9 suppliers of microdisks to OEMs, by suppliers and by months, January 1987-September 1988

*	*	*	*	*	*	*

Table 38
Finished 3.5" HD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 suppliers of microdisks, by suppliers and by months, January 1987-September 1988

*	*	*	*	*	*	*

1/ * * *.
2/ Verbatim's January-September 1988 unit values are based on its three largest OEMs, the result of the Commission's verification. The incorporation of the price data for the third OEM had a minor effect on Verbatim's unit values.
3/ * * *.
4/ * * *.
5/ * * *.
6/ * * *.

Suppliers' prices adjusted for the value of incentives.--Suppliers of U.S.- and Japanese-produced microdisks primarily offer incentives to purchasers of their branded product, e.g., distributors and mass merchandisers. The value of incentives given to distributors was deducted from the unit values for both branded DS DD and HD product reported by the top eight suppliers to this market segment (tables 39 and 40). The value of the incentives given to mass merchandisers was deducted from the unit values for DS DD microdisks reported by the top seven suppliers to this market segment. Each supplier identified those incentives that were not already deducted from the pricing data submitted to the Commission. These incentives include cash/credit terms, market development funds, cooperative advertising allowances, rebates, and warehouse allowances. 1/ The cost of the incentives given to the largest distributors ranged between *** percent and *** percent of the total value of these distributors' purchases of microdisks. 2/ The cost of the incentives given to the largest mass merchandisers ranged between *** percent and *** percent of the total value of these mass merchandisers' purchases of microdisks. 3/

Unit values net of incentives followed the same general trend as did the actual unit values, declining during 1986-87 but then remaining steady or increasing slightly through September 1988. No major differences in price comparisons resulted by deducting the value of the suppliers' incentives from the unit values. Purchasers contacted during the investigation agreed that most of the incentive programs by the suppliers were similar and of equal value.

For DS DD branded product sold to distributors (table 39), the low-adjusted-price suppliers were generally * * * during 1986, * * * during 1987, and * * * during January-September 1988. The high-adjusted-price suppliers were * * * during 1986, * * * during 1987, and * * * during January-September 1988. For HD branded product sold to distributors (table 40), the low-adjusted-price suppliers were * * * during 1987 and * * * during 1988. The high-adjusted-price supplier was * * * during 1987-88. For DS DD product sold to mass merchandisers (table 41), the low-adjusted-price supplier was * * * and the high-adjusted-price suppliers were * * * in 1986 and * * * in 1987-88.

Table 39
Finished 3.5" DS DD microdisks: Unit values adjusted for the value of incentives of branded products sold to unrelated distributors by the top 8 suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988

* * * * * * *

1/ Incentives that were already deducted include volume discounts, free freight, and free goods.
2/ The range of the top eight suppliers' incentives as a percentage of each of their largest distributors' annual total purchases during January 1986 to September 1988 by value was as follows: * * *. *** U.S. producers, * * *, reported their aggregate incentive programs and not customer specific incentives. This aggregate information was used for these suppliers.
3/ The range of the top seven suppliers' incentives as a percentage of each of their largest mass merchandisers' annual total purchases during January 1986 to September 1988 by value was as follows: * * *. * * *.

Table 40
Finished 3.5" HD microdisks: Unit values adjusted for the value of incentives of branded products sold to unrelated distributors by the top 8 suppliers of microdisks, by suppliers and by months, January 1987-September 1988

* * * * * * *

Table 41
Finished 3.5" DS DD microdisks: Unit values adjusted for the value of incentives of microdisks sold to unrelated mass merchandisers by the top 7 suppliers of microdisks to mass merchandisers, by suppliers and by months, January 1986-September 1988

* * * * * * *

Price trends for microdisks by country of finishing.--Unit values for microdisks are presented in this section by country of finishing process, i.e., whether U.S.-finished or Japanese-finished. U.S. imports of Japanese product by U.S. producers that they sold at the same price as their U.S.-finished microdisks are not included. U.S.-produced microdisks by Sony and Maxell that they sold at the same price as their U.S. imports of Japanese product are also not included. 1/ Weighted-average unit values of all 3 microdisk products declined for both U.S. producers and importers from 1986 to late 1987, becoming relatively stable through September 1988, as shown in tables 42-44. 2/

Prices for SS DD microdisks for sales to all customers declined between *** and *** percent (table 42). Prices for the imported Japanese product declined 38.5 percent for sales of finished branded microdisks to distributors, *** percent for sales of finished microdisks to mass merchandisers, and *** percent for sales of finished microdisks to OEMs. Unit values for the U.S.-finished product declined *** percent for sales of the premium branded product to distributors, 3/ and *** percent for sales to OEMs (the only 2 categories with product being sold during the complete period of the investigation).

1/ The suppliers included in the U.S.-finished unit values are: * * *. The suppliers included in the Japanese-finished product are: * * *. * * *.
2/ U.S. producers and importers reported or estimated their total monthly U.S. shipments (in units) of U.S.- and Japanese-finished SS DD, DS DD, and HD microdisks to the specific channel of distribution. Commission staff used these quantity estimates in developing the relevant weights for the price series.
3/ U.S.-finished premium branded microdisks do not include unit values for * * *.

Table 42
Finished 3.5" SS DD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988. 1/ 2/

(In dollars per unit)

Period	Sales to distributors: Branded product: U.S.-finished 3/ Premium	Sales to distributors: Branded product: U.S.-finished 3/ Price-fighter	Sales to distributors: Branded product: Japan	Sales to mass merchandisers: U.S.-finished	Sales to mass merchandisers: Japan	Sales to OEMs: U.S.-finished	Sales to OEMs: Japan
1986:							
Jan.....	$***	$ ***	$1.48	$ ***	$ ***	$ ***	$ ***
Feb.....	***	***	***	***	***	***	***
Mar.....	***	***	1.44	***	***	***	***
Apr.....	***	***	1.20	***	1.21	***	1.10
May.....	***	***	1.26	***	***	***	***
June.....	***	***	1.07	***	1.73	***	1.18
July.....	***	***	***	***	1.13	***	1.05
Aug.....	***	***	1.06	***	1.09	***	1.01
Sept.....	***	***	1.08	***	1.10	***	.97
Oct.....	***	***	1.05	***	***	.91	.91
Nov.....	***	***	1.01	***	1.25	.89	***
Dec.....	***	***	.92	***	1.10	***	.87
1987:							
Jan.....	***	***	.95	***	1.11	***	***
Feb.....	***	***	.96	***	1.05	***	.97
Mar.....	***	***	.92	***	1.00	***	.95
Apr.....	***	***	.86	***	.68	***	.80
May.....	***	***	.85	***	1.09	***	.81
June.....	***	***	.89	***	***	***	.79
July.....	***	***	***	***	***	***	***
Aug.....	***	***	.92	***	***	***	.95
Sept.....	***	***	.88	***	***	.80	.98
Oct.....	***	***	***	***	***	.69	.80
Nov.....	***	***	.89	***	***	.72	.77
Dec.....	***	***	.85	***	.92	.74	***
1988:							
Jan.....	***	***	.91	***	***	***	***
Feb.....	***	***	.94	***	***	***	***
Mar.....	***	***	.90	***	***	***	***
Apr.....	***	***	.90	***	***	***	***
May.....	***	***	.93	***	.90	***	***
June.....	***	***	.91	***	***	***	***
July.....	***	***	.88	***	***	***	***
Aug.....	***	***	.90	***	***	***	***
Sept.....	***	***	.91	***	***	***	***

1/ Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished. The suppliers comprising the U.S.-finished unit values include: * * *. The suppliers comprising the Japanese-finished product include: * * *.
2/ See table F-12 for volumes associated with these unit values.
3/ U.S.-finished premium branded microdisks do not include unit values for * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 43
Finished 3.5" DS DD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988. 1/ 2/

(In dollars per unit)

Period	Sales to distributors: Branded product: U.S.-finished 3/: Premium	Sales to distributors: Branded product: U.S.-finished 3/: Price-fighter	Sales to distributors: Branded product: Japan	Sales to mass merchandisers: U.S.-finished	Sales to mass merchandisers: Japan	Sales to OEMs: U.S.-finished	Sales to OEMs: Japan
1986:							
Jan.....	$ ***	$ ***	$2.15	$ ***	$ ***	$ ***	$1.77
Feb.....	***	***	***	***	***	***	1.64
Mar.....	***	***	1.53	***	2.01	***	1.68
Apr.....	***	***	1.83	***	1.79	***	1.71
May.....	1.73	***	1.87	***	1.75	***	1.67
June.....	1.81	***	1.84	***	1.50	***	1.52
July.....	1.75	***	1.75	***	1.48	***	1.48
Aug.....	1.83	***	1.62	***	1.13	***	1.35
Sept.....	1.74	***	1.64	***	1.82	***	1.25
Oct.....	1.67	***	1.58	***	1.81	***	1.20
Nov.....	1.62	***	1.47	***	1.76	***	1.21
Dec.....	1.66	***	1.55	***	1.69	***	1.20
1987:							
Jan.....	***	***	1.43	***	1.58	1.02	1.15
Feb.....	***	***	1.42	***	1.59	.94	1.07
Mar.....	1.49	***	1.35	***	1.59	.94	1.11
Apr.....	1.62	***	1.33	***	1.51	.93	1.03
May.....	1.44	***	1.34	***	1.56	.95	1.03
June.....	1.44	***	1.29	***	1.51	.91	1.08
July.....	1.39	***	1.29	***	1.49	.91	1.00
Aug.....	1.38	***	1.29	***	1.48	.96	1.03
Sept.....	1.33	***	1.27	***	1.41	.93	1.01
Oct.....	1.30	***	1.32	1.34	1.35	.89	1.03
Nov.....	1.34	***	1.23	***	1.39	.88	1.01
Dec.....	1.28	***	1.33	***	1.36	.92	1.02
1988:							
Jan.....	***	***	1.32	***	1.39	***	1.01
Feb.....	***	***	1.32	***	1.38	***	1.05
Mar.....	***	***	1.31	***	1.37	***	.99
Apr.....	***	***	1.27	***	1.37	***	.98
May.....	***	***	1.26	***	1.34	***	.98
June.....	***	***	1.26	***	1.39	***	.98
July.....	***	***	1.25	***	1.44	***	.97
Aug.....	***	***	1.27	***	1.40	***	1.00
Sept.....	***	***	1.25	***	1.47	***	1.00

1/ Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished. The suppliers comprising the U.S.-finished unit values include: * * *. The suppliers comprising the Japanese-finished product include: * * *.
2/ See table F-13 for volumes associated with these unit values.
3/ U.S.-finished premium branded microdisks do not include unit values for * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table 44
Finished 3.5" HD microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by types of customer and by months, January 1986-September 1988. 1/ 2/

(In dollars per unit)

Period	Sales to distributors: Branded product: U.S.-finished: Premium 3/	Sales to distributors: Branded product: Japan	Sales to mass merchandisers: Japan	Sales to OEMs: Japan
1987:				
Jan.	$ ***	$ ***	$ ***	$ ***
Feb.	***	***	***	***
Mar.	***	***	***	***
Apr.	***	***	***	***
May.	***	4.04	***	***
June.	***	4.02	***	***
July.	***	3.87	***	***
Aug.	***	3.81	***	***
Sept.	***	3.91	***	***
Oct.	***	3.76	***	***
Nov.	***	3.78	***	***
Dec.	***	3.74	***	***
1988:				
Jan.	***	3.74	***	***
Feb.	***	3.50	3.82	2.70
Mar.	***	3.58	3.80	2.94
Apr.	***	***	3.76	2.29
May.	***	3.29	***	2.83
June.	***	3.22	***	***
July.	***	3.70	***	2.89
Aug.	***	3.29	3.74	***
Sept.	***	3.41	***	***

1/ Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished. The suppliers comprising the U.S.-finished unit values include: * * *. The suppliers comprising the Japanese-finished product include: * * *.
2/ See table F-14 for volumes associated with these unit values.
3/ U.S.-finished premium branded microdisks do not include unit values for * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

During 1986-88, unit values for DS DD microdisks declined approximately 26 to 44 percent for imported Japanese product and *** to *** percent for the U.S. product (table 43). Over the whole period, unit values for the imported Japanese product fell 42 percent for sales of branded microdisks to distributors, *** percent for sales to mass merchandisers, and 44 percent for sales to OEMs. Unit values for the U.S.-finished product declined *** percent for sales of the premium branded microdisks to distributors, *** percent for sales to mass merchandisers, and *** percent for sales to OEMs. Unit values for the U.S.-finished "price-fighter" product sold to distributors declined *** percent during 1987-88.

Unit values for Japanese-finished high-density microdisks declined *** to *** percent during 1987-88 (table 44). The imported Japanese product dominated the high-density market for all customers through most of the investigation period, * * *. Unit values for U.S.-finished high-density microdisks * * * for sales of branded microdisks to distributors.

Price comparisons.--The reported sales information for U.S. producers' and importers' monthly shipments to unrelated customers during January 1986 to September 1988 resulted in 223 direct monthly price comparisons within three customer categories (distributors, mass merchandisers, and OEMs) between the weighted-average unit values of the domestic and imported Japanese-finished microdisks (table 45). 1/ Fifty-seven percent (127) of the comparisons were observations of overselling and 41 percent (91) of the comparisons were observations of underselling by the imported Japanese-finished microdisks.

Table 45
Finished 3.5" microdisks: Average margins of underselling (overselling) by the subject imports from Japan, by months, January 1986-September 1988.

* * * * * * *

Most of the observations of underselling occurred during the beginning of the period of investigation, 1986-early 1987, and involved SS DD microdisks. DS DD microdisks represented most of the microdisks sold during the period of investigation.

