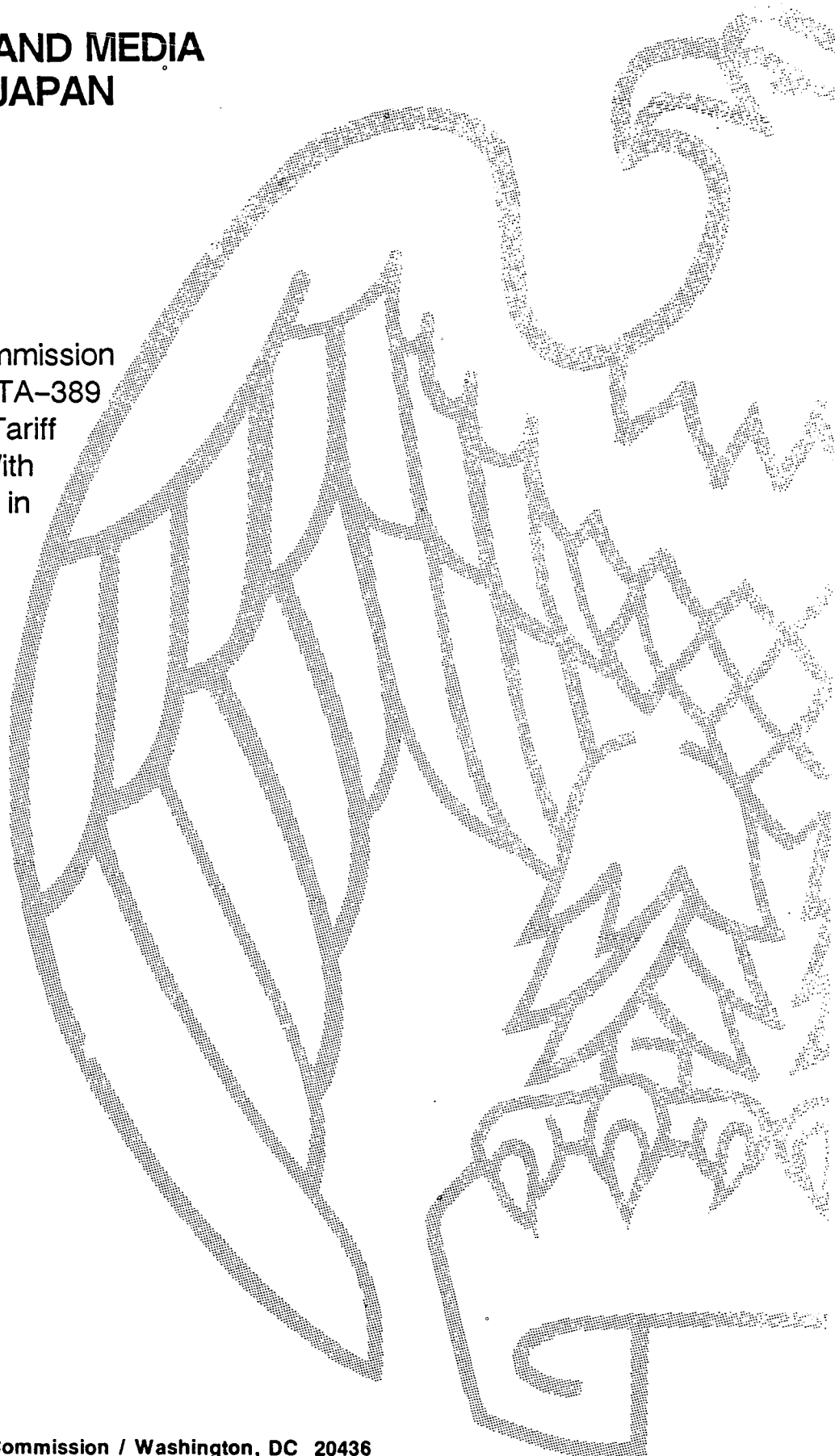


# **3.5" MICRODISKS AND MEDIA THEREFOR FROM JAPAN**

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

USITC PUBLICATION 2076

APRIL 1988



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UNITED STATES INTERNATIONAL TRADE COMMISSION  
Washington, DC

Investigation No. 731-TA-389 (Preliminary)

3.5" 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 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Japan of 3.5" microdisks and media therefor, provided for in item 724.45 of the Tariff Schedules of the United States, 3/ that are alleged to be sold in the United States at less than fair value (LTFV). 4/

Background

On February 26, 1988, a petition was filed with the Commission and the Department of Commerce by Verbatim Corp., Charlotte, NC, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of 3.5" microdisks and media therefor from Japan. Accordingly, effective February 26, 1988, the Commission instituted preliminary antidumping investigation No. 731-TA-389 (Preliminary).

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1/ The record is defined in sec. 207.2(i) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(i)).

2/ Chairman Liebel and Vice Chairman Brunsdale did not participate.

3/ 3.5" microdisks and media therefor are defined in the Commission's Federal Register notice 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."

4/ Commissioner Cass determines that there is a reasonable indication that industries in the United States are materially injured by reason of allegedly LTFV imports of, respectively, double-density 3.5" microdisks and media therefor, and high-density 3.5" microdisks and media therefor.

Notice of the institution of the Commission's investigation and of a public conference 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 March 9, 1988 (53 F.R. 7581). The conference was held in Washington, DC, on March 21, 1988 and all persons who requested the opportunity were permitted to appear in person or by counsel.



VIEWS OF THE COMMISSION 1/

We determine that there is a reasonable indication 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 are allegedly being sold at less than fair value (LTFV). 2/ In a preliminary investigation, the Commission is to determine whether, based upon the best information available at the time of the preliminary determination, there is a reasonable indication of material injury, threat thereof, or material retardation of establishment of an industry. 3/ Our determination is based primarily on the poor financial condition of the domestic industry, the significant volume and large market penetration of imports from Japan, and the apparent adverse impact of these imports on prices in the U.S. market.

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1/ Chairman Liebeler and Vice Chairman Brunsdale did not participate in this determination.

2/ Commissioner Cass determines that there is a reasonable indication that industries in the United States are materially injured by reason of, respectively, imports of double-density 3.5 inch microdisks and media therefor from Japan which are allegedly being sold at LTFV, and imports of high-density 3.5 inch microdisks and media therefor from Japan which are allegedly being sold at LTFV. See his Separate Views which follow.

3/ 19 U.S.C. § 1671b(a); § 1673b(a). The Federal Circuit in *American Lamb Co. v. United States*, 785 F.2d 994 (Fed. Cir. 1986), addressed the standard for preliminary determinations. The Court held that the Commission may conclude that no reasonable indication exists only if "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation." Id. at 1001.

Like product and domestic industry

To determine whether there exists a "reasonable indication of material injury," the Commission must make threshold factual determinations with respect to "like product" and "domestic industry". <sup>4/</sup> The imported products subject to this investigation are 3.5 inch microdisks and coated media therefor from Japan. <sup>5/</sup> The 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

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<sup>4/</sup> 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 . . ." 19 U.S.C. § 1677(4)(A). "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 an investigation under this subtitle." 19 U.S.C. § 1677(10).

<sup>5/</sup> The Department of Commerce's Notice of Initiation describes the scope of the investigation as:

. . . 3.5" microdisks and coated media thereof from Japan currently provided for under TSUSA item number 724.4570 and currently classifiable under HS 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.

Coated media produced in Japan and finished into 3.5" microdisks in another country prior to importation into the United States from the other country is tentatively included in the scope of the investigation. In the course of this proceeding we will determine whether to continue to include these indirect imports in the scope of this investigation.

introduced 8 inch and 5.25 inch formats, thereby enabling manufacturers to downsize disk drives so that computers with 3.5 inch disk drives are more compact than with previous formats. <sup>6/</sup> The technological challenge lies in producing the smaller microdisks with memory capacity equal to or greater than the larger formats.

The production process for 3.5 inch microdisks involves: (1) precise coating of a clear mylar or polyester base film with a suspension of magnetically-charged particles, bonded to the film by sophisticated binders, resulting in "webs" of "coated media"; (2) punching out doughnut-shaped "cookies" from the webs of coated media; (3) "burnishing" cookies to remove imperfections in the coated disk surface; <sup>7/</sup> (4) precise attachment of a stainless steel "hub" to the burnished cookie; and (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.

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<sup>6/</sup> 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 unlike. See Report at A-2-A-4 for a description of the characteristics and uses of the different formats.

<sup>7/</sup> The need for burnishing is reduced as imperfections decrease with use of improved coating techniques. Verbatim Post Conference Brief at 6.

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). <sup>8/</sup>

Petitioner 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. <sup>9/</sup> All 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. Several respondents have gone farther and argued 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. <sup>10/</sup>

a. Like product

The Commission's decision regarding the appropriate like product(s) in an investigation is essentially a factual determination, and the Commission

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<sup>8/</sup> SSDD 3.5 inch microdisks are DSDD 3.5 inch microdisks that have been certified on only one side. Report at A-3, n.1. Development of even higher density 3.5 inch microdisk media is ongoing. These future products are not specifically within the scope of Commerce's investigation, and therefore have not been considered for purposes of the like product analysis.

<sup>9/</sup> Petitioner has not alleged that uncoated media is a like product. 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.

<sup>10/</sup> E.g., Post Conference Brief of Fuji at 2-3; Post Conference Brief of C. ITOH/CITECH at 3; Post Conference Brief of Sony at 6.

applies the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis. In analyzing like product issues, the Commission generally compares articles in terms of a number of factors including physical appearance, interchangeability, channels of distribution, customer perceptions, common manufacturing facilities and production equipment and employees. <sup>11/</sup> In addition, in considering the question of whether "semifinished" or "component" articles are "like" the finished product, the Commission considers the necessity for further processing, the costs of such processing and the value added thereby, whether the article at an earlier stage of production embodies or imparts to the finished article an essential characteristic or function, whether there are independent markets for the finished and unfinished articles, and the degree of interchangeability of articles at the different stages of production. <sup>12/</sup> No single factor is determinative, and the Commission may consider other factors which it deems relevant based on the facts of a given investigation.

The Commission has found minor variations to be an insufficient basis for a separate like product analysis. Rather, the Commission has looked for clear

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<sup>11/</sup> 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); 64K Dynamic Random Access Memory Components from Japan, Inv. No. 731-TA-270 (Final), USITC Pub. 1862 (June 1986) (hereinafter 64K DRAMs).

<sup>12/</sup> Crankshafts, *supra* n. 11; 64K DRAMs, *supra* n. 11; Cellular Mobile Telephones and Subassemblies Thereof from Japan, Inv. No. 731-TA-207 (Final), USITC Pub. 1786 (December 1985) (hereinafter Cellular Mobile Telephones).

dividing lines among products. <sup>13/</sup> Moreover, the like product requirement may not be "interpreted in such a narrow fashion as to permit minor differences in physical characteristics and uses to lead to the conclusion that the products are not like each other." <sup>14/</sup>

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., double-density (DD) and high-density (HD), are separate like products?

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

1. Are different densities of 3.5 inch microdisks "like"?

Both petitioner and respondents have addressed the factual similarity of this case to the Commission's various semiconductor investigations, which examined the question of whether semiconductors of various densities (memory capacity) are "like". <sup>16/</sup> In those cases, the Commission concluded that

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<sup>13/</sup> E.g., 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.

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

<sup>15/</sup> Respondents refer to unburnished cookies rather than coated media. Trade between media producers and microdisk "converters" is transacted in the form of unburnished cookies. Burnished cookies are delicate, so burnishing is normally performed as part of the conversion or finishing process. TDK Post Conference Brief at 12-13.

<sup>16/</sup> 64K DRAMS, supra n. 11, Erasable Programmable Read Only Memories from  
(Footnote continued on next page)

different semiconductor densities do not distinguish separate like products. The Commission's decision was based largely on the conclusion that while there was an evolution of semiconductors over time, their essential characteristic, 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 lack of complete substitutability among different densities of semiconductors due to differences in the design of specific end use equipment did not preclude a determination that different densities of semiconductors constitute a single like product.

Respondents argue that "clear dividing lines" separate HD and DD disks and media because: (1) HD media is different in kind because it is coated with a denser, higher coercive magnetic material; <sup>17/</sup> (2) different manufacturing equipment and processes are necessary to produce HD media, <sup>18/</sup> and HD disks

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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). Cf. Crankshafts, supra n. 11 (Commission determined that crankshafts of different weights are a single like product).

<sup>17/</sup> 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 more thinly coated onto the underlying film, providing the increased memory capacity.

<sup>18/</sup> Production of HD 3.5 inch microdisks and media therefor generally  
(Footnote continued on next page)

must be assembled under extraordinary "clean room" conditions; <sup>19/</sup> (3) disks of differing densities are not interchangeable, because each disk drive is designed for use with disks of a particular density; <sup>20/</sup> and (4) customers perceive differences in disks of varying densities, and such disks are distributed only to customers with appropriate disk drives.

In this case, we base our preliminary determination largely on the fact that despite variations in density, all 3.5 inch microdisks share a common end

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involves higher technology production facilities and materials. The improved equipment, however, can also be used for production of DD 3.5 inch microdisks and media therefor. Verbatim Post-Conference Brief at 11, n.15.