Of the 94 comparisons for the SS DD product for the three customer categories, the Japanese import was less expensive than the U.S.-finished product for 49 observations and more expensive for 42 observations. 2/ Margins of underselling during the entire period ranged from *** percent to *** percent. Twenty-five of the 28 comparisons during 1986 were underselling. Comparisons of the Japanese product with the U.S. premium branded product sold to distributors were the only observations of underselling during 1988. In comparing the Japanese product with the U.S. price-fighter branded product during 1988, all observations were overselling by the U.S. importers of the Japanese product. Margins of overselling during 1986-88 ranged from *** percent to *** percent.

1/ Price comparisons were made between the price of the U.S.-finished product and the price of the Japanese-finished product.
2/ * * *.

Of the 111 comparisons for DS DD microdisks for the three customer categories, the Japanese import was less expensive than the U.S.-finished product in 26 observations and more expensive in 83 observations. 1/ During 1988, *** of the *** comparisons were observations of overselling by the Japanese product. Margins of underselling ranged from *** percent to *** percent. Margins of overselling for DS DD microdisks ranged from *** percent to *** percent.

Of the 18 comparisons for high-density microdisks, all were for the category of branded product sold to distributors and the Japanese product was * * *. The margins of underselling ranged from *** to *** percent below the U.S. price. The margins of overselling were *** and *** percent.

Purchasers' questionnaire responses concerning competition between the domestic and imported microdisks.--The Commission requested purchasers to report on competitive conditions between domestic and Japanese microdisks based on their actual purchase experiences during January 1986-September 1988. Eleven distributors, 3 mass merchandisers, and 17 OEMs responded to at least some portions of this section of the purchaser questionnaire, but not everyone responded to all the questions asked. Purchasers were asked to compare any product differences between the domestic and Japanese microdisks by physical product characteristics, by availability and reliability of supply, and by order lead times. Purchasers were also requested to comment on the delivered purchase prices of the domestic and Japanese microdisks.

Product differences.--The responding distributors and mass merchandisers indicated that the quality of the domestic microdisks was generally equal to the quality of the Japanese product. These purchasers reported no significant difference in sales terms, incentive programs, supply availability, supplier reliability, or order lead times as the result of the country of origin. One supplier may have been preferred over another supplier, but no general pattern was observed.

The responding OEMs reported that there was no significant difference in supply availability, supplier reliability, and sales terms as the result of the country of origin. Unlike distributors and mass merchandisers, however, most of the OEMs indicated that the quality of the Japanese-produced microdisks was higher than the U.S.-produced microdisks. 2/ These OEMs also reported that once they have qualified the supplier, the product is considered highly substitutable with all other qualified microdisks regardless of the country of origin.

Pricing differences.--Of the 25 purchasers responding to this section of the questionnaire, 21 purchasers indicated that the delivered prices of the Japanese-produced microdisks were higher than those of U.S.-produced microdisks. 3/ Twelve purchasers indicated that the Japanese product was up to *** percent more expensive than domestic product. Three purchasers reported that the Japanese product ranged from *** to *** percent below the price of U.S.-produced microdisks. 4/

1/ * * *.
2/ See sections of this report entitled "channels of distribution" and "non-price factors", for more information on OEM qualification procedures and quality ratings between the various suppliers of microdisks.
3/ Eight of 9 distributors, 1 mass merchandiser, and 12 of 13 OEMs.
4/ * * *.

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that during the period January 1985 through September 1988, the value of the Japanese yen advanced sharply, by 92.7 percent, against the U.S. dollar (table 46). 1/ Adjusted for relative movements in producer price indexes in the United States and Japan, the real value of the Japanese currency appreciated 57.0 percent relative to the dollar from January-March 1985 through July-September 1988.

Lost sales

*** specific allegations of lost sales, involving $*** of U.S.-finished microdisks, were supplied to the Commission by *** U.S. producers, * * *, during the current investigation. *** allegations of lost sales, involving $***, were supplied by * * * 2/ and *** allegations of lost sales, involving $*** to *** purchasers, were supplied by * * *. 3/ The lost sales all occurred during * * *, and involved *** units of SS DD product and *** units of DS DD product. During the final and preliminary investigations, Commission staff contacted *** purchasers accounting for alleged lost sales of $***. 4/ 5/

* * *, was cited by * * * in a lost sale allegation of $***, involving *** DS DD microdisks in * * *. The price of imports was alleged to be *** cents per unit, whereas the U.S. producer price quote was *** cents per unit. * * * when the alleged lost sale occurred, could not recall the specific sale but stated that * * * never made an order that large. * * * reported that * * * may have purchased small quantities from overseas sources when * * * needed product urgently and microdisks from its domestic supplier, * * *, were not available, but * * * never recalled getting a fabulous offer by the Japanese. * * * stated that the U.S. suppliers were giving better pricing than the Japanese.

Currently, * * *. * * *, stated that although * * * could purchase microdisks from other sources at lower prices, it chooses to purchase microdisks from * * * mainly on the basis of quality of * * *'s product and brand recognition. * * * currently purchases approximately *** microdisks per year (* * *).

* * *, was cited by * * * in a lost sale allegation of $***, involving *** SS DD and *** DS DD microdisks in * * *. The price of imports was alleged to be *** cents per SS and *** cents per DS microdisk, whereas the U.S. producer price quote was *** cents per SS and *** cents per DS product. * * *, stated that * * * never purchased that amount of microdisks. It currently purchases approximately *** microdisks per year. * * * had purchased from * * * until * * * when * * * cut them off from product because of lack of supply. * * * started purchasing from * * *, and currently purchases * * * of * * *'s requirements from * * *.

1/ International Financial Statistics, December 1988.
2/ * * *.
3/ * * *.
4/ * * *.
5/ * * *.

Table 46
U.S.-Japanese exchange rates: 1/ Nominal exchange rates of the Japanese yen in U.S. dollars, real exchange rate equivalents, and producer price indicators in the United States and Japan, 2/ indexed by quarters, January 1985-September 1988

Period	U.S. Producer Price Index	Japanese Producer Price Index	Nominal exchange rate index	Real exchange rate index 3/
			----US dollars/yen----	
1985:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	100.1	98.8	102.8	101.5
July-September.....	99.4	97.5	108.0	106.0
October-December....	100.0	94.7	124.4	117.8
1986:				
January-March.....	98.5	92.8	137.2	129.2
April-June.....	96.6	89.4	151.5	140.1
July-September.....	96.2	87.0	165.4	149.7
October-December....	96.5	86.1	160.8	143.5
1987:				
January-March.....	97.7	85.6	168.2	147.4
April-June.....	99.2	84.9	180.6	154.5
July-September.....	100.3	86.0	175.4	150.2
October-December....	100.8	85.7	189.8	161.3
1988:				
January-March.....	101.3	84.7	201.3	168.3
April-June.....	103.1	84.4	205.1	167.8
July-September.....	104.5	85.2	192.7	157.0

1/ Exchange rates expressed in U.S. dollars per unit of yen.
2/ Producer price indicators--intended to measure final product prices--are based on average quarterly indices presented in line 63 of the International Financial Statistics.
3/ The indexed real exchange rate represents the nominal exchange rate adjusted for relative movements in Producer Price Indices in the United States and Japan. Producer prices in the United States increased 4.5 percent between January 1985 and September 1988 compared to a 14.8-percent decrease in Japan during the same period.

Note.--January-March 1985=100.

Source: International Monetary Fund, International Financial Statistics, December 1988.

* * * commented that * * *'s microdisk prices are higher than domestic sources and prices are continuing to increase. * * * also stated that * * * needs a greater supply of microdisks and would purchase product from U.S. sources, but no U.S. company has approached * * * with product available.

* * *, was cited by * * * in a lost sale allegation of $***, involving *** SS DD and DS DD microdisks in * * *. The price of imports was alleged to be *** cents per unit, whereas the U.S. producer price quote was *** per unit. * * * 1/, could not recall the specific sale but stated that * * * was purchasing product from * * * at that time. * * * stopped supplying * * * with product in * * * because of the supply shortage. Currently, * * * purchases product from distributors because * * * can get better terms than if * * * purchased direct from the manufacturer. Moreover, distributors offer better availability of product because they buy from more than one source and they require shorter lead times than manufacturers. * * * purchases approximately *** to *** microdisks per month.

* * * commented that the overall quality level of U.S.-produced microdisks has improved substantially. In 1984, when the microdisk format started, the "American product was a joke." Currently, U.S.-produced microdisks work well in all computers except for Apple's MacIntosh. * * * believes that microdisks from Japanese manufacturers such as * * * are more suitable for the Apple computer.

* * *, was named by * * * in *** lost sales for $***, involving *** microdisks in * * *. The price of imports was alleged to be *** cents to *** cents per unit below the price of the U.S. producer. * * *, could not recall the alleged sales but stated that although price spreads of these magnitudes do occasionally occur, prices paid by * * * are generally similar between the major suppliers, i.e., * * *. * * * commented that * * *'s other supplier, * * *, prices its microdisks lower than the major suppliers because * * * is attempting to buy market share. * * * purchases approximately *** microdisks per year from *** suppliers: * * *.

* * *, was cited by * * * in *** lost sales for $***, involving *** microdisks in * * *. The price of imports was alleged to be *** cents to *** cents per unit below the price of the U.S. producer. * * *, could not recall these sales but stated that * * * purchases microdisks from * * *. * * * buys over $*** of microdisks per year.

* * * bases its purchasing decision on brand name awareness, price, program support (incentives), and market share. * * * considers both the prices and incentives offered by these suppliers to be very similar. Major price differences last only for a short time during the period between one firm's decline of price and when other firms match the decrease. For example, in * * *, * * * lowered its price first and this price was quickly matched by the other suppliers. * * * commented that if a bidding situation develops, * * * will continue to lower their prices to make the sale. As of * * *, * * * pays the following prices per unit for DS DD microdisks: * * *. Currently, * * * has a promotion offering DS microdisks at *** per unit.

* * *, was cited in *** lost sales by * * * for $***, involving *** DS DD microdisks in * * *. The price of imports was alleged to be *** cents per unit below the price of the U.S. producer. * * *, commented that * * * could not

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1/ * * *.

recall the specific sale but * * * never observed price differentials at that magnitude.

* * * currently purchases approximately *** microdisks per year, mainly from * * *. * * * has also purchased microdisks in the past from * * *. * * * commented that * * * views * * * particularly poorly with respect to pricing because * * * offers different prices to everybody. * * * can purchase * * * product at lower prices from wholesalers than he can from * * *. * * * also stated that * * * has policies similar to those of * * *. Recently, * * * did not follow * * * in a price reduction for microdisks, but offered * * * that effectively lowered its price to match * * *.

* * *, was named by * * * in a lost sale allegation of $***, involving approximately *** microdisks during * * *. The price of imports was alleged to be $*** per unit, whereas the U.S. producer price quote was $*** per unit. * * *, could not recall the sale but stated that it was not unusual for a order that large to be determined by price. An average order for * * * is *** diskettes per week. For an order of *** diskettes, * * * stated that * * * will play the manufacturers off one another to get the best available price.

* * * purchases microdisks primarily from * * *, but also from * * *. * * * purchases over a *** microdisks per year. * * * commented that there was no major pricing differences between larger suppliers, although * * * notices that the prices of * * *, are approximately *** cents to *** cents below the competition.

Allegations investigated during the preliminary investigation 1/.--* * * was cited in a lost sale allegation of $*** involving *** SS DD microdisks and *** DS DD microdisks. The price of imports was alleged to be $*** per unit for the SS product, and $*** per unit for the DS product, whereas the U.S. producer price quote was $*** per unit for the SS product and $*** per unit for the DS product.

* * *, purchaser for * * *, reported that this allegation was not completely accurate. * * * did request bids for *** microdisks, of which *** percent were 3.5", and *** percent were 5.25". The bid did not specify the amount of SS or DS product. Companies that offered quotes were * * *. * * * offered the lowest prices of $*** for SS and $*** for DS and was awarded the sale, although not for the full quantity of the bid. The price differential with * * * was $***.

* * * presently purchases approximately *** to *** microdisks a month. It purchases *** percent of its product from * * *. Due to the supply crunch, * * * has placed them on an allocation system. * * * stated that price and quality are the most important factors in his purchasing decision. In general, the price of Japanese product is 10 cents lower than domestic product, and the quality of the domestic product is not satisfactory. For example, the * * * product will have an error rate of 1 out of 2,000 diskettes, whereas * * * or the other domestic producers will have an error rate of 10 percent. * * * is

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1/ *** purchasers accounting for lost sales of $*** were contacted during the preliminary investigation. These allegations were investigated during the preliminary investigation (March 1988) when there was a shortage of microdisks in the United States. The allegations shown are unchanged from the preliminary report.

also required by some of its customers to use suppliers that have been qualified. For example, * * *, one of * * *'s customers, requires * * * disks.

* * * was cited in a lost sale allegation of $*** involving *** SS DD microdisks in * * *. The imported price was alleged to be $*** per disk, $*** below the U.S. supplier's price. * * * recalled the order, but reported that the sale went to a domestic supplier, * * *, * * *. * * * purchases *** percent of its microdisks from * * * because * * *'s quality is good and * * * prefers to buy American. * * * has seen Japanese prices $0.20 to $0.22 cents below U.S. prices, but * * * has not been satisfied with the quality of those imported disks. Presently * * * purchases approximately *** diskettes a month, an increase from *** to *** diskettes reported last year.

* * * was cited in a lost sale of $*** involving *** SS DD microdisks in * * *. The imported price was alleged to be $*** per unit, whereas the domestic price quote was $*** per unit. * * *, purchaser of disk products for * * *, could not recall the specific sale, but commented that * * * would never commit to * * *. * * * stated that * * * purchased *** microdisks from * * * in * * * at $*** per unit.