<sup>19/</sup> The issue of the need for a "cleaner" production environment was also present and was not found to be dispositive in the semiconductor cases, where the higher density chips required significantly cleaner production facilities. In those cases, as here, the cleaner environment would not adversely affect the manufacture of the lower density products, and is therefore not necessarily a distinguishing production characteristic of higher density products. Respondents' argument that HD media and disks are produced using improved techniques and equipment, including a substantially higher technology "clean room" environment, does not preclude the finding that microdisks of different densities are produced using common machinery and processes in common production facilities, especially where, as in this case, the improved equipment can be used to manufacture lower density media and disks.

<sup>20/</sup> In the semiconductor cases, lack of interchangeability due to changes in end use equipment design was not dispositive. Cf., Crankshafts, supra n. 11, where a specific weight or size/specification of the finished product was necessary for different end users, nevertheless the function of each product was deemed to be the same. Similarly, in cases involving color picture tubes, the Commission 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). Use of a higher density 3.5 inch microdisk in a drive designed for

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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. 3.5 inch microdisks of all densities appear to share common channels of distribution, <sup>21/</sup> and are manufactured in common facilities by the same production employees. <sup>22/</sup> Furthermore, there is a degree of interchangeability in end uses of DD disks and HD disks. For example, a HD disk drive can read information from either a DD disk or HD disk without complications. <sup>23/</sup> In light of the information discussed above, we do not find that respondents' arguments preclude a preliminary finding that 3.5 inch disks of varying density constitute a single like product.

We therefore determine, for purposes of this preliminary investigation, that DD and HD 3.5 inch microdisks and media are a single like product.

2. Are 3.5 inch microdisks and media therefor "like"?

The more difficult like product issue in this investigation is whether finished 3.5 inch microdisks and coated media therefor are a single like

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lower density 3.5 inch microdisks is possible, although the cost of HD disks makes such use unlikely, and there is increased risk of data loss. Report at A-4; Post Conference Brief of Sony at 17-18.

<sup>21/</sup> Report at A-11-A-13. 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. While not all manufacturers produce all densities, it is a general practice in the industry to offer all densities to customers.

<sup>22/</sup> See notes 18 and 19, supra.

<sup>23/</sup> Transcript of the Conference (Tr.) at 77.

product. In general, petitioner argues that coated media for 3.5 inch microdisks is effectively an "unfinished" microdisk, containing the essential characteristics of the finished product, and requiring only assembly in order to be usable. <sup>24/</sup>

More specifically, petitioner contends that the coated media bears the electrical properties that constitute the microdisk's essential characteristics and make it a memory product. <sup>25/</sup> Verbatim argues that the fact that coated media must be packaged in the form of a finished 3.5 inch microdisk is not dispositive, relying on the Commission's determinations in the semiconductor cases, where the Commission did not find dispositive the fact that semiconductor chips must be inserted into a package to be useable. <sup>26/</sup> Moreover, petitioner asserts that once the media is coated and the cookie is punched, the only physical process affecting the media is "burnishing", which merely polishes and smooths the surface of the microdisk

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<sup>24/</sup> Verbatim Post Conference Brief at 6.

<sup>25/</sup> Petitioner refers to the factual similarity between this investigation and 64K DRAMS, supra n. 11, where the Commission concluded that the essential characteristic of a DRAM is its capacity to store information as electrical charges. Petitioner argues that the essential characteristic of a 3.5 inch microdisk is its capacity to store information in the form of electrical signals on the coated media, and notes that none of the other disk components is capable of receiving, storing, or reading back, information. Verbatim Post Conference Brief at 4-5.

<sup>26/</sup> Id. at 6.

to improve the head's access to the coated media's magnetic particles. <sup>27/</sup>  
 Finally, Verbatim maintains that 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. <sup>28/</sup>

Respondents contend that coated media is not an "unfinished microdisk" because additional essential components must be added to the coated media after it is burnished and before it can perform its function of memory storage. In respondents' view, the production process is clearly divisible into cookie production and conversion into microdisks, as reflected by the fact that unburnished cookies have an independent market. <sup>29/</sup> Respondents maintain that the 3.5 inch microdisk has several essential characteristics, imparted by each of its high-technology components, and that the coated media merely imparts to the finished microdisk an essential element, rather than the essential element. <sup>30/</sup> They argue that media coating is not part of an

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<sup>27/</sup> Verbatim Post Conference Brief at 5-6. As noted above, burnishing becomes less important as coating processes become more sophisticated.

<sup>28/</sup> Verbatim Post Conference Brief at 7; TDK Post Conference Brief at 22.

<sup>29/</sup> TDK Post Conference Brief at 19-20; Fuji Post Conference Brief at 12-13; C. ITOH Post Conference Brief at 4-5.

<sup>30/</sup> Fuji Post Conference Brief at 6-7, 13-14. Unburnished media, unless coated with an extreme degree of technical precision, cannot accurately and reliably record magnetic data nor can it be read. 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. TDK Post Conference Brief at 29. Respondents cite  
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integrated production process. <sup>31/</sup> Respondents assert that coated media and finished 3.5 inch microdisks are different in physical appearance, can be and often are produced in separate manufacturing facilities, and are manufactured using different equipment and technology. <sup>32/</sup> The assembly process for 3.5 inch microdisks is complex, they maintain, and imparts substantial value to

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 the Commission's determination in Cellular Mobile Telephones, supra n. 12, where the Commission found that each of seven subassemblies performed an essential function of the completed cellular mobile telephone (CMT), is necessary to the function of the complete unit, and represents an earlier stage of production requiring extensive further processing. Therefore the Commission determined that each of seven subassemblies constituted a separate like product. However, the Commission also found that CMT transceivers, control units, and complete CMTs, comprised a single like product, since a CMT transceiver must be used together with a control unit to form an operating CMT, and there are no independent uses for either part.

We note, moreover, that developments in 3.5 inch microdisk packaging design are ongoing, in an attempt to simplify and lower the costs of the assembly process. It has been contended that the current Sony package design is unnecessarily complex and costly, and that some components, i.e. the shutter, may not only be unnecessary, but may actually be damaging to the function of the microdisk in the long run.

<sup>31/</sup> Respondents support this argument by citing the number of independent 3.5 inch microdisk assemblers, and Verbatim's physically separate coating and assembly operations. Fuji Post Conference Brief at 9. Separate processing or finishing of products, however, does not necessarily indicate that they are unlike. In Crankshafts 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. The Commission noted that machining is an exacting process that must be performed to extremely tight tolerances, but it could be done either by producers of unmachined crankshafts or by end users. Supra n. 11. In EPROMs the Commission noted that almost all U.S. chip manufacturers transferred chips to overseas affiliates or subcontractors for assembly. Supra n. 16.

<sup>32/</sup> Fuji Post Conference Brief at 9.

the finished product. <sup>33/</sup> They also note that 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, original equipment manufacturers, and distributors, for sale to computer owners. Finally, respondents rely on the lack of interchangeability between coated media and 3.5 inch microdisks, asserting that coated media cannot function when inserted into a disk drive. <sup>34/</sup>

Respondents also make much of the fact that there is an independent market for coated media for 3.5 inch microdisks in the United States. Respondent TDK estimates that there was a sizeable U.S. cookie market in 1987, and predicts that U.S. "converters", or microdisk finishers, will proliferate in the near future thus expanding the independent cookie

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<sup>33/</sup> In Crankshafts 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. Supra n. 11. 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 n. 11.

<sup>34/</sup> We note that in most instances, a good at an earlier stage of production will not be interchangeable with the finished good. This fact is not determinative. E.g., 64K DRAMs, supra n. 11; EPROMs, supra n. 16; Crankshafts, supra n. 11. But see Cellular Mobile Telephones, supra n. 12.

market. <sup>35/</sup> Petitioner points out that there are no distributors or retailers dealing in media, <sup>36/</sup> and maintains that this market is relatively insignificant in comparison to the market for finished 3.5 inch microdisks. <sup>37/</sup> It is difficult to determine the precise size of the U.S. market for coated media, since all such media are consumed in the production of finished 3.5 inch microdisks. <sup>38/</sup>

The question of whether 3.5 inch microdisks are like coated media is a difficult one, and at this preliminary stage we determine that microdisks and media comprise a single like product. We base this conclusion on the essential characteristics and dedicated use of the coated media, rather than on the value added in the assembly process, the different end users and the existence of the market for coated media or cookies.

Our determinations of like product and domestic industry are for purposes of this preliminary determination only, and we intend to reconsider these issues thoroughly in the event a final investigation is instituted. We therefore urge the parties to be prepared to address the facts of this case in the framework of the factors set forth in our analysis, and we welcome

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<sup>35/</sup> TDK Post Conference Brief at 17.

<sup>36/</sup> 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.

<sup>37/</sup> Verbatim Post Conference Brief at 7-8.

<sup>38/</sup> See Report at A-9-A-11 for consumption figures for 3.5 inch microdisks and media therefor.

argument as to any additional factors or a different framework which may be considered in the event a final investigation is instituted.

b. Domestic industry

In defining the domestic industry, the Commission generally considers the overall nature of production-related activities in the United States, including the extent and source of a firm's capital investment, the technical expertise involved in production activity in the United States, employment levels, the quantity and type of parts sourced in the United States, and any other costs and activities in the United States directly leading to production of the like product. <sup>39/</sup>

Having found one like product, we conclude that companies in the United States which either produce media for 3.5 inch microdisks (coaters) and companies which purchase media from coaters, whether U.S. or imported, and assemble it into finished 3.5 inch microdisks (converters), and vertically integrated companies that both coat and convert, are included in the domestic industry. <sup>40/</sup> There are currently eight companies which either coat media

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<sup>39/</sup> EPROMs, supra n. 16; 64K DRAMS, supra n. 11; 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 8.

<sup>40/</sup> We note that 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 the degree of integration has little (if any) relevance to the question of determining whether a producer has sufficient U.S.

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for, finish, or both coat and finish, 3.5 inch microdisks in the United States. <sup>41/</sup>

Verbatim coats media for 3.5 inch microdisks in the United States. Verbatim has no assembly operations in the United States, but ships coated media to its related company assembly facility in Guadalajara, Mexico and Limerick, Ireland. <sup>42/</sup> All Verbatim media assembled into finished 3.5 inch microdisks in Mexico are destined for sale in the United States. In addition, Verbatim ships coated media to a U.S. converter for assembly into finished 3.5 inch microdisks, which are sold under Verbatim's label.

c. Related parties

All but one of the companies in the domestic industry imported either 3.5 inch 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(ies) as a "related party" under

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production-related activities to be considered a "domestic" producer, the Commission has taken this into account in considering the question of causation.

<sup>41/</sup> Report at A-6-A-8. The specific operations of each company in the United States are confidential. In addition, several other companies have either started to assemble 3.5 inch microdisks in the United States since January 1, 1988, or plan to do so during 1988. Report at A-6, n.2. The Commission's period of investigation ended December 31, 1987. Consequently, the activities of these companies are not reflected in our analysis. Should a final investigation be instituted, the operations of these companies will be considered to the extent they fall within the period of that investigation.

<sup>42/</sup> Prior to mid-1986, Verbatim assembled 3.5 inch microdisks at its facility in Sunnyvale, CA.



the statute. Under section 771(4)(B) of the statute when a producer is related to exporters or importers of the product under investigation, or is itself an importer of that product, the Commission may exclude such producers from the domestic industry "in appropriate circumstances." <sup>43/</sup> Application of the related parties provision is within the Commission's discretion based on the facts presented in each case. <sup>44/</sup> The parties have not addressed the related parties issue, and no party argued that any company should be excluded from the domestic industry on this basis.

The related parties provision enables the Commission 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. <sup>45/</sup> Given that almost every company in the domestic

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<sup>43/</sup> 19 U.S.C. § 1677(4)(B).

<sup>44/</sup> *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) whether 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. Granular Polytetrafluorethylene Resin from Italy and Japan, Invs. Nos. 731-TA-385 and 386 (Preliminary) USITC Pub. 2043 (December 1987) at 9. 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, USITC Pub. 1798 (1986) at 12.

<sup>45/</sup> Granular Polytetrafluorethylene Resin from Italy and Japan, Invs. Nos. 731-TA-385 and 386 (Preliminary) USITC Pub. 2043 (December 1987) at 9. See  
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industry imported 3.5 inch microdisks or media therefor, we have determined that exclusion of any company from the domestic industry under the related parties provision is not warranted in this preliminary investigation.

d. Exclusion of imports and standing

Among other respondents, Fuji argues that petitioner Verbatim does not produce DD 3.5 inch microdisks, HD media for 3.5 inch microdisks, and HD 3.5 inch microdisks in the United States, and that therefore the Commission should exclude imports of these articles from consideration in its determination, or determine that Verbatim has no standing to bring a petition with respect to these articles. <sup>46/</sup> Fuji's arguments are premised on (1) the conclusion that there are four like products at issue, and (2) the belief that no U.S. producer of DD 3.5 inch microdisks, HD 3.5 inch microdisks, or HD media for 3.5 inch microdisks supports the petition. Having determined that there is one industry at issue in this investigation, we need not reach these questions. We note, however, that we have previously indicated that the Commission should not decide standing issues, and therefore we leave consideration of this question to the Commerce Department.