* * * presently purchases *** microdisks on a quarterly basis from * * * and * * *. The supplier must first be qualified as an approved vendor for * * * before * * * can purchase their product. Currently, * * *'s qualified suppliers for microdisks are * * *.

* * * was cited in a lost sale for $*** involving *** SS DD microdisks in * * *. The alleged price of the imported Japanese product was $*** per disk, $*** below the domestic quote. * * * could not recall the order, but commented that * * * usually purchases from * * *. Domestic suppliers, in * * *'s opinion, do not have a good quality product and * * *, in particular, only makes a blue microdisk, whereas * * * offers * * * 6 colors. * * * presently pays * * * approximately $*** per disk for SS DD and $*** per disk for DS DD.

* * *, was cited in a lost sale for $*** involving *** DS DD microdisks in * * *. The price of imported disks was alleged to be $*** per unit, whereas the domestic price quote was $*** per unit. * * * recalled the specific bid, but commented that no order was ever actually made. * * * also denied that the price differential was ever that wide. The lowest price * * * recalled for DS DD diskettes was $***. If there was a price of $*** for good quality microdisks, * * * stated that * * * would definitely purchase them.

* * * stated that for the specific bid, the price quotes were: * * *. Although price was an important determinant for this bid, leadtime was also a factor. * * * promised delivery of the order in 3 days, as opposed to a leadtime for * * * of 4 weeks, and a leadtime for * * * of 8 weeks. * * * would have received the order, but * * * ultimately decided not to purchase the microdisks.

Currently, * * * has a * * * with * * * for approximately *** disks a month. Under the contract with * * *, * * * will never pay more than the contract price for a disk, yet is guaranteed market price if it falls. The main reason * * * received this contract was that * * * waited too long to reach a decision and * * * was the only company willing to * * *. The other suppliers all * * *.

* * * was cited in a lost sale of $*** involving *** SS DD microdisks and *** DS DD microdisks. The alleged price of the SS DD import from Japan was

$*** per disk, $*** below the U.S. supplier's price quote. The price of the DS DD import was $***, $*** below the U.S. supplier's price quote. * * * could not recall the sale, but mentioned that * * * would not be surprised if it did occur. * * * stated that given equal quality, price was usually the deciding purchasing factor. * * * presently purchases from * * *. The current supply shortage has made it much tougher to get product in desired colors (most popular are blue and "Apple"-white). The factors important to * * * when it purchases microdisks are price, quality, and leadtime, but not so much a full product line by the supplier. Some of * * *'s customers specify Japanese media only (no specific brand). This accounts for approximately *** to *** percent of * * *'s business.

* * * was cited in a lost sale allegation for $*** involving *** SS DD microdisks in * * *. The Japanese price quote was alleged to be $*** per unit, * * *. * * * could not recall the specific order, but commented that if the price for SS microdisks was that high, * * * would have probably purchased the DS product instead. * * * presently purchases microdisks from * * *. * * * commented that there is currently a severe shortage of SS product. However, DS product is available if anyone wants to pay the higher price. * * * blamed the supply shortage on the Japanese who, * * * believes, are shifting supply to Europe. * * * observed that price has increased approximately $0.10 to $0.15 in the last couple of months and that the price for Japanese product was higher than that of domestic product.

* * * was cited in a lost sale allegation of $*** involving *** DS DD microdisks that occurred in * * *. The alleged price of the Japanese imported product was $***, $*** below the domestic supplier's price. * * * could not recall the specific sale, but stated that there are few U.S. vendors, most of whom do not have a full array of colors, and they suffer from quality problems. At the time of the alleged sale the price for * * * microdisks was $*** per unit, their sales terms were * * *, and they both provided a full range of colored diskettes. * * * offered only gray microdisks and offered terms of * * *. * * * offered terms of * * *, but were substantially higher in price ($***).

The 3 primary factors in * * *'s purchasing decisions are price, credit terms, and vendor relationships. A penny or two difference in price does not cause them to switch suppliers. Colors and full product lines are also important to * * *. * * * would like to purchase * * * from * * *, but their quality in * * * diskettes is not satisfactory, and * * * does not have a wide array of colors. * * * currently purchases *** to *** percent of his 3.5" diskettes from * * *.

* * * was cited in a lost sale of $*** involving *** DS DD microdisks. The Japanese product was alleged to be $*** per unit, $*** less than the domestic suppliers product. * * * stated that * * * never purchased that quantity of microdisks and that * * * was the only supplier that * * * purchased product from directly. However, * * * did purchase foreign product from distributors when * * * requested that specific type of product.

Lost revenues

*** specific allegations of lost revenues involving $*** of U.S.- finished microdisks were reported by * * * during the current investigation. 1/ All the specific allegations of lost revenues occurred between * * *. Commission staff contacted * * * purchasers cited by * * * accounting for alleged lost revenues of $***. 2/

In addition, * * *. 3/

* * *, was cited by * * * in a lost revenue allegation for $*** involving *** DS DD microdisks during * * *. * * * alleges that it was compelled to reduce the price for its microdisks from $*** per unit to $*** per unit due to Japanese imports. * * *, recalled purchasing the * * * product, but at the higher price. * * * stated that * * * did give * * * at that time for product * * *. * * * remarked that * * * probably * * *. * * * also stated that he did not know any supplier pricing its microdisk product at the $*** range during the specified time period.

* * * purchases over $*** of microdisks per year. * * * stated that customer preference for specific brands determines from which supplier * * * will purchase microdisks. * * * currently purchases microdisks from * * *. * * * considers the Japanese product to be slightly superior to the domestic product and it is priced higher. * * * commented that the supply shortage that existed in late 1987/early 1988 seems to be over, although the HD product is still in short supply.

* * *, was cited by * * * in a lost revenue allegation for $*** involving *** DS DD microdisks during * * *. * * *, could not recall the specific sale, but stated that because the microdisk market is very price sensitive, price is very important in how the distributor buys the product, not in how * * * sells. * * * commented that nobody has ever lost a sale, nor has anyone lowered their price due to * * * threats to purchase an import. However, * * * tries to get the lowest price possible for * * * purchases.

* * * purchases approximately $*** of microdisks per year. * * * currently purchases microdisks from * * *. * * * comments that * * * microdisks are the lowest priced and * * *'s microdisks are the highest priced in the market.

* * * is currently the * * *. * * * stated that all the suppliers offer a full array of incentives to purchasers of microdisks; each supplier trying to best each other with the programs. * * * believes that * * * is the least aggressive supplier of incentives.

* * *, was cited by * * * in a lost revenue allegation for $*** involving *** DS DD microdisks in * * *. * * * alleges that it was compelled to lower the price for its microdisks from $*** per unit to $*** per unit due to Japanese imports. * * *, could not recall the specific sale, but stated that * * * primarily purchases diskette products from * * *. * * * commented that all the manufacturers price their product within a comparable range, within 2 to 3 cents per unit. * * *, a U.S. importer of Japanese microdisks, is the low

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1/ * * *.
2/ * * *.
3/ * * *.

price supplier and * * *, also a U.S. importer of Japanese microdisks, is the high price supplier. * * * purchases approximately *** microdisks per year.

* * * commented that all manufacturers offer incentive programs, but * * * seem to offer the most incentives. * * * stated that * * * in particular will always offer a better deal. * * * has also had the most problems with * * *. * * * reported that price, inventory protection, marketing support, and brand name recognition are the factors generally considered by * * * in deciding from whom to purchase microdisks.

Allegations investigated during the preliminary investigation.--No specific allegations of lost revenues were reported during the preliminary investigation. However, * * * alleged aggregate lost revenues of $*** in * * * and $*** in * * * due to the reduction of its prices to match import prices. These alleged losses amount to approximately $*** per unit sold by * * * in * * * and $*** in * * *. The Commission contacted the two purchasers, * * * that * * * specified best exemplified the loss of revenues when * * * was compelled to meet market prices.

* * *. It purchases microdisks for * * *; these disks are an additional feature for * * * sales. * * * reports that * * * currently purchases approximately *** microdisks a month, primarily from * * *, although they also purchase high-density disks from * * * in small quantities. As an OEM, * * * has a 2-step qualification process for selecting acceptable microdisks. First, an outside house evaluates a sample of microdisks from a supplier and determines whether they meet * * *'s specifications. Second, for those diskettes that pass the first step, the sample is sent to * * * where their engineers run more tests on the product. * * * stated that * * *'s qualification process could take up to a year. Presently, qualified vendors of double-density microdisks for * * * include * * *. For high-density microdisks, only offshore vendors are qualified: * * *. * * * has attempted to qualify its high-density product, but could not pass a media roughness test.

* * * reports that the Japanese product is currently 10 cents higher than the domestic product. Price becomes a factor for * * * only if quality and leadtime are equal between the competing suppliers. * * * does not see a supply crunch in the double-density market, although * * * does see the market tightening for the high-density product.

* * *. * * * reported that duplicating microdisks currently accounts for nearly *** percent of their business. Up until the supply crunch late last year they were purchasing microdisks only from * * *. Now, they also try to purchase from anyone that can supply the microdisks. * * * states that while they have large orders outstanding, * * * has received only small shipments of *** to *** microdisks.

* * * stated that price has risen approximately 5 percent because of the supply crunch. However, availability has become the major factor in * * *'s purchasing decisions. * * * commented that, in general, the price for Japanese microdisks is higher than the price for domestic products. Currently, * * * offers the lowest price and * * * offers the highest price.

APPENDIX A

COPIES OF THE COMMISSION'S NOTICES

[Investigation No. 731-TA-389 (Final)]

3.5 Inch Microdisks and Media Therefor From Japan

AGENCY: International Trade Commission.

ACTION: Revised schedule for the subject investigation.

EFFECTIVE DATE: November 7, 1988.

FOR FURTHER INFORMATION CONTACT: Diane J. Mazur (202-252-1184), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION: Effective September 29, 1988, the Commission instituted the subject investigation and established a schedule for its conduct (53 FR 40972, October 19, 1988). Subsequently, the Department of Commerce extended the date for its final determination in the investigation from December 7, 1988 to February 6, 1989 (53 FR 44933, November 7, 1988). The Commission, therefore, is revising its schedule in the investigation to conform with Commerce's new schedule.

The Commission's new schedule for the investigation is as follows: requests to appear at the hearing must be filed with the Secretary to the Commission not later than January 24, 1989; the prehearing conference will be held at the U.S. International Trade Commission Building at 9:30 a.m. on January 31, 1989; the prehearing staff report will be placed in the nonpublic record of January 23, 1989; the deadline for filing prehearing briefs is February 2, 1989; the hearing will be held at the U.S. International Trade Commission Building at 9:30 a.m. on February 9, 1989; the deadline for filing posthearing briefs is February 16, 1989, and the deadline for Parties to file additional written comments on business proprietary information is February 21, 1989.

For further information concerning this investigation see the Commission's notice of investigation cited above and the Commission's Rules of Practice and Procedure, part 207, subparts A and C (19 CFR Part 207), and part 201, subparts A through E (19 CFR Part 201).

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

By order of the Commission.

Kenneth R. Mason,

Secretary.

Issued: November 17, 1988.

[FR Doc. 88-27131 Filed 11-22-88; 8:45 am]

BILLING CODE 7020-02-M

[Investigation No. 731-TA-389 (Final)]

3.5 Inch Microdisks and Media Therefor From Japan

AGENCY: United States International Trade Commission.

ACTION: Institution of a final antidumping investigation and scheduling of a hearing to be held in connection with the investigation.

SUMMARY: The Commission hereby gives notice of the institution of final antidumping investigation No. 731-TA-389 (Final) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. 1673d(b)) (the Act) to determine whether an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Japan of 3.5 inch microdisks and media therefor, [1] provided for in item 724.45 of the Tariff Schedules of the United States (and classified in subheading 8523.20.00 of the Harmonized Tariff Schedule of the United States), that have been found by the Department of Commerce, in a preliminary determination, to be sold in the United States at less than fair value (LTFV). Unless the investigation is extended, Commerce will make its final LTFV determination on or before December 7, 1988, and the Commission will make its final injury determination by January 26, 1989 (see sections 735(a) and 735(b) of the Act (19 U.S.C. 1673d(a) and 1673d(b))).

For further information concerning the conduct of this investigation, hearing procedures, and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 207, Subparts A and C (19 CFR Part 207), and Part 201, Subparts A through E (19 CFR Part 201; as amended, 53 FR 33041 *et seq.* (August 28, 1988)).

EFFECTIVE DATE: September 29, 1988.

FOR FURTHER INFORMATION CONTACT: Diane J. Mazur (202-252-1184), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION:

Background

This investigation is being instituted as a result of an affirmative preliminary determination by the Department of Commerce that imports of 3.5 inch microdisks and media therefor from Japan are being sold in the United States at less than fair value within the meaning of section 731 of the Act (19 U.S.C. 1673). The investigation was requested in a petition filed on February 26, 1988, by Verbatim Corp., Charlotte, NC. In response to that petition the Commission conducted a preliminary antidumping investigation and, on the basis of information developed during the course of that investigation, determined that there was a reasonable indication that an industry in the United States was materially injured by reason of imports of the subject merchandise (53 FR 12999, April, 20, 1988).

Participation in the Investigation

Persons wishing to participate in this investigation as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than twenty-one (21) days after the publication of this notice in the **Federal Register.** Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service List

Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance. In accordance with § 201.16(c) and § 207.3 of the rules (19 CFR 201.16(c) and 207.3), each document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document.

[1] 3.5 inch microdisks and media therefor are defined as unrecorded flexible magnetic disk recording media, with or without protective covering, for ultimate use in recording and storing data with a 3.5 inch floppy disk drive.

The Secretary will not accept a document for filing without a certificate of service.