Fuji also maintains that if there is no domestic production of HD 3.5 inch microdisks or media therefor, there is no domestic industry, and therefore the Commission must exclude imports of high density media and

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also EPROMs, supra n. 16; Rock Salt from Canada, Inv. No. 731-TA-239 (Final), USITC Pub. 1798 (1986).

<sup>46/</sup> Post Conference Brief of Fuji at 24-29.

microdisks from any affirmative determination. <sup>47/</sup> Having found only one industry we need not reach the question of whether to "exclude" some imports from our consideration.

Condition of the domestic 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. <sup>48/</sup> No single factor is determinative, and in each investigation the Commission will consider the particular nature of the industry concerned. The indicia of the industry's performance in this preliminary investigation generally show increases.

This is 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 using 3.5 inch disk drives. Such computers are also relatively new products, and the market for them is continuing to expand. Similarly, losses are not unexpected in the context of a new industry, particularly one in a high technology field requiring substantial initial expenditures on research,

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<sup>47/</sup> Of course, this argument ignores that the domestic industry may produce an article "most similar" to an imported product. Thus, even if there were no domestic production of an article identical to one segment of the imports, i.e. HD 3.5 inch microdisks, the Commission may determine that another article, i.e. DD 3.5 inch microdisks, is the product "most similar in characteristics and uses" to imported HD 3.5 inch microdisks and define a domestic industry in those terms.

<sup>48/</sup> 19 U.S.C. § 1677(7)(C)(iii).

development, and sophisticated manufacturing equipment. Nonetheless, the level of losses for both media coaters and converters is significant, and leads us to conclude that there is a reasonable indication that the domestic industry is materially injured.

Apparent U.S. consumption of 3.5 inch microdisks increased by 520 percent from 1985 to 1987, while apparent consumption of media for 3.5 inch microdisks increased by more than 200 percent. <sup>49/</sup> Domestic producers' shipments of both finished 3.5 inch microdisks and media therefor also increased during the period of investigation, <sup>50/</sup> and shipments of DSDD 3.5 inch microdisks showed the largest increases. <sup>51/</sup> The high-density 3.5 inch microdisk was first introduced in 1986, and domestic shipments of such disks are still low. However, it is generally expected that demand and production in this sector of the industry will increase significantly.

Employment in both the media coating and conversion sectors of the

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<sup>49/</sup> Report at A-9-A-11 and Table 3. 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, and thus is reflected in the apparent consumption figure for finished 3.5 inch microdisks.

<sup>50/</sup> Report at A-17-A-19 and Table 7. U.S. producers' domestic shipments of 3.5 inch microdisks increased by 349 percent from 1985 to 1987, and domestic producers' shipments of media for 3.5 inch microdisks showed a threefold increase.

<sup>51/</sup> Id. at Table 8. As noted above, SSDD 3.5 inch microdisks are identical to DSDD, except that they are certified as to one side only, as opposed to both sides. The double-sided 3.5 inch disk drive was introduced very soon after the initial introduction of the single-sided 3.5 inch disk drive. Since the capacity of the DSDD 3.5 inch microdisk is twice that of the SSDD, the double-sided disk drives have gained widespread acceptance. Single-sided disk drives have been a less significant factor in the market.

industry increased during the period of investigation. <sup>52/</sup> However, some producers did report layoffs and reductions of personnel between 1985 and 1987. Hours worked in the conversion sector declined during the period of investigation, as did wages and total compensation paid to such workers. <sup>53/</sup> The opposite trend was evident in the media coating sector of the industry, with hours worked, total wages paid, and total compensation paid increasing. <sup>54/</sup> Productivity increased significantly in both sectors of the industry. <sup>55/</sup>

The Commission received usable income and loss data from six producers, accounting for 71.8 percent of domestic shipments of 3.5 inch microdisks and/or media therefor in 1987. The domestic industry generally sustained significant operating losses in its operations producing 3.5 inch microdisks and/or media therefor. Net sales for the industry increased by 29.2 percent from 1985 to 1986. Net sales increased again, by 53.0 percent, from 1986 to 1987. <sup>56/</sup> Operating losses as a percentage of sales, however, were 165.7 percent in 1985, 138.1 percent in 1986, and 71.1 percent in 1987. <sup>57/</sup>

While operating losses are not unexpected during the first few years of a new product's life, the level of losses in this industry is significant.

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<sup>52/</sup> Report at A-20-A-21 and Table 9.

<sup>53/</sup> Id. at Table 9.

<sup>54/</sup> Id. at Table 9.

<sup>55/</sup> Id.

<sup>56/</sup> Report at A-25 and Table 13.

<sup>57/</sup> Id.

Moreover, the level of losses in the industry at issue is substantially higher than the level of losses reported for the overall establishments in which the like product is produced. <sup>58/</sup> In addition, we note that capital expenditures have dropped significantly in the industry, despite the increases in demand for the product, the introduction of the high density disk, which requires a cleaner production environment and more sophisticated equipment, and the current shortages in the market. <sup>59/</sup> Research and development expenditures also declined from 1986 to 1987, after increasing from 1985 to 1986. <sup>60/</sup> As the Commission has recognized, research and development are critical to the success of industries in high technology fields, where new developments in product and process technology must continue. <sup>61/</sup>

Based on our consideration of the information in the record of this preliminary investigation, and in light of the standard of determination, we determine that there is a reasonable indication that the domestic industry is materially injured.

#### Causation

In making preliminary determinations, the Commission is directed to determine whether there is a reasonable indication of material injury "by

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<sup>58/</sup> Compare Report at A-23 and Table 11, with id. at A-23-A-25 and Table 13.

<sup>59/</sup> Report at A-25.

<sup>60/</sup> Report at A-26.

<sup>61/</sup> See, e.g. EPROMs, supra n. 16; Cellular Mobile Telephones, supra n. 12.

reason of" the allegedly LTFV imports under investigation. <sup>62/</sup> While the Commission may consider information indicating that such injury is caused by factors other than allegedly LTFV imports, we may not weigh various possible causes. <sup>63/</sup> 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,
- (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. <sup>64/</sup>

The specific data concerning the volume and value of imports of both 3.5 inch microdisks and media therefor from Japan are confidential, as are the specific market penetration ratios. However, in terms of volume, imports from Japan of 3.5 inch microdisks increased by 500 percent from 1985-1987, and imports of media for 3.5 inch microdisks increased 116 percent. <sup>65/</sup> Throughout this period, U.S. producers' shipments of 3.5 inch microdisks accounted for less than one quarter of apparent U.S. consumption. U.S. producers' shipments accounted for 24.8 percent of apparent U.S. consumption in 1985, declined to 16.9 percent in 1986, and increased to 21.7 percent in

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<sup>62/</sup> 19 U.S.C. § 1673d(b).