Limited Disclosure of Business Proprietary Information Under a Protective Order

Pursuant to § 207.7(a) of the Commission's rules (19 CFR 201.7(a)), the Secretary will make available business proprietary information gathered in this final investigation to authorized applicants under a protective order, provided that the application be made not later than twenty-one (21) days after the publication of this notice in the **Federal Register**. A separate service list will be maintained by the Secretary for those parties authorized to receive business proprietary information under a protective order. The Secretary will not accept any submission by such parties containing business proprietary information without a certificate of service indicating that it has been served upon all the parties that are authorized to receive such information under a protective order.

Staff Report

The prehearing staff report in this investigation containing business proprietary information will be placed in the nonpublic record on December 5, 1988, and a public version will be issued thereafter, pursuant to § 207.21 of the Commission's rules (19 CFR 207.21).

Hearing

The Commission will hold a hearing in connection with this investigation beginning at 9:30 a.m., on December 20, 1988 at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Requests to appear at the hearing should be filed in writing with the Secretary to the Commission not later than the close of business (5:15 p.m.) on December 6, 1988. All persons desiring to appear at the hearing and make oral presentations should file prehearing briefs and attend a prehearing conference to be held at 9:30 a.m. on December 12, 1988, in room 117 of the U.S. International Trade Commission Building. The deadline for filing prehearing briefs is December 15, 1988.

Testimony at the public hearing is governed by § 207.23 of the Commission's rules (19 CFR 207.23). This rule requires that testimony be limited to a nonbusiness proprietary summary and analysis of material contained in prehearing briefs and to information not available at the time the prehearing brief was submitted. Any written materials submitted at the hearing must be filed in accordance with the procedures described below and any confidential materials must be submitted at least three (3) working days prior to the hearing (see § 201.6(b)(2) of the Commission's rules (19 CFR 201.6(b)(2))).

Written Submissions

All legal arguments, economic analyses, and factual materials relevant to the public hearing should be incuded in prehearing briefs in accordance with § 207.22 of the Commission's rules (19 CFR 207.22). Posthearing briefs must conform with the provisions of § 207.24 (19 CFR 207.24) and must be submitted not later than the close of business on December 27, 1988. In addition, any person who has not entered an appearance as a party to the investigation may submit a written statement of information pertinent to the subject of the investigation on or before December 27, 1988.

A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the Commission's rules (19 CFR 201.8). All written submissions except for business proprietary data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any business information for which business proprietary treatment is desired must be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Business Proprietary Information." Business proprietary submissions and requests for business proprietary treatment must conform with the requirements of § 201.6 and 207.7 of the Commission's rules (19 CFR 201.6 and 207.7).

Parties must obtain disclosure of business proprietary information pursuant to § 207.7(a) of the Commission's rules (19 CFR 201.7(a)) may comment on such information in their prehearing and posthearing briefs, and may also file additional written comments on such information no later than December 30, 1988. Such additional comments must be limited to comments on business proprietary information received in or after the posthearing briefs.

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.20 of the Commission's rules (19 CFR 207.20).

Issued: October 11, 1988.

By order of the Commission.

Kenneth R. Mason,

Secretary.

[FR Doc. 88-24200 Filed 10-18-88; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B

COPIES OF THE COMMERCE'S NOTICES

Notices

Federal Register
Vol. 54, No. 27
Friday, February 10, 1989

DEPARTMENT OF COMMERCE

International Trade Administration

[A-588-802]

Final Determination of Sales at Less Than Fair Value: 3.5" Microdisks and Coated Media Thereof From Japan

AGENCY: Import Administration, International Trade Administration, Department of Commerce.

ACTION: Notice.

SUMMARY: We have determined that 3.5" microdisks and coated media thereof from Japan are being, or are likely to be, sold in the United States at less than fair value. The U.S. International Trade Commission (ITC) will determine, within 45 days of the publication of this notice, whether these imports are materially injuring, or are threatening material injury to, a United States industry.

EFFECTIVE DATE: February 10, 1989.

FOR FURTHER INFORMATION CONTACT: Contact Loc Nguyen or Charles Wilson, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230, telephone: (202) 377-3530 or 377-5288.

SUPPLEMENTARY INFORMATION:

Final Determination

We have determined that 3.5" microdisks and coated media thereof from Japan are being, or are likely to be, sold in the United States at less than fair value, as provided in section 735(a) of the Tariff Act of 1930, as amended (19 U.S.C. 1673d(a)) (the Act). The estimated weighted-average margins are shown in the "Continuation of Suspension of Liquidation" section of this notice.

Case History

On September 23, 1988, we made an affirmative preliminary determination (53 FR 38045, September 29, 1988). The following events have occurred since the publication of that notice.

The questionnaire responses from Sony Corporation (Sony) were verified in Japan between October 3 and October 7, and in the United States from October 24 through October 26, 1988.

The questionnaire responses from Hitachi Maxell, Ltd. (Hitachi) were verified in Japan from October 6 through October 14, 1988, and in the United States on October 27 and October 28.

The questionnaire responses from Fuji Photo Film Company, Ltd. (Fuji) were verified in Japan from October 3 through October 7, and in the United States from October 19 through October 21.

On November 1, 1988, the Department postponed the date of the final determination to February 6, 1989 (53 FR 44933, November 7, 1988), at the request of one of the respondents, as provided for in section 735(a)(2)(A) of the Act.

On December 7, 1988, the Department held a public hearing. Interested parties also submitted comments for the record in their pre-hearing briefs of November 30, 1988, and in their post-hearing briefs of December 15, 1988.

Scope of Investigation

The United States has developed a system of tariff classification based on the international harmonized system of customs nomenclature. On January 1, 1989, the U.S. tariff schedules were fully converted to the *Harmonized Tariff Schedule* (HTS), as provided for in

section 1201 et seq. of the Omnibus Trade and Competitiveness Act of 1988. All merchandise entered, or withdrawn from warehouse, for consumption on or after this date is now classified solely according to the HTS item numbers. As with the TSUSA numbers, the HTS numbers are provided for convenience and Customs purposes. The written description remains dispositive as to the scope of the product coverage.

The products covered by this investigation are 3.5" microdisks and coated media thereof from Japan and are currently provided for under subheading 8523.20.0000 of the HTS. These products were previously provided for in item 724.4570 of the TSUSA.

A 3.5" microdisk is a tested or untested magnetically coated polyester disk with a steel hub encased in a hard plastic jacket. 3.5" microdisks are used to record and store encoded digital computer information for access by 3.5" floppy disk drive. They include single-sided, double-sided or high density formats.

Coated media is the flexible recording material used in the finished microdisk. Media consists of a polyester base film to which a coating of magnetically charged particles is bonded. It is intended for use specifically in a 3.5" floppy disk drive.

Respondents have argued that the merchandise included in the scope of investigation constitutes four separate "classes of kinds" of merchandise, namely 3.5" double density (DD) media, 3.5" high density (HD) media, 3.5" DD microdisks and 3.5" HD microdisks. In our preliminary determination, the Department found that these products constitute one "class or kind" of merchandise. After carefully reviewing this issue, we have found no reason to alter this decision. In determining that 3.5" coated media (both DD and HD) and 3.5" finished microdisks (both DD and HD) are of the same "class or kind" of merchandise, we have considered the following factors: 1) The physical characteristics of the merchandise; 2) the expectations of the ultimate purchasers; 3) the ultimate use of the merchandise; 4) the channels of trade in which the merchandise moves; and 5) the manner in which the merchandise is advertised and displayed. The Court of International Trade has endorsed these criteria in determining whether a product is within the "class or kind" of merchandise described in a prior antidumping finding (See *Diversified Products Corp. v. United States*, 572 F. Supp. 883 (Court of International Trade 1983)).

The media is the physical and technological heart of the 3.5" microdisk and its format and material properties define the functional characteristics of the microdisk. The media alone receives bits of data during the recording process from direct contact with the head of the drive. In addition, the 3.5" media is dedicated exclusively for use in the 3.5" microdisk. In contrast to the media, the packaging parts added during finishing are not electromagnetically active. They are merely the housing in which the electromagnetically active component is encased. Therefore, the Department does not find that the fact that 3.5" media have, in some respects, different physical characteristics from 3.5" finished disks is controlling in this case. The important fact here is that the 3.5" media is the memory of the microdisk—its sole electromagnetically active component. Therefore, with respect to the first criterion, we determine that the characteristics of the 3.5" media and microdisk are the same.

Because the media is the physical and technological heart of the microdisk and because 3.5" media is dedicated for use exclusively in the 3.5" microdisk, both the ultimate use and the expectations of the ultimate purchaser of the 3.5" media are the same as for the 3.5" finished microdisk, thus satisfying both the second and the third criteria cited above (See *Mitsubishi Electronic Corp. v. United States*, Slip op. 88-152 (Court of International Trade, October 31, 1988).

In terms of the fourth criterion, 3.5" media and 3.5" finished microdisks move in the same channels of trade. Although media must be further manufactured for use as finished microdisks, there is no other use for media in the floppy disk industry. Many U.S. importers purchase both 3.5" media and 3.5" finished disks for resale to the ultimate end-user.

As for the fifth criterion, because 3.5" media are used exclusively in the production of 3.5" finished microdisks, the only manner in which they are advertised and displayed is in the form of finished microdisks. There is no separate advertising of media.

Based upon this analysis, the Department concludes that 3.5" media and 3.5" microdisks are within the same "class or kind" of merchandise.

The Department also determines that 3.5" DD media and microdisks and 3.5" HD media and microdisks are within the same "class or kind" of merchandise. 3.5" DD media and microdisks and 3.5" HD media and microdisks are practically identical with respect to format size, design technology, production processes, packaging, uses and channels of trade. The fact that HD media and microdisks have more capacity and are higher performance items than DD media and microdisks represents a refinement—rather than a major shift—in microdisk media technology. There is no difference in physical appearance or characteristics between the DD and HD microdisk. The coating formulations of the DD and HD media and microdisks are similar and the same microdisk coating equipment is used for DD and HD microdisk production. Furthermore, DD disks can be used in HD drives and, because DD disks are much cheaper, HD drive owners continue to buy and use DD disks. Most dealers and distributors have expanded their portfolios to include HD as well as DD disks. Therefore, the first and third criteria cited above are met.

DD and HD microdisks are also within the same class or kind of merchandise in terms of channels of trade, advertising, and consumer expectations. The introduction of HD drives has created demand for both HD and DD disks, because DD disks can be used in both HD and DD drives. HD drive owners use DD microdisks for software and data storage purposes, for specific data or programming needs that can be filled readily by the less expensive DD disks and for data interchange with DD drive users. There is, therefore, a very basic inter-generational continuity that links the DD and the HD formats.

As a result of its analysis, the Department concludes that DD media and microdisks and HD media and microdisks are within the same "class or kind" of merchandise.

Petitioner requested in the petition that we include within the scope of this investigation coated media produced in Japan and finished into 3.5" microdisks in third countries prior to importation into the United States. In our notice of initiation, the Department tentatively agreed to include such imports. However, based on the arguments presented by a Canadian microdisk finisher, Kao-Didak, we preliminarily determined to include from the scope of this investigation third country imports of finished microdisks containing Japanese media.

We verified the submissions of Kao-Didak and confirmed the following facts which had served as the basis of our preliminary determination: (1) In the finishing process currently used by Kao-Didak, burnishing is extremely important to the technical performance levels of the finished microdisk because burnishing affects the surface characteristics and electromagnetic

properties of the media: (2) Kao-Didak's finishing process requires a substantial capital outlay and an extremely high degree of technical precision: (3) the facilities used by Kao-Didak to perform these operations represent an investment in state-of-the-art equipment and the employment of highly trained technical personnel: (4) the value of the Japanese media is only a small fraction of the value of the microdisk finished in the process used by Kao-Didak: and (5) the capital and technology intensive nature of Kao-Didak's finishing process indicates that media finishing of the kind performed by Kao-Didak is not the type of operation that can be set up and undertaken easily in any country. Given these verified facts, we have concluded that when Japanese media is finished in Canada by Kao-Didak in this manner, the finished microdisk becomes a product of Canada for country-of-origin purposes under the antidumping law, and thus is not within the scope of this investigation. (In this regard, we note that the determinations of "class or kind" and the country-of-origin involve two separate inquiries.)

The process for finishing media currently used by Kao-Didak is readily distinguishable from the relatively simple assembly process that was used by third country product assemblers in the *Erasable Programmable Read Only Memories (EPROMs) from Japan: Final Determination of Sales at Less than Fair Value*, 51 FR 39680, 39685 (October 30, 1986). In EPROMs, once the semiconductor dice left Japan, they possessed all the essential qualities to function in a commercially reliable manner, and none of the operations performed in Singapore affected the character or performance of the dice themselves. Product assemblers in Singapore merely encapsulated the Japanese-produced semiconductor dice in a relatively unsophisticated operation which required little capital investment in Singapore and which could have been accomplished relatively easily in any country. Therefore, we determined that this relatively superficial finishing of EPROM semiconductors did not transform these products into products of Singapore for country-of-origin purposes under the antidumping law.

In contrast to EPROMs, the media is first burnished at Kao-Didak prior to its integration with other components. Burnishing involves rotating the coated media through a burnishing tape to remove surface defects as well as dust and scratches. By achieving optimum surface smoothness, burnishing ensures that the microdisk will be a commercially reliable product. This processing of the media itself is not a simple assembly process which leaves the magnetic disk unchanged. Rather, it constitutes a significant manufacturing step and is critical to our determination that the country-of-origin is Canada.

Following our preliminary determination, petitioner identified certain microdisk finishers in other third countries which allegedly employ a process substantially more labor-intensive than the type of operation employed by Kao-Didak. However, no facts have yet been presented or verified that would enable us to substantiate the allegations regarding the operations in other third countries at this time. Should this investigation lead to the issuance of an antidumping duty order, and an interested party brings to our attention information on imports of 3.5" microdisks incorporating Japanese media from a finisher other than Kao-Didak, we will examine such imports to determine whether the process by which they were finished provides a basis for their inclusion in the scope of the order.

Standing

The respondents have argued that the petitioner, Verbatim Corporation (Verbatim), has no standing to file a petition against 3.5" microdisks because (1) it has not established that it has the support of the relevant industry, defined as a majority of the producers of the like product, 19 U.S.C. 1677(4)(A); and (2) Verbatim does not qualify as a manufacturer or producer of the "like product" under subparagraphs (C), (D) or (E) of 19 U.S.C. 1677(9).

With regard to the question of whether Verbatim has the support of the relevant industry, the statutory provision governing the standing of parties to bring petitions requires the commencement of an investigation "whenever an intereted party * * * files a petition * * * on behalf of an industry" (section 732(b)(1) of the Act). As we have stated in prior cases (see *e.g., Final Determination of Sales at Less than Fair Value: Certain Electrical Conductor Aluminum Redraw Rod from Venezuela*, 53 FR 24755 (June 30, 1988)), the Department relies upon the petitioner's representation that it has filed "on behalf of" the domestic industry until it is affirmatively shown that a majority of the domestic industry opposes the petition. The Department bases this position on the fact that neither the Act nor its legislative history restricts access to the unfair trade laws by requiring that parties petitioning for relief under these laws establish affirmatively that a majority of the members of the relevant domestic industry supports the petition. The only requirement is that the party filing the petition act as the representative of the domestic industry.

In this case, no member of the domestic industry has objected to the petition. Only respondents have raised the issue. Absent evidence of opposition to the petition by members of the domestic industry, the Department has no basis to conclude that a majority of the industry opposed the petition. Therefore, the Department finds that Verbatim has filed on behalf of the domestic industry.

We also find that Verbatim is an interested party with respect to 3.5" microdisks and coated media thereof, because Verbatim produces 3.5" DD media, which is within the same class or kind of merchandise as 3.5" DD microdisks and 3.5" HD media and microdisks.

Although the parties submitted various arguments on the standing issue, we have not received sufficient evidence to reach a decision contrary to that in our preliminary determination. Furthermore, we placed great importance on the ITC's finding of one like product and one industry when formulating our preliminary determination. Accordingly, should the ITC find in its final determination more than one like product, we will consider the issue of whether Verbatim has standing with respect to each of the ITC's like product categories. Such an analysis would take into account Verbatim's activities as a manufacturer, producer or wholesaler for each of those like products. If we determine at that time that Verbatim lacks standing for any of the like products, we will rescind the initiation of this investigation as it pertains to those products.

In conclusion, the Department reaffirms its preliminary determination in this case that the petitioner has standing to bring this petition. Our determination is based on the fact that (1) Verbatim produces a "like" product: (2) Verbatim filed its petition on behalf of the microdisk industry: (3) no member of the domestic industry has objected to the petition.

Period of Investigation

The period of investigation for 3.5" microdisks and coated media thereof from Japan was September 1, 1987 through February 29, 1988.

Fair Value Comparisons

To determine whether sales of 3.5" microdisks and coated media thereof from Japan in the United States were made at less than fair value, we compared the United States price (using

both purchase price and exporter's sales price) with the foreign market value. Virtually all of the respondents' sales to the United States were used for such or similar comparisons.

United States Price

Purchase Price

As provided in section 772(b) of the Act, we used the purchase price to represent the United States price for sales of 3.5" microdisks and coated media thereof where sales were made to an unrelated purchaser prior to importation of the product into the United States. We calculated purchase price based on packed F.O.B. prices. We made deductions, where appropriate, for foreign inland freight and insurance and foreign brokerage and handling.

Exporter's Sales Price

For all exporter's sales price sales, the subject merchandise was imported into the United States by a related importer before being sold to the first unrelated party.

To calculate exporter's sales price in accordance with section 772(c) of the Act, we used the packed, delivered, duty paid prices of 3.5" microdisks and coated media thereof to unrelated purchasers in the United States. We made deductions, where appropriate, for foreign inland freight and insurance, foreign brokerage and handling charges, ocean/air freight, marine/air insurance, U.S. duty, U.S. brokerage and handling charges, U.S. inland freight insurance, discounts and allowances, rebates and price protection.

We made deductions under § 353.10(e)(2) of our regulations for direct and indirect selling expenses incurred by or for the account of the exporter in selling 3.5" microdisks and coated media thereof in the United States. Direct selling expenses were deducted for U.S. credit, warranties, advertising, sales promotion and repacking for shipment to the customer. For Fuji and Sony, indirect selling expenses were comprised of indirect selling expenses incurred outside the United States, U.S. indirect selling expenses of the related reseller in the United States related commissions and inventory carrying costs. For Hitachi, indirect selling expenses were comprised of indirect selling expenses incurred outside the United States, U.S. indirect selling expenses of the related reseller in the United States, and inventory carrying costs. Pursuant to § 353.10(e)(1) of our regulations, we also deducted commissions paid to unrelated parties for all three respondents. The total of the indirect expenses and commissions formed the cap for the allowable home market indirect selling expenses offset under § 353.15(c) of our regulations.

Foreign Market Value

In accordance with section 773(a) of the Act, we calculated foreign market value based on the packed, delivered or ex-works prices to related and unrelated customers in the home market. In our preliminary determination, we included sales to related customers, pursuant to 19 CFR 353.22(b), since we determined at that time that the prices paid by those customers were comparable to the prices paid by unrelated customers. However, we said at the time of the preliminary determination that "if we were unable to ascertain at verification that the prices to related and unrelated customers in the home market are comparable, we will use only the sales to unrelated customers in calculating foreign market value in our final determination." For Sony and Fuji, we verified that the net prices paid by related customers for identical microdisk items were comparable to the prices paid by unrelated customers; therefore, for purposes of the final determination, we have included Sony and Fuji's sales to related customers in calculating the foreign market value. For Hitachi, we verified that the net prices paid by related customers are not at "arms length"; therefore, we have not included Hitachi's sales to related customers in calculating the foreign market value in our final determination.

We made deductions from the home market price, where appropriate, for inland freight and insurance, handling, cash discounts, rebates, ship and debit and price protection. We deducted the home market packing cost from the foreign market value and added U.S. packing costs.

Where appropriate, we made further adjustments to the home market price to account for differences in the merchandise due to differences in consumer packaging, in accordance with section 773(a)(4)(B) of the Act.

For comparisons involving purchase price sales, we made adjustments to the home market price, where appropriate, for differences in credit expenses, advertising and promotion, pursuant to 19 CFR 353.15.

For comparisons involving exporter's sales price transactions, we made further deductions from the home market price, where appropriate, for credit expenses, advertising and promotion. We deducted indirect selling expenses incurred on home market sales up to the amount of commissions and indirect selling expenses incurred on sales in the U.S. market, in accordance with § 353.15(c) of our regulations.

Currency Conversion

For comparisons involving purchase price transactions, we used the official exchange rates in effect on the dates of sale, in accordance with § 353.56(a)(1) of the Commerce Regulations. For comparisons involving exporter's sales price transactions, we used the official exchange rates in effect on the dates of the sale, in accordance with section 773(a)(1) of the Act, as amended by section 615 of the Trade and Tariff Act of 1984. All currency conversions were made at the rates certified by the Federal Bank of New York.

Verification

As provided in section 776(b) of the Act, we verified all information used in reaching the final determination in this investigation. We used standard verification procedures, including examination of relevant accounting records and original source documents provided by the respondents.

Interested Party Comments

General Comments

Comment 1: Respondents argue that, since Verbatim Corporation did not produce microdisks in the United States at the time the petition was filed, it did not have standing as a U.S. producer of the "like product." Furthermore, respondents argue that Verbatim has not established that it has the support of the relevant industry.

Petitioner argues that it has standing to file a petition that includes microdisks because it is a domestic producer of the "like product" in this investigation.

DOC Position: We have determined that the petitioner has the requisite standing, as discussed in the "Standing" section above.

Comment 2: Petitioner argues that there is one class or kind of merchandise in this investigation, encompassing different density formats of 3.5" microdisks such as HD and DD.

Respondents argue that the merchandise included in the scope of investigation as described in the initiation and preliminary determination notices constitutes four separate classes or kinds of merchandise, DD media, DD microdisks, HD media, and HD microdisks.

DOC Position: We have determined the 3.5" coasted DD and HD media and DD and HD Microdisks constitute the same class or kind of merchandise, as discussed in the "Scope of Investigation" section of this notice.

Comment 3: Petitioner asserts that this investigation must be open-ended with respct to future generations of 3.5" microdisks. Petitioner states that in determining whether merchandise developed after the issuance of an antidumping order is included within that order, the Department's well established practice is to perform a "class or kind" analysis. Thus, petitioner argues that any scope determination with respect to a future generation of 3.5 microdisk must await the availability of the commercial and technical data necessary to such an analysis. Verbatim anticipates the development and commercialization of future generations of 3.5" disks featuring greater memory capacity than 3.5" formats now on the market. Verbatim further anticipates that these new formats and media will likely fall within the product scope of the investigation, as defined by the Department in its Notice of Initiation product descriptions, and may well belong to the same class or kind of merchandise as the imports subject to investigation. Therefore, it would be premature for the Department to exclude future generation microdisk products from the scope of the investigation before facts about their development, distribution, and use are available.

Respondents agree with petitioner that future generations of microdisk products should be left open. However, they assert that the scope of investigation language as written in the initiation and preliminary determination is too broad and would automatically include future generations of microdisks. They argue, therefore, that the Department would narrow the scope language.

DOC Position: We agree that it would be premature for the Department to exclude future generations of microdisks from the scope of this investigation. At this time, there exists no information about the development, distribution and use of future generation microdisk products on which the Department could base such a determination. As for the issue of the scope of investigation language, we determine that the description as written in the initiation and preliminary determination best describes the present product and therefore needs no revision.

Comment 4: Respondents claimed that since petitioner did not allege and the Department did not investigate less than fair value sales of media, media should be excluded from the scope of the investigation.

Petitioner argues that it framed the petition to include both finished microdisks and coated media thereof. Petitioner also states that it could not locate meaningful sales data pertaining to media and that the antidumping laws require a petitioner to include in its petition only such information as is "reasonably available" to it. Moreover, petitioner claims that the Court of International Trade recently held that where unfinished and finished goods belong to the same class or kind, the petitioner need not include in the petition "inclusive information covering all the categories and subcategories for all those goods included" in the class or kind subject to investigation. Because media and finished microdisks belong to the same class or kind, Verbatim is not required to provide data on media sales.

DOC Position: We agree with petitioner. Because the petition includes both finished microdisks and coated media thereof and because we determine that media and finished microdisks are the same class or kind of merchandise, it is not necessary for the petitioner to allege less than fair value sales on all the categories and subcategories of the same class or kind of merchandise (See *Mitsubishi Electric Corp. v. United States*, op. cit.).

Comment 5: Petitioner argues that exclusion of Japanese media finished in third countries from the scope of the investigation would be improper and would result in widespread circumvention of any order issued in this case. Petitioner also argues that any determination that finishing constitutes substantial transformation must be made on a case-by-case basis because the technological sophistication involved and value-added in the country of finishing can vary appreciably. The Department should then include, on either a definitive or presumptive basis, imports of media from Japan finished in third countries in the scope of this investigation.

Kao-Didak, Ltd., and respondents argue that the Department should continue to exclude Japanese media finished in third countries from the scope of the investigation. Kao-Didak argues that, at least, it has to be included because its manufacturing operations are extensive and technically sophisticated and account for the bulk of the value of the finished microdisks. Kao-Didak further argues that media is "remanufactured" in Canada through a "burnishing" process that is itself a critical phase of production. Accordingly, Kao-Didak's 3.5" microdisks are properly labelled "Made in Canada."

Doc Position: We have verified Kao-Didak's submission, and we agree that Kao-Didak should be excluded from the scope of investigation. As for finishers in other third countries, no facts have been presented or verified that would enable us to substantiate the allegations regarding the operations in other third countries at this time. See the "Scope of Investigation" section of this notice.

Sony Comments

Comment 1: Sony believes the Department should treat home market formatting as a direct expense or, alternatively, as a physical difference in merchandise. Sony states that formatting is done to specific disks for specific customers. The cost of formatting was deducted from the selling price of each of these disks and this cost was verified.

Petitioner claims that the cost of formatting is a manufacturing cost and is properly treated as an indirect selling expense. Or, if Sony claims that formatted disks are only "similar" to nonformatted disks, then it can claim an adjustment for differences in physical characteristics.

DOC Position: We agree that formatting should be treated as a difference in merchandise adjustment. However, because there are sufficient sales of identical merchandise in the home market to compare to the U.S. sales, we have dropped all formatted sales in the home market from our calculation of foreign market value.

Comment 2: Sony claims that the Department mistakenly treated home market technical service expenses as an indirect selling expense in its preliminary determination. Sony believes that this expense should be treated as a direct selling expense.

DOC Position: This expense was denied in the home market because it applies to sales prior to the period of investigation.

Comment 3: Sony believes that any deductions for warranty costs on U.S. sales should also be made on the home market side. Sony states that it gives the same warranty on U.S. and home market microdisk sales and since the microdisks were produced at the same facility they should experience the same failure rate. Sony states that, since its warranty covers the microdisk for a lifetime, there are obviously home market warranty expenses incurred. However, these expenses are minimal and do not justify elaborate recordkeeping. Sony America's (SONAM) U.S. experience is a reasonable proxy measure of the home market expense according to Sony.

Petitioner claims, however, that no data was obtained at verification to support Sony's claim for home market warranty expenses. According to petitioner, the information available

indicates that there were no home market warranty expenses; therefore, the Department cannot make any assumptions about Sony's home market warranty expenses based on Sony's experience in the U.S. market. Petitioner argues that the Department should continue to deny this adjustment in the final determination.