<sup>63/</sup> S. Rep. No. 249, 96th Cong., 1st Sess. 57-58 (1979); H.R. Rep. No. 317, 96th Cong., 1st Sess. 47 (1979).

<sup>64/</sup> 19 U.S.C. § 1677(7)(B).

<sup>65/</sup> Report at A-35, Table 20, and A-37, Table 21.

1987, an overall decline of 3 percent. <sup>66/</sup> The share of the U.S. market for media for 3.5 inch microdisks accounted for by U.S. producers' shipments increased steadily during the period of investigation, from 55.4 percent in 1985 to 74.4 percent in 1987. <sup>67/</sup> Throughout the period of investigation, allegedly LTFV imports from Japan have accounted for a significant share of apparent U.S. consumption of both 3.5 inch microdisks and media therefor.

The Commission received pricing information for both sales of 3.5 inch microdisks and media for 3.5 inch microdisks from U.S. producers and importers. The Commission requested quarterly price data for sales in the various channels of distribution in this industry. <sup>68/</sup> Although there are variations in the pricing data, on the whole, prices for 3.5 inch microdisks declined throughout the industry to all purchasers, in all product categories. Data for the last two quarters of 1987 indicate that the prices have firmed - price declines have slowed, and in some instances, prices have increased slightly. The price of media sold to unrelated purchasers by U.S. producers and importers also declined throughout the period of

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<sup>66/</sup> Id. at A-35, Table 20. We note, however, that imports of 3.5 inch microdisks from countries other than Japan, including imports from Mexico and Ireland of 3.5 inch microdisks containing media coated by Verbatim in the United States, increased 350 percent between 1986 and 1987. Id.

<sup>67/</sup> Report at A-37, Table 21.

<sup>68/</sup> 3.5 inch microdisks are sold to original equipment manufacturers, distributors, and mass merchandisers, in the form of either branded or unbranded product. Sales of media for 3.5 inch microdisks in almost all instances are factory direct, open market sales to unrelated purchasers, who assemble the media into finished 3.5 inch microdisks. Report at A-11.



investigation. <sup>69/</sup>

Prices of imports of both SSDD and DSDD 3.5 inch microdisks finished in Japan declined by slightly larger percentages than did prices of U.S. finished product from 1985 to 1987. <sup>70/</sup> Imports from Japan of SSDD 3.5 inch microdisks were priced below U.S. finished 3.5 inch microdisks in more than half the quarters for which comparisons were possible, imports from Japan of DSDD 3.5 inch microdisks were priced below U.S. finished product in approximately one-third of the quarters for which comparisons were possible, and imports from Japan of HD 3.5 inch microdisks were priced below U.S. finished product in all the quarters for which comparisons were possible. <sup>71/</sup> Prices of imports of 3.5 inch microdisks of all densities from Japan sold to distributors were below the U.S. finished product prices in half the quarters for which comparisons were possible, prices of imports of 3.5 inch microdisks of all densities from Japan sold to both mass merchandisers and original equipment manufacturers were below the prices of U.S. finished product in just under half the quarters for which comparisons were possible. <sup>72/</sup>

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<sup>69/</sup> Report at A-41 and Table 22. We note that such sales accounted for only a small percentage of apparent U.S. consumption of media. Factory direct sales from foreign producers to U.S. converters, company transfers from U.S. media coaters to related assemblers, and exports, accounted for the majority of apparent U.S. consumption of media.

<sup>70/</sup> Report at A-42, and Tables 23 and 24.

<sup>71/</sup> Report at A-46.

<sup>72/</sup> Report at A-46.

DSDD 3.5 inch microdisks currently account for the bulk of both domestic shipments and imports from Japan. Underselling by Japanese imports in this product sector occurred in 1986, as the domestic industry was increasing its production of DSDD 3.5 inch microdisks. In 1987, underselling by imports from Japan was found consistently in the newer, more profitable HD 3.5 inch microdisks, a sector of the market where significant growth and higher returns are expected. <sup>73/</sup>

The underselling by imports indicates that the pricing of allegedly LTFV imports has contributed to price declines during the period of investigation. Price declines have contributed to the industry's inability to generate the profits needed for expansion, capital expenditures, and continuing product development. The magnitude of these price declines is particularly troublesome in light of sharply increasing demand for 3.5 inch microdisks during the period of investigation. Consequently, we conclude that there is a reasonable indication that allegedly LTFV imports are a cause of material injury to the domestic industry producing 3.5 inch microdisks and media therefor.

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<sup>73/</sup> The Commission investigated over half of the lost sales allegations received. While none of these allegations were confirmed, the purchasers contacted did confirm that imports were often lower priced than domestic product. Report at A-47-A-50.

ADDITIONAL VIEWS OF COMMISSIONER RONALD A. CASS

3.5 inch Microdisks from Japan  
Investigation No. 731-TA-389 (Preliminary)

I concur with the Commission's affirmative determination in this preliminary investigation. As explained in more detail below,<sup>1/</sup> I determine that two domestic industries produce products like those subject to investigation -- the double density microdisk industry and the high density microdisk industry -- and further determine that there is a reasonable indication that these industries are suffering material injury by reason of LTFV imports from Japan. I join the Commission's opinion insofar as it concludes that there is a reasonable indication that returns to the domestic industries may have declined materially relative to what they would have been absent the LTFV sales subject to investigation. Because my analysis of this decision does not in all respects follow that presented in the opinion for the Commission, I offer these additional views on the disposition of this preliminary investigation.

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<sup>1/</sup> Definition of the like products subject to investigation and the industries producing them is discussed in Part II of these Views.

## I. Nature of the Inquiry

### Preliminary Investigations

Preliminary investigations of allegations that products imported into the United States have been sold at less than fair value (LTFV) and are a cause of material injury or a threat thereof to a domestic industry require the Commission to perform three functions. First, the Commission must identify the product or products that are "like" the allegedly LTFV imports and must identify the domestic industry or industries producing those products.<sup>2/</sup> Second, the Commission must assess the effects of LTFV imports on the domestic industry.<sup>3/</sup> Third, the Commission must reach a legal conclusion: is there a reasonable indication that the allegedly LTFV imports have materially injured the domestic industry or threaten material injury to the domestic industry.<sup>4/</sup>

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<sup>2/</sup> See 19 U.S.C. § 1677(4), (10).