DOC Position: We agree with petitioner and have denied this expense in the home market, because Sony could not give us any data at verification to support its claim for home market warranty.

Comment 4: Sony says that in the final determination the Department should treat repackaging performed in the United States as either a packing expense or a difference in merchandise adjustment. U.S.-side packing should be treated as an adjustment to foreign market value, not as an adjustment to U.S. price. Sony claims that repackaging performed in the United States is simply another part of ESP packing.

DOC Position: We disagree. Repackaging is a direct selling expense incurred in the United States on United States sales; therefore, we have deducted the expense directly from the U.S. price.

Comment 5: Petitioner claims that it is the established practice of the Department to allow adjustments for rebates only with respect to sales made during the period of investigation. According to petitioner, the verification report confirms that the microfloppy disk (MFD) rebate paid by Sony to distributors was based on distributor resales of the product previously sold by Sony to the distributors. Petitioner believes that this rebate should be allocated to those prior sales made by Sony to which the rebate applies which occurred during the period of investigation. Petitioner argues that absent the information necessary to make this adjustment, the Department should disallow the MFD rebate to distributors.

According to Sony, its rebate programs took two basic forms, payments to purchasers who purchased directly from Sony and payments to distributors based on the distributor's resales. For the first group, Sony could directly link the payments with specific Sony sales. For the second group, Sony was unable to tie distributor resales back to Sony sales to those distributors on a one-for-one basis.

DOC Position: We have allowed the rebate program based on payments that could be linked with specific Sony sales. However, we have denied the rebate program based on distributor resales. This program ended on September 20, 1987, and was therefore only in effect for approximately three weeks during the period of investigation. Thus, distributor resales that took place during this three-week period were likely based on sales of the subject merchandise from Sony to its distributors prior to the period of investigation.

Comment 6: With respect to direct customer price protection, Sony credits customers with a rebate which is based on the customer's inventory as of a certain date. The amount of the credit is determined by reductions in Sony's price made after the customer purchases the product at a higher price and places the product in inventory. Petitioner argues that this rebate cannot be allowed as an adjustment to the price of home market sales during the period of investigation if the payment by Sony is based on sales made prior to the period of investigation.

Sony states that it took the most conservative approach and reported price protection paid during the period of investigation as opposed to expenses accrued during the period. However, Sony claims that this should be changed since the verifier apparently perferred using expenses accrued during the period of investigation.

DOC Position: We agree with Sony and have used the verified accrued expenses in our calculation, because the accrued expenses are those that are directly related to sales made during the period of investigation.

Comment 7: Petitioner believes that ocean freight expenses are considerably understated. Petitioner urges the Department to review Sony's cubic foot per microdisk figure as it claims it differs substantially from Verbatim's actual experience.

Sony claims that this expense was thoroughly verified.

DOC Position: We have verified Sony's ocean freight expenses and have used these figures in our calculation.

Comment 8: Petitioner asserts that the Department should not limit the calculation of Market Development Funds (MDFs) in the U.S. market only to payments made, but should also consider commitments of MDF made to customers. Petitioner believes that these amounts should be included in the adjustment to U.S. price.

Sony argues that calculating this expense on payments plus commitments would constitute double counting. SONAM's revised figures are based on payments from 9/1/87–8/31/88 and are divided by sales made during the same period.

DOC Position: We verified Sony's MDF payments made to customers during the period of investigation and have used these figures in our calculation.

Fuji Comments

Comment 1: Petitioner argues that Fuji incorrectly reported the shipping dates on purchase price sales as the date the product cleared Japanese Customs, rather than the date the product was shipped from the Chofu plant. The proper shipping date should be used and the time between shipment from Chofu and the clearance of the product through Japanese Customs should be added to the credit period of U.S. purchase price sales.

Fuji argues that the microdisks are sent from its Chofu plant to its Yokohama facilities for assembly or export packing and are considered its inventory assets. Only at the time the merchandise is shipped to its purchase price customers from its Yokohama facility does Fuji commence credit expenses as a measure of its financing of accounts receivables. Fuji states that it has corrected the date of shipment to the time the merchandise is shipped from its Yokohama factory rather than the time the merchandise cleared Japanese Customs.

DOC Position: We agree with the respondents that credit expenses are incurred from the time the merchandise is shipped to its purchase price customers from its Yokohama facility and not from the time it leaves the Chofu plant, since part of the finishing process, *i.e.*, assembly and packing, is done at Yolohama.

Comment 2: Petitioner asserts that Fuji's reported payment dates on home market sales were often not the actual payment dates. Petitioner argues that the actual payment dates should be used, and appropriate adjustments from payment terms and credit expense should be made.

Fuji states that most dates of payment were correct, some were not. Some showed longer dates of payment, some shorter. Others indicated partial payment on many different dates. Fuji claims that, at verification, it provided data on the actual credit expenses incurred on sales in the home market.

DOC Position: The corrected information on credit expense was verified, and we have used this information in our calculation.

Hitachi Comments

Comment 1: Petitioner states that with respect to Hitachi, the Department created separate subgroupings of microdisk sales in the home and U.S. markets based solely on the presence or absence of a printed shutter or label.

DOC Position: The Department disagrees. Hitachi's methodology for matching its home market products with its identical U.S. products was correct. Comparisons were made based not only on the presence or absence of a printed shutter or label but were based on the major relevant characteristics of 3.5" microdisks. Furthermore, product comparisons for home market and U.S. products conducted at verification verified as identical.

Comment 2: Petitioner states that, for Hitachi's purchase price sales, actual payment dates must be substituted for reported payment dates.

DOC Position: We disagree. Hitachi's purchase price sales were estimated as net 61 days from shipment date. At verification, the Department verified that 61 days was a reasonable estimate as some dates of payment were substantially less than 61 days while other dates of payment were more than 61 days. Furthermore, we verified that it was not possible to correlate particular payments with particular sales as Hitachi's payments from its customers were made on the outstanding balances rather than on each individual sale.

Comment 3: Petitioner states because Hitachi has requested that the Department disregard certain related sales in the home market, all relevant home market sales data have not been provided and should be provided so that a proper review and comment can be made.

DOC Position: We disagree. In its May 27, 1988, response, Hitachi initially reported a supplemental list of home market sales to unrelated purchasers made by its two selling subsidiaries in Japan. These supplemental sales have been used in our calculations.

Comment 4: Petitioner states that the verification of Hitachi's time in inventory of product shipped from the Tsukuba factory to Hitachi noted an understatement. Petitioner claims this understatement should be corrected and inventory carrying costs should be recalculated.

DOC Position: DOD disagrees. Pursuant to 19 CFR 353.23(a), the understatement of inventory carrying costs has been determined to be insignificant in relation to the price or value of the affected transaction and may be disregarded.

Continuation of Suspension of Liquidation

We are directing the U.S. Customs Service to continue to suspend liquidation of all entries of 3.4" microdisks and coated media thereof from Japan that are entered or withdrawn from warehouse, for consumption, on or after September 29, 1988, the date of publication of the preliminary determination in the **Federal Register**. The Customs Service shall continue to require a cash deposit or posting of bond equal to the estimated amounts by which the foreign market value of the merchandise subject to this investigation exceeds the United States price, as shown below. This suspension of liquidation will remain in effect until further notice.

The weighted-average margins are as follows:

Manufacturer/producer/exporter	Weighted-average margin percentage
Sony Corporation	51.00
Hitachi Maxell, Ltd	27.73
Fuji Photo Film Company Ltd	50.52
All others	42.95

ITC Notification

In accordance with section 735(d) of the Act, we have notified the ITC of our determination. If the ITC determines that material injury, or threat of material injury, does not exist, this proceeding will be terminated and all securities posted as a result of suspension of liquidation will be refunded. However, if the ITC determines that such an injury does exist, the Department will issue an antidumping duty order directing Customs officers to assess an antidumping duty on 3.5" microdisks and coated media thereof from Japan as defined in the "Scope of Investigation" section of this notice, entered or withdrawn from warehouse for consumption after the suspension of liquidation, equal to the amount by which the foreign market value exceeds the U.S. price.

This determination is published pursuant to section 735(d) of the Act (19 U.S.C. 1673d(d)).

February 6, 1989.

Jan W. Mares,

Assistant Secretary for Import Administration.

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BILLING CODE 3510-DS-M

International Trade Administration

[A-588-802]

Postponement of Final Antidumping Duty Determination and Postponement of Antidumping Duty Public Hearing; 3.5" Microdisks and Coated Media Thereof from Japan

AGENCY: International Trade Administration, Import Administration, Commerce.

ACTION: Notice.

SUMMARY: This notice informs the public that we have received a request from respondent Fuji Photo Film Company, Ltd. to postpone the final determination as permitted by section 735(a)(2)(A) of the Tariff Act of 1930, as amended (the Act). Based on this request, we are postponing our final determination as to whether sales of 3.5" microdisks and coated media thereof from Japan have occurred at less than fair value until not later than February 6, 1989. We are also postponing our public hearing until December 7, 1988.

EFFECTIVE DATE: November 7, 1988.

FOR FURTHER INFORMATION CONTACT: Loc Nguyen or Charles Wilson, Office of Investigations, Import Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230, (202) 377-3530 or (202) 377-5288.

SUPPLEMENTARY INFORMATION: On September 29, 1988, we published a preliminary determination of sales at less than fair value of this merchandise (53 FR 38045).

On October 31, Fuji Photo Film Company, Ltd. requested a 60 day postponement of the date of the final determination. If exporters who account for a significant proportion of exports of the subject merchandise under investigation request a postponement of the final determination following a preliminary affirmative determination, we are required, absent compelling reasons to the contrary, to grant the request. Accordingly, we are postponing the date of the final determination until not later than February 6, 1989.

Public Comment

In conjunction with this postponement, a public hearing to afford interested parties an opportunity to comment on the preliminary determination, in accordance with 19 CFR 353.47, will now be held, if requested, at 10:00 a.m. on December 7, 1988, at the U.S. Department of Commerce, Room 3708, 14th Street and Constitution Avenue, NW., Washington, DC 20230.

Individuals who wish to participate in the hearing must submit a request to the Assistant Secretary for Import Administration, Room B-099, at the above address within ten days of the publication of this notice. Requests should contain: (1) The party's name, address, and telephone number; (2) the number of participants; (3) the reasons for attending; and (4) a list of the issues to be discussed.

In addition, pre-hearing briefs in at least ten copies, both public and non-public versions, must be submitted to the Assistant Secretary by November 30, 1988. Oral presentations will be limited to issues raised in the briefs. All written views should be filed in accordance with 19 CFR 353.46, at the above address, in at least ten copies, not less than 30 days before the date of the final determination, or, if a hearing is held, within seven days after the hearing transcript is available.

The U.S. International Trade Commission is being advised of this postponement, in accordance with section 735(d) of the Act. This notice is published pursuant to section 735(d) of the Act.

Dated: November 1, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-25704 Filed 11-4-88; 8:45 am]

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Federal Register / Vol. 53, No. 189 / Thursday, September 29, 1988 / Notices 38015

International Trade Administration

[A-588-802]

Preliminary Determination of Sales at Less Than Fair Value; 3.5" Microdisks and Coated Media Thereof from Japan

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: We preliminarily determine that 3.5" microdisks and coated media thereof from Japan are being, or are likely to be, sold in the United States at less than fair value. We have notified the U.S. International Trade Commission (ITC) of our determination and have directed the U.S. Customs Service to suspend liquidation of all entries of 3.5" microdisks and coated media thereof from Japan as described in the "Suspension of Liquidation" section of this notice. If this investigation proceeds normally, we will make a final determination by December 7, 1988.

EFFECTIVE DATE: September 29, 1988.

FOR FURTHER INFORMATION CONTACT: Loc Nguyen or Charles Wilson, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street

and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 377-3530 or (202) 377-5288.

SUPPLEMENTARY INFORMATION:

Preliminary Determination

We preliminarily determine that 3.5" microdisks and coated media thereof from Japan are being, or are likely to be, sold in the United States at less than fair value, as provided in section 733 of the Tariff Act of 1930, as amended (19 U.S.C. 1673b) (the Act). The estimated weighted-average margins are shown in the "Suspension of Liquidation" section of this notice.

Case History

Since our notice of initiation (53 FR 9464, March 23, 1988), the following events have occurred. On April 5, 1988, the ITC determined that there is a reasonable indication that imports of 3.5" microdisks and coated media thereof from Japan are materially injuring a U.S. industry (USITC Pub. No. 2076, April 1988).

On April 13, 1988, questionnaries were presented to Sony Corporation (Sony), Hitachi Maxell, Ltd. (Hitachi), and Fuji Photo Film Company, Ltd. (Fuji), which account for a substantial portion of Japanese exports to the United States during the period of investigation.

We received replies to the questionnaire from Sony on April 28 and May 31, 1988. Replies were received from Fuji and Hitachi on April 27 and May 27, 1988. In addition, we received a voluntary response from Kasei Verbatim Corporation on April 27, 1988.

We sent deficiency letters to the four respondents during the period from May 6 to September 16, 1988. On May 24, 1988, Kasei Verbatim Corporation withdrew from the investigation. Responses to all deficiency letters sent to Hitachi and Fuji were received by the Department prior to this determination.

With regard to Sony, we sent four deficiency letters during the above referenced period. We also made numerous phone calls and met twice with Sony's counsel in an effort to obtain additional information and our preliminary determination. Although we received responses to the first three deficiency letters, we found that they did not adequately address our concerns. We did not receive the response to our last deficiency letter until September 23, 1988, the date of our preliminary determination.

On June 30, 1988, petitioner requested that the preliminary determination be postponed. On July 14, 1988 in accordance with section 733(c)(1)(A) of the Act, we postponed the preliminary determination to September 23, 1988 (53 FR 27185, July 19, 1988).

Scope of Investigation

The United States has developed a system of tariff classification based on the international harmonized system of customs nomenclature. On January 1, 1989, the U.S. tariff schedules will be fully converted to the *Harmonized Tariff Schedule* (HTS) and all merchandise entered or withdrawn from warehouse for consumption on or after this date will be classified solely according to the appropriate HTS item number(s). Until that time, however, the Department will be providing both the appropriate *Tariff Schedules of the United States Annotated* (TSUSA) item number(s) and the appropriate HTS item number(s) with its product descriptions. As with the TSUSA, the HTS item numbers are provided for convenience and customs purposes. The written description remains dispositive as to the scope of the product coverage.

We are requesting petitioners to include the appropriate HTS item number(s) as well as the TSUSA item number(s) in all petitions filed with the Department through the end of this year. A reference copy of the HTS schedule is available for consultation in the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs officers have reference copies and petitioners may contact the Import Specialist at their local customs office to consult the schedule.

The products covered in this investigation are 3.5" microdisks and coated media thereof from Japan currently provided for under TSUSA item number 724.4570 and currently classifiable under HTS item number 8523.20.0000.

A 3.5" microdisk is a tested or untested magnetically coated polyester disk with a steel hub encased in a hard plastic jacket. 3.5" microdisks are used to record and store encoded digital computer information for access by a 3.5" floppy disk drive. They include single-sided, double-sided or high density formats.

Coated media is the flexible recording material used in the finished microdisk. Media consists of a polyester base film to which a coating of magnetically charged particles is bonded. It is intended for use specifically in a 3.5" floppy disk drive.

In our notice of initiation, the Department tentatively included within the scope of this investigation coated media produced in Japan and finished into 3.5" microdisks in third countries prior to importation into the United States from those countries. Based upon the information developed during the course of this proceeding, however, we have determined to exclude from the scope of this investigation such third country imports of finished microdisks incorporating Japanese media.

The process of further manufacturing the unfinished media (cookies) imported from Japan is very complex. Burnishing, one of the finishing processes, is extremely important to the technical performance levels of the finished microdisk because burnishing affects the surface characteristics and electromagnetic properties of the media. The technical sophistication needed to overcome the difficulties of perfecting the burnishing process has been a significant barrier to the establishment of more microdisk plants.

Similarly, other finishing processes performed on the unfinished media—namely clean room subassembly of the shell and media, final assembly of the shutter and spring, and certification—require a substantial capital outlay and an extremely high degree of technical precision. The facilities needed to perform these operations represent an investment in state-of-the-art equipment and the employment of highly trained technical personnel. The capital- and technology-intensive nature of these processes reveals that media finishing is not the type of operation that can be set up and undertaken relatively easily in any country.

Thus, the finishing of media is readily distinguishable from the relatively simple assembly process that was evident in the *Erasable Programmable Read Only Memories from Japan* ("EPROM") determination. In that investigation, we did not regard encapsulation as a sophisticated operation; instead, it was determined that this assembly process was a stage of EPROM production which could be accomplished relatively easily in any country.

In short, due to the sophisticated technology, significant capital investment and substantial value added by a microdisk finisher, we have determined that imports of finished microdisks in the United States should be deemed products of the country in which the finishing of media was performed, not the country in which the unfinished media was produced. Based on the information developed, we do not find in this instance that excluding such third country imports of finished microdisks containing Japanese media would lead to substantial circumvention of any order.

Period of Investigation

The period of investigation is September 1, 1987, through February 29, 1988.

Fair Value Comparisons

To determine whether sales of 3.5" microdisks and coated media thereof from Japan to the United States were made at less than fair value, we compared the United States price (using both purchase price and exporter's sales price) to the foreign market value.

Although Sony did not respond to our last deficiency letter until the day of the determination, we have used the information contained in earlier submissions as the best information available according to section 776(c) of the Act. If we are unable to verify the revised data, we will continue to use best information available in our final determination. However, best information available for purposes of the final determination may be different from the information used for this preliminary determination.

United States Price

Purchase Price

As provided in section 772(b) of the Act, we used the purchase price to represent the United States price for sales of 3.5" microdisks and coated media thereof where sales were made to an unrelated purchaser prior to importation of the product into the United States. We calculated purchase price based on packed F.O.B. prices. We made deductions, where appropriate, for foreign inland freight and insurance and foreign brokerage and handling.

Exporter's Sales Price

For all exporter's sales price sales, the subject merchandise was imported into the United States by a related importer before being sold to the first unrelated party.

To calculate exporter's sales price in accordance with section 772(c) of the Act, we used the packed, delivered, duty paid prices of 3.5" microdisks and coated media thereof to unrelated purchasers in the United States. We made deductions, where appropriate, for foreign inland freight, foreign inland insurance, foreign brokerage, ocean freight, air freight, marine insurance, U.S. duty, U.S. brokerage and handling, U.S. inland freight, U.S. inland insurance, discounts and allowances, rebates and price protection.

We made deductions under § 353.10(e)(2) of our regulations for direct and indirect selling expenses incurred by or for the account of the exporter in selling 3.5" microdisks and coated media thereof in the United States. Direct selling expenses were deducted for U.S. credit, warranties, advertising, sales promotion and repacking for shipment to the customer. For Fuji and Sony, indirect selling expenses were comprised of indirect selling expenses incurred outside the United States. U.S. indirect selling expenses incurred outside the United States, U.S. indirect selling expenses of the related reseller in the United States, related commissions and inventory carrying costs. For Hitachi, indirect selling expenses were comprised of indirect selling expenses of the related reseller in the United States and inventory carrying costs. Pursuant to § 353.10(e)(1) of our regulations, we also deducted commissions paid to unrelated parties for all three respondents. The total of the indirect expenses and commissions formed the cap for the allowable home market indirect selling expenses offset under § 353.15(c) of our regulations.

Foreign Market Value

In accordance with section 773(a) of the Act, we calculated foreign market value based on the packed, delivered or ex-works prices to related and unrelated customers in the home market. For purposes of this preliminary determination, we included sales to related customers, pursuant to 19 CFR 353.22(b), since we preliminarily determine that the prices paid by those customers were comparable to the prices paid by unrelated customers. If we are unable to ascertain at verification that the prices to related and unrelated customers in the home market are comparable, we will use only the sales to unrelated customers in calculating the foreign market value in our final determination. We made deductions from the home market price, where appropriate, for inland freight and insurance, handling, cash discounts, rebates, and price protection. We deducted the home market packing cost from the foreign market value and added all U.S. packing costs.

Where appropriate, we made further adjustments to the home market price to account for differences in the merchandise due to differences in consumer packaging, in accordance with section 773(a)(4)(B) of the Act.

For comparisons involving purchase price sales, we made adjustments to the home market price, where appropriate, for differences in credit expenses, advertising and promotion, pursuant to 19 CFR 353.15.

For comparisons involving exporter's sales price transactions, we made further deductions from the home market price, where appropriate, for credit expenses, advertising and promotion. Indirect selling expenses incurred on home market sales up to the amount of commissions and indirect selling expenses incurred on sales in the U.S. market were deducted for the three respondents, in accordance with § 353.15(c) of our regulations.

Currency Conversion

For comparisons involving purchase price transactions, we made currency conversions in accordance with 19 CFR 353.56(a)(1). For comparisons involving exporter's sales price transactions, we used the official exchange rates in effect on the dates of sale, in accordance with section 773 (a)(1) of the Act, as amended by section 615 of the Trade and Tariff Act of 1984. All currency conversions were made at the rates certified by the Federal Reserve Bank.

Verification

We will verify the information used in making our final determination in accordance with section 776(b) of the Act.

Suspension of Liquidation

In accordance with section 733(d) of the Act, we are directing the U.S. Customs Service to suspend liquidation of all entries of 3.5" microdisks and coated media thereof from Japan that are entered or withdrawn from warehouse for consumption on or after the date of publication of this notice in the Federal Register. The U.S. Customs service shall require a cash deposit or posting of a bond equal to the estimated amounts by which the foreign market value of 3.5" microdisks and coated media thereof from Japan exceeds the United States price as shown below. This suspension of liquidation will remain in effect until further notice. The weighted-average margins are as follows:

Manufacturer/producer/exporter	Weighted-average margin percentage
Sony Corporation	44.84
Hitachi Maxell, Ltd.	26.39
Fuji Photo Film Company, Ltd.	54.32
All Others	39.66

This suspension of liquidation covers imports of 3.5" microdisks and coated media thereof meeting the definition outlined in the "Scope of Investigation" section of this notice.

ITC Notification

In accordance with section 733(f) of the Act, we have notified the ITC of our determination. In addition, we are making available to the ITC all nonprivileged and nonproprietary information relating to this investigation. We will allow the ITC access to all privileged and business proprietary information in our files, provided the ITC confirms that it will not disclose such information, either publicly or under administrative protective order, without the written consent of the Assistant Secretary for Import Administration.

The ITC will determine whether these imports are materially injuring, or threaten material injury to, a U.S. industry before the later of 120 days after the date of this determination, or 45 days after the final determination, if affirmative.

Public Comment

In accordance with 19 CFR 353.47, if requested, we will hold a public hearing to afford interested parties an opportunity to comment on this preliminary determination at 10:30 a.m. on November 7, 1988, at the U.S. Department of Commerce, Room 3708, 14th Street and Constitution Avenue NW., Washington, DC 20230. Individuals who wish to participate in the hearing must submit a request to the Assistant Secretary for Import Administration, Room B-099, at the above address within ten days of the publication of this notice. Requests should contain: (1) The party's name, address and telephone number; (2) the number of participants; (3) the reasons for attending; and (4) a list of the issues to be discussed.

In addition, prehearing briefs in at least ten copies must be submitted to the Assistant Secretary by October 31, 1988. Oral presentations will be limited to issues raised in the briefs. All written views should be filed in accordance with 19 CFR 353.46, at the above address, in at least ten copies, not less than 30 days before the date of the final determination, or, if a hearing is held, within seven days after the hearing transcript is available.

This determination is published pursuant to section 733(f) of the Act (19 U.S.C. 1673b(f)).

September 23, 1988.

Jan W. Mares,

Assistant Secretary for Import Administration.

[FR Doc. 88-22381 Filed 9-28-88; 8:45 am]

BILLING CODE 3510-DS-M

APPENDIX C

IMPACT OF IMPORTS ON U.S. PRODUCERS' EXISTING DEVELOPMENT AND PRODUCTION EFFORTS, GROWTH, INVESTMENT, AND ABILITY TO RAISE CAPITAL

* * * * * * *

APPENDIX D

INCENTIVE PROGRAMS FOR 3.5" MICRODISKS

Price protection.--Because of the history of falling prices in the floppy disk market, both U.S. producers and importers generally offer price protection to their customers for unsold inventory following a decline in the supplier's official price. The supplier offers the distributor either cash or a product credit on remaining inventory equal to the difference between the old and new price. The distributor must contact the supplier within 30 or 60 days of publication of a new price sheet in order to take advantage of the program. The supplier then reviews the purchaser's inventory and determines the amount due to the distributor.

Free goods.--*** importers and *** producers reported instituting programs that offered free goods to purchasers of microdisks. Typically, a specific percentage of the quantity of the order is given to the purchaser in free microdisks (e.g. 1 box for every 10 purchased). ***. ***, an importer of microdisks, had one free goods program from *** to *** that offered *** percent free microdisks for $*** in sales, *** percent free microdisks for $*** in sales, and *** percent free microdisks for $*** in sales. *** offered a program that gave *** percent free goods only to *** distributors for orders of *** diskettes placed in the first 90 days. *** offered *** percent free goods in an incentive program held in ***. ***, explained that this program occurred after the market price for diskettes fell, and prior to an official reduction of ***'s price.

Rebates.--*** U.S. producers and *** importers offered rebate programs during the period of the investigation. The rebates were based on either a percentage growth in sales or maintenance of an absolute volume by purchasers over a specific time period. For example, ***. ***, a U.S. producer of microdisks, offered a *** percent rebate to customers in ***, if sales of branded product achieved *** percent of the contract goal for all products, including ***. *** offered rebates up to *** percent for wholesalers and up to *** percent for distributors. *** offered rebates of *** percent on purchases between $*** and $***, and *** percent on purchases over $***. *** reported that it offered rebate programs occasionally, the value of which amounted to approximately *** percent of total branded sales.

Market development funds (MDF).--Market development funds provide additional resources to a customer for market development activities. The petitioner alleges that MDF programs are frequently employed by importers "as a means of providing an additional sales-inducing discount." 1/ *** importers offered these funds to specific purchasers, which represented between *** percent of those sales. *** offered this program to mass merchandisers and distributors on purchases of all floppy disk products. *** reported that it currently allocates *** percent of branded product sales to its MDF program. However, *** indicated that ***. *** and *** are the only U.S. producers who offers market development funds. *** currently allocates *** percent of net revenues to an MDF. During the preliminary investigation, *** reported that it allocated *** percent of net revenues to an MDF and an additional *** percent of net revenue to its *** for MDF activities.

Co-operative advertising allowance.--This incentive program is very similar to an MDF in that they both attempt to develop the market area for the supplier. However, the co-operative advertising expense is more easily verifiable. Under this program, suppliers offer to pay a percentage of the

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1/ Petition, p. 43.

distributor's advertising expense for highlighting the supplier's branded product. Typically, proof of this expense must be presented to the supplier for reimbursement. Nearly all of the U.S. suppliers offer this program, with the reported values ranging from *** percent of sales to participating customers. U.S. importers, including ***, offer these allowances for up to *** percent. ***, reported that they provide this advertising allowance to customers in the form of a credit on future purchases.