<sup>3/</sup> See 19 U.S.C. § 1677(7)(B).

<sup>4/</sup> See 19 U.S.C. § 1673b(a). For the purposes of this preliminary investigation I have analyzed the effects of the alleged LTFV imports on the high density microdisk industry in terms of material injury, not material retardation. However, in any final investigation material retardation may be relevant since the development of high density microdisks is a relatively recent phenomenon.

The disposition of preliminary investigations differs from decision on final investigations principally in the evidentiary standard the Commission applies to its assessment of the effect of LTFV sales on the domestic industry. In final investigations, the Commission simply adopts the conclusion supported by the weight of the evidence. In preliminary investigations, the Commission's practice, specifically approved by the Court of Appeals,<sup>5/</sup> has been to continue investigations of LTFV sales unless persuaded both that the record gathered in the preliminary investigation supports a finding that such injury has not occurred and that the further evidence that would be gathered in a final investigation would not be likely to support a contrary finding. Hence, while the nature of the inquiry in final and preliminary investigations is essentially similar, affirmative preliminary determinations can be reached on a factual record that would not support such a decision at the final stage.

For both preliminary and final investigations, however, all of the judgments reached by the Commission must be informed by an understanding of the purpose served by the antidumping laws implemented in these investigations. That purpose emerges from the statutory definition of the "unfair" practice to be investigated and from the statutory

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<sup>5/</sup> American Lamb Co. v. United States, 785 F.2d 994 (Fed. Cir. 1986).

specification of prerequisites for imposing duties on goods marketed through such an unfair practice.

### The Antidumping Laws: Unfair Practice Defined

Although the first American antidumping law identified the unfair trade practice with a particular reason for dumping, the law currently governing LTFV sales, the Trade Agreements Act of 1979,<sup>6/</sup> describes the unfair practice simply as sale of imported products in the United States<sup>7/</sup> at a price below that charged in the producer's home market.<sup>8/</sup> That statute, which substantially replicates the Antidumping Act of 1921,<sup>9/</sup> does not ask what motivates exporters to engage

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<sup>6/</sup> Pub. L. No. 96-39, Title I, § 101, 93 Stat. 144 (1979).

<sup>7/</sup> Section 1673(1) includes as LTFV imports merchandise that "is being, or is likely to be, sold in the United States . . . ." 19 U.S.C. § 1673(1).

<sup>8/</sup> Dumping may also be found in certain circumstances if the exporter's prices in the United States are below its sales price in a third country's market or if the exporter's prices in the United States are below its production costs. See 19 U.S.C. §§ 1677a, 1677b. Neither of these allegations is made in the instant investigation.

<sup>9/</sup> Pub. L. No. 67-10, Title II, § 201, 42 Stat. 11 (1921). The 1979 Act replaces the 1921 Act as a formal matter, but the 1979 Act reflects an intent to build on and revise prior law.

in LTFV sales (also referred to as "dumping").<sup>10/</sup> Indeed, the initial impetus for passage of the 1921 Act was dissatisfaction with the Antidumping Act of 1916,<sup>11/</sup> which imposed penalties for dumping only if the practice was shown to be predatory.

Application of the earlier law depended on proof that the exporters were attempting to obtain market power in the United States by charging prices so low as to drive competing U.S. firms from the market. In theory, such predation might occur because, although the exporter, too, may be losing money on its current U.S. sales, the excessive returns eventually earned from the exercise of its enhanced market power are expected to exceed losses from dumping. The conditions under which predatory dumping occurs are highly restrictive and the practice -- not to mention proof that it has occurred -- is correspondingly rare.<sup>12/</sup>

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<sup>10/</sup> This does not mean that an understanding of the reasons for dumping is not relevant to analysis of its effects, but it does mean that Congress did not require that any particular motivation for dumping be shown to support an affirmative determination in LTFV investigations nor did Congress believe that effects inconsistent with any supposed purpose for dumping should be ignored.

<sup>11/</sup> Pub. L. No. 64-27, Title VIII, § 800, 39 Stat. 78 (1916).

<sup>12/</sup> The Supreme Court in Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 589 (1986), recognized that "predatory pricing schemes are rarely tried, and even more rarely successful." For predatory pricing to be a plausible  
(continued...)

While the 1916 Act remains in the statute books, it is the later law -- the law first adopted in 1921 and substantially replicated in 1979<sup>13/</sup> -- instead that governs this investigation. In passing the 1921 and 1979 acts, Congress signalled its concern with dumping of any sort, not merely with the restricted case of predation. Under the approach mandated by law since 1921, then, the dumping in itself is an unfair practice for some reason other than its motivation. Understanding dumping law must begin with appreciation of the attribute of this practice that makes it unfair.

#### The Nature and Consequences of Dumping

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<sup>12/</sup>(...continued)

strategy, U.S. firms must have relatively less access to the capital market than the exporting firm(s). Efficient capital markets will ensure that loans are made to cover losses anticipated to be temporary because of the predictable higher prices that will be received later when the exporting firm raises its price. This would permit U.S. firms to weather temporarily lower prices, and thus defeat the predatory scheme. Moreover, the ease of market re-entry may also promise to defeat a predatory scheme, i.e., if firms once driven from the market may re-enter and recommence production when the exporter raises prices, the ability of the exporter to reap monopoly returns will be checked.

<sup>13/</sup> Trade Agreement Act of 1979, Pub. L. No. 96-39, Title I, § 101, 93 Stat. 144 (1979). Title VII was revised in 1984. Trade and Tariff Act of 1984, Pub. L. No. 98-573, Title VI, § 601, 98 Stat. 2948 (1984).



The attribute common to all dumping that supports Congress' conclusion is not difficult to identify. The essential requirement for dumping, of any sort, is that some impediment bars reimportation to the exporting country of products exported to the United States. Without such an impediment, there would be no way to sustain a price difference between the United States and the exporter's home market.<sup>14/</sup> The existence of impediments to importation of products into the foreign markets has obvious effects on consumers in those markets, but it also affects producers and consumers in the United States.

While the magnitude of these effects will vary greatly, the direction of these effects will be the same whenever an impediment to foreign trade allows sale of exports in the United States below the price charged in the producer's home market. In almost all cases, U.S. producers of competing products will be disadvantaged by facing both higher costs of competing in the foreign market and lower returns in the U.S. market. U.S. consumers (whether ultimate consumers or downstream producers who use the subject product as an input), however, benefit from the impediment to trade because they

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<sup>14/</sup> This impediment might be a product of law, custom, or asymmetrical transportation costs (creating substantially higher costs to return of the goods to the exporting country than the costs associated with their transportation to the United States).

will be able to purchase the product in this country at a lower price than would otherwise obtain.