Spiffs.--Spiffs are payments to distributor sales representatives as a reward for achieving sales goals of a specified product. *** importers and *** producers reported that they offered this program as a short term promotion. U.S. producers and importers typically offered cash, although they have also offered trips and merchandise in the past. *** currently offers *** cents per disk sold to sales representatives, down from a spiff of *** cents a disk prior to ***. *** have run spiffs that offered sales representatives $*** for every box sold during a specific time period. *** has typically given away cash or *** merchandise, although it has also offered free ***. Spiff programs are a component of ***'s MDF. *** also reported that trips have been a part of the firm's spiff program in the past. The funds for ***'s spiffs came from either the MDF, the co-operative advertising allowance, or sales programs.

Cash/credit terms.--Both U.S. producers and importers offer different sales terms depending on the type of customer. Typically, no sales discount will be offered to software duplicators or purchasers of unbranded product. *** offers sales terms of *** percent discount off invoice price to mass merchandisers if paid within *** days, otherwise the full value is due in ***, terms of *** to distributors, and terms of *** to OEM's. Sales terms offered by U.S. importers range between *** for branded product.

Warehouse allowances.--*** was the only importer who offered a warehouse allowance during the period of investigation to encourage sales of its product to distributors. The firm reported that this program was only for very large sales and ranged up to *** percent of the total value of the sale. *** and *** both started to offer a warehouse allowance in ***.

Pallet allowances.--*** were the only suppliers who offered this program. *** reported that ***. *** reported that it offered a pallet allowance only ***.

Other programs.--*** importers and *** producers reported other purchasing incentives. *** reported an *** incentive to distributors and mass merchandisers based on a percentage increase in sales versus those in the prior year. *** offered a program called "***", in which distributors ***. *** offered a program that gave a trip to *** to distributors who reach a specified sales goal in ***, including microdisks. 1/ *** offered a program in *** entitled "***", where approximately *** distributors won a free trip to *** for ***. Additionally, *** offered *** as part of MDF funds to promote sales of branded products to dealers. ***. *** was given to distributors who ***, and another *** was given for every additional ***.

1/ *** also gave away two free trips to *** during the period of the investigation. However, they state that the trips were not offered as incentives, but rather to show ***.

APPENDIX E

OEM RATINGS OF SUPPLIER PRODUCT QUALITY

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APPENDIX F

SUPPLEMENTAL PRICING TABLES

Table F-1
3.5" double-density media: Total reported quantity sold of U.S.-produced and imported Japanese product, by quarters, January 1986-September 1988.

* * * * * * *

Table F-2
Finished 3.5" SS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988

* * * * * * *

Table F-3
Finished 3.5" DS DD microdisks: Unit values of unbranded products sold to unrelated distributors by the top 7 U.S. suppliers of microdisks, by suppliers and by months, January 1986-September 1988

* * * * * * *

Table F-4
Finished 3.5" DS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988

* * * * * * *

Table F-5
Finished 3.5" SS DD microdisks: Unit values of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988

* * * * * * *

Table F-6
Finished 3.5" DS DD microdisks: Sale quantities of branded products sold to unrelated distributors by the top 8 U.S. suppliers of branded microdisks to distributors, by suppliers and by months, January 1986-September 1988

* * * * * * *

Table F-7
Finished 3.5" DS DD microdisks: Sale quantities of microdisks sold to unrelated mass merchandisers by the top 7 U.S. suppliers of microdisks to mass merchandisers, by suppliers and by months, January 1986-September 1988

* * * * * * *

Table F-8
Finished 3.5" DS DD microdisks: Sale quantities of microdisks sold to unrelated OEMs by the top 9 U.S. suppliers of microdisks to OEMs, by suppliers and by months, January 1987-September 1988

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Table F-9
Finished 3.5" HD microdisks: Sale quantities of branded products sold to unrelated distributors by the top 8 U.S. suppliers of microdisks, by suppliers and by months, January 1987-September 1988

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Table F-10
Finished 3.5" SS DD microdisks: Weighted-average net unit values of products sol unrelated purchasers by U.S. producers and importers of Japanese microdisks, by t customer and by months, January 1986-September 1988. 1/ 2/

(In dollars per unit)

Period	Sales to distributors			Sales to mass merchandisers		Sales to
	Branded product					
	U.S.-finished			U.S.-		U.S.-
	Premium	Price-fighter	Japan	finished	Japan	finished
1986:						
Jan.....	$ ***	$ ***	$1.48	$ ***	$ ***	$ ***
Feb.....	***	***	***	***	***	***
Mar.....	***	***	1.44	***	***	***
Apr.....	***	***	1.20	***	***	***
May.....	***	***	1.26	***	***	***
June.....	***	***	1.07	***	1.73	***
July.....	1.20	***	***	***	***	***
Aug.....	***	***	1.06	***	1.09	***
Sept.....	1.14	***	1.08	***	1.10	***
Oct.....	***	***	1.05	***	1.13	.91
Nov.....	***	***	1.01	***	1.25	.89
Dec.....	1.10	***	.92	***	1.10	***
1987:						
Jan.....	***	***	.95	***	1.11	***
Feb.....	***	***	.96	***	1.05	***
Mar.....	***	***	.92	***	1.00	***
Apr.....	***	***	.86	***	.68	***
May.....	***	***	.85	***	1.09	***
June.....	***	***	.89	***	***	***
July.....	***	***	***	***	***	***
Aug.....	***	***	.92	***	***	***
Sept.....	***	***	.88	***	***	.80
Oct.....	1.10	***	***	***	***	.69
Nov.....	***	***	.89	***	***	.72
Dec.....	***	***	.85	***	.92	.74
1988:						
Jan.....	***	***	.91	***	***	***
Feb.....	***	***	.94	***	***	***
Mar.....	***	***	.90	***	***	***
Apr.....	***	***	.90	***	***	***
May.....	***	***	.93	***	.90	***
June.....	***	***	.91	***	***	***
July.....	***	***	.88	***	***	***
Aug.....	***	***	.90	***	***	***
Sept.....	***	***	.91	***	***	***

1/ Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished. The suppliers comprising the U.S.-finished unit values include: * * *. The suppliers comprising the Japanese-finished product include: * * *.
2/ * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table F-11
Finished 3.5" DS DD microdisks: Weighted-average net unit values of products sol unrelated purchasers by U.S. producers and importers of Japanese microdisks, by t customer and by months, January 1986-September 1988. 1/ 2/

(In dollars per unit)

Period	Sales to distributors: Branded product: U.S.-finished: Premium	Sales to distributors: Branded product: U.S.-finished: Price-fighter	Sales to distributors: Branded product: Japan	Sales to mass merchandisers: U.S.-finished	Sales to mass merchandisers: Japan	Sales to U.S.-finished
1986:						
Jan.....	$ ***	$ ***	$2.15	$ ***	$ ***	$ ***
Feb.....	***	***	***	***	***	***
Mar.....	***	***	1.53	***	2.01	***
Apr.....	***	***	1.83	***	1.79	***
May.....	1.73	***	1.87	***	1.75	***
June.....	1.81	***	1.84	***	1.50	***
July.....	1.75	***	1.75	***	1.48	***
Aug.....	1.83	***	1.62	***	1.13	***
Sept.....	1.74	***	1.64	***	1.82	***
Oct.....	1.67	***	1.58	***	1.81	***
Nov.....	1.62	***	1.47	***	1.76	***
Dec.....	1.66	***	1.55	***	1.69	***
1987:						
Jan.....	***	***	1.43	***	1.58	1.02
Feb.....	***	***	1.42	***	1.59	.94
Mar.....	1.50	***	1.35	***	1.59	.94
Apr.....	1.63	***	1.33	***	1.51	.93
May.....	1.45	***	1.34	***	1.56	.95
June.....	1.45	***	1.29	***	1.51	.91
July.....	1.40	***	1.29	***	1.49	.91
Aug.....	1.38	***	1.29	***	1.48	.96
Sept.....	1.33	***	1.27	***	1.41	.93
Oct.....	1.30	***	1.32	1.34	1.35	.89
Nov.....	1.34	***	1.23	***	1.39	.88
Dec.....	1.28	***	1.33	***	1.36	.92
1988:						
Jan.....	***	***	1.32	***	1.39	***
Feb.....	***	***	1.32	***	1.38	***
Mar.....	***	***	1.31	***	1.37	***
Apr.....	***	***	1.27	***	1.37	***
May.....	***	***	1.26	***	1.34	***
June.....	***	***	1.26	***	1.39	***
July.....	***	***	1.25	***	1.44	***
Aug.....	***	***	1.27	***	1.40	***
Sept.....	***	***	1.25	***	1.47	***

1/ Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished. The suppliers comprising the U.S.-finished unit values include: * * *. The suppliers comprising the Japanese-finished product include: * * *.
2/ * * *.

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table F-12
Finished 3.5" SS DD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by months, January 1986-September 1988

(In thousands of units)

Period	Sales to distributors: Branded product: U.S.-finished: Premium	Sales to distributors: Branded product: U.S.-finished: Price-fighter	Sales to distributors: Branded product: Japan	Sales to mass merchandisers: U.S.-finished	Sales to mass merchandisers: Japan	Sales to OEMs: U.S.-finished	Sales to OEMs: Japan
1986:							
Jan.....	***	***	130.8	***	***	***	***
Feb.....	***	***	***	***	***	***	***
Mar.....	***	***	137.3	***	***	***	***
Apr.....	***	***	92.2	***	72.6	***	174.4
May.....	***	***	72.4	***	***	***	***
June.....	***	***	111.2	***	52.3	***	293.5
July.....	45.4	***	***	***	35.2	***	188.4
Aug.....	***	***	54.5	***	27.9	***	98.9
Sept.....	71.4	***	76.8	***	43.2	***	161.9
Oct.....	***	***	84.0	***	***	322.9	194.0
Nov.....	***	***	62.5	***	32.2	117.0	***
Dec.....	10.3	***	73.5	***	56.3	***	144.7
1987:							
Jan.....	***	***	50.9	***	47.6	***	***
Feb.....	***	***	132.6	***	72.0	***	53.2
Mar.....	***	***	538.5	***	82.1	***	148.2
Apr.....	***	***	173.0	***	11.2	***	99.8
May.....	***	***	191.5	***	22.7	***	86.1
June.....	***	***	289.2	***	***	***	100.6
July.....	***	***	***	***	***	***	***
Aug.....	***	***	27.9	***	***	***	122.9
Sept.....	***	***	456.1	***	***	225.9	82.1
Oct.....	54.4	***	***	***	***	106.5	98.5
Nov.....	***	***	82.6	***	***	179.3	139.9
Dec.....	***	***	136.0	***	11.4	230.8	***
1988:							
Jan.....	***	***	57.2	***	***	***	***
Feb.....	***	***	10.1	***	***	***	***
Mar.....	***	***	67.8	***	***	***	***
Apr.....	***	***	54.1	***	***	***	***
May.....	***	***	24.4	***	12.1	***	***
June.....	***	***	24.6	***	***	***	***
July.....	***	***	23.8	***	***	***	***
Aug.....	***	***	35.6	***	***	***	***
Sept.....	***	***	63.6	***	***	***	***

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table F-13
Finished 3.5" DS DD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by months, January 1986-September 1988

(In thousands of units)

Period	Sales to distributors: Branded product: U.S.-finished: Premium	Sales to distributors: Branded product: U.S.-finished: Price-fighter	Sales to distributors: Branded product: Japan	Sales to mass merchandisers: U.S.-finished	Sales to mass merchandisers: Japan	Sales to OEMs: U.S.-finished	Sales to OEMs: Japan
1986:							
Jan.....	***	***	44.6	***	***	***	62.8
Feb.....	***	***	***	***	***	***	139.7
Mar.....	***	***	81.1	***	34.5	***	159.7
Apr.....	***	***	117.9	***	101.2	***	633.9
May.....	15.7	***	62.5	***	92.3	***	427.7
June.....	44.7	***	88.9	***	131.1	***	686.0
July.....	17.4	***	173.6	***	108.3	***	883.0
Aug.....	13.7	***	119.7	***	410.3	***	778.0
Sept.....	49.2	***	55.9	***	120.3	***	478.5
Oct.....	76.7	***	96.0	***	113.0	***	427.2
Nov.....	50.4	***	159.0	***	125.6	***	569.0
Dec.....	41.4	***	202.0	***	88.7	***	532.3
1987:							
Jan.....	***	***	169.0	***	173.2	13.4	650.4
Feb.....	***	***	271.1	***	136.7	19.6	780.5
Mar.....	97.1	***	150.5	***	266.9	63.2	414.0
Apr.....	117.4	***	262.5	***	138.2	156.0	195.1
May.....	94.8	***	178.4	***	178.2	176.0	885.7
June.....	251.2	***	125.6	***	238.3	296.7	883.7
July.....	127.9	***	319.8	***	146.2	303.5	1,327.5
Aug.....	100.5	***	150.7	***	244.9	166.6	1,243.2
Sept.....	60.9	***	273.9	***	346.9	851.7	1,728.8
Oct.....	114.1	***	258.9	208.3	235.8	868.4	1,993.9
Nov.....	191.4	***	172.6	***	376.3	478.9	2,373.6
Dec.....	235.2	***	389.3	***	249.1	520.6	2,620.5
1988:							
Jan.....	***	***	368.6	***	546.5	***	1,199.4
Feb.....	***	***	341.5	***	774.6	***	2,018.5
Mar.....	***	***	512.9	***	412.8	***	2,449.9
Apr.....	***	***	647.8	***	413.0	***	2,488.4
May.....	***	***	934.5	***	544.3	***	2,860.9
June.....	***	***	388.4	***	520.4	***	2,143.2
July.....	***	***	922.9	***	364.9	***	1,989.9
Aug.....	***	***	556.3	***	487.9	***	2,383.4
Sept.....	***	***	547.7	***	352.4	***	3,370.1

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission.

Table F-14
Finished 3.5" HD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by months, January 1987-September 1988

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