The law authorizing imposition of duties against such LTFV imports reveals awareness of the contradictory effects of dumping on U.S. producers and consumers.<sup>15/</sup> While Congress did not ask the agencies that implement this law to assess ab initio the relative magnitudes of benefits to consumers and burdens to producers, consideration of all these effects doubtless influenced the structure of the law governing antidumping duties. That in large measure explains Congress' decision to limit the occasions for imposition of antidumping duties to instances in which this Commission found that harm to producers exceeded some threshold.<sup>16/</sup>

Similarly, Congress did not authorize a free-form inquiry into the effects on U.S. producers of impediments to competition in foreign markets. Legal impediments constraining competition in foreign markets can be addressed

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<sup>15/</sup> See, e.g., J. Viner, Dumping: A Problem in International Trade 259 (1923), citing S. Rep. 510, 66th Cong., 2d Sess.

<sup>16/</sup> The Trade Agreements Act of 1979 generally approved the Commission's practice under prior law, which required more than de minimis injury, as consistent with the more specific material injury standard. S. Rep. No. 249, 96th Cong., 1st Sess. 87 (1979). See, e.g., Parts for Self-Propelled Bituminous Paving Equipment from Canada, Inv. No. AA1921-166, USITC Pub. 824 at 4-5 (July 1977).

directly through other processes if they can be identified,<sup>17/</sup> although often these impediments will resist ready identification. Congress did not direct this Commission to assess foreign market effects directly; instead, it instructed the Commission to look at the domestic markets in which U.S. producers compete with the foreign products and to assess the impact on U.S. producers of dumping in these markets.<sup>18/</sup>

In limiting our attention to effects on producers in the domestic market, however, the statute does not reflect a purpose to insulate the domestic market from foreign competition; were that Congress' goal, a far different statute would have been drafted.<sup>19/</sup> The goal of antidumping law is not to close domestic markets but to allow domestic markets to operate as though the impediment to international trade that dumping requires did not exist.<sup>20/</sup> All of the functions

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<sup>17/</sup> Section 301 of the Trade Act of 1974 gives the President broad authority to retaliate against "unjustifiable" or "unreasonable" acts, policies, or practices of a foreign country affecting U.S. commerce. 19 U.S.C. § 2411. Administration of section 301 has been delegated to the Office of the United States Trade Representative, although final authority remains with the President.

<sup>18/</sup> 19 U.S.C. § 1673.

<sup>19/</sup> In particular, such a purpose would make this Commission's inquiry into injury, which the statute not only commands but directs in great detail, mere surplusage.

<sup>20/</sup> For example, 19 U.S.C. § 1673(2) provides as a remedy from injurious dumping a duty "in an amount equal to the amount by which the foreign market value exceeds the United  
(continued...)"

assigned to the Commission in these investigations must be performed with this goal in mind.

## II. Like Product and Domestic Industry

### Purpose: Circumscribing the Inquiry

In examining the effects of LTFV imports on domestic producers, the Commission is directed to consider a particular subset of domestic producers, those producing a "like product."<sup>21/</sup> The industry that produces the product most like the subject imports will be comprised of those domestic producers whose product competes most directly with the LTFV imports<sup>22/</sup> and whose returns will be most affected by the LTFV imports.

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<sup>20/</sup>(...continued)

States price for the merchandise." If insulation from foreign competition were the desired goal, exclusion would be a more appropriate remedy.

<sup>21/</sup> 19 U.S.C. § 1677(4), (10).

<sup>22/</sup> The domestic industry in a Title VII investigation is typically narrower in scope than in a section 201 investigation. The domestic industry in a 201 investigation is defined as those producers of a product "like or directly competitive with" the imported article. 19 U.S.C. § 2251 (b)(1). The use of "like, or in the absence of like, most similar in characteristics and uses with" the imported article, I believe, reflects congressional intent for the Commission to focus only on the producers of the most directly competitive products in Title VII investigations.

This is the purpose of the definition of the industry to be examined in terms of production of a like product: to identify the producers whose goods are most clearly competitive with and therefore most affected by imports. That purpose is also reflected in the statutory instruction to the Commission when an industry producing a like product cannot be found. If U.S. producers do not produce an article that competes sufficiently directly with the LTFV imports to be called "like" the imports, the Commission is directed to look at the effects of LTFV imports on the group of producers whose products are most similar to the imports.<sup>23/</sup> In the absence of an industry whose product clearly competes directly with the subject imports, this will define the industry whose product competes most directly with the imports.

The industry examined usually will not include all the producers who are affected by LTFV imports. To some extent, all U.S. producers will be affected by LTFV imports. The effects on other producers, however, will not always be

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<sup>23/</sup> The statute actually asks the Commission to examine the industry producing a product "like, or in the absence of like, most similar in characteristics and uses with" the imports under investigation. 19 U.S.C. § 1677(4), (10). The Commission traditionally has not distinguished between these categories, and, instead, has sought to define the "like product" by reference to the characteristics and uses of the imports and domestic products.

negative,<sup>24/</sup> and the extent of the effects diminishes as products compete less directly with the LTFV goods.

Circumscription of the ambit of our investigation facilitates the Commission's timely exercise of authority<sup>25/</sup> but does not change the purpose of our inquiry. A general inquiry into the effects of a given group of imports on all American producers (much less on the economy as a whole) would present enormous difficulties, especially under the deadlines imposed on these investigations. Congress' decision to limit Commission's charge to examining the effects of given LTFV imports on the segment of the domestic industry most affected by them gives our investigations a more manageable scope. Moreover, the more circumscribed inquiry provides sufficient basis for the decision with which Congress was concerned: if LTFV imports do not materially injure the producers comprising

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<sup>24/</sup> Downstream producers who use the dumped product as an input benefit from paying the lower LTFV price. Producers of all products, including noncompeting products, also receive some benefits because the lower price increases the purchasing power of income earned through sales (although reduced demand for import-competing products will generally swamp this effect for producers of such products). Producers of products complementary to the LTFV imports also benefit as the lower price induces greater demand for their products.

<sup>25/</sup> It may be noteworthy that the definition of industry in terms of the like product was introduced into the statute in 1979 at the same time Congress imposed stricter time constraints on the ITC's decisions in antidumping cases. Commission practice before this time, however, generally was consistent with the 1979 definition. See S. Rep. 249, 96th Cong., 1st Sess. 82-90 (1979).

the most affected industry, then it seems safe to assume that such imports to not have an adverse impact on the economy as a whole.

#### Defining Like Products: The Traditional Approach

The Commission has articulated a test for definition of like products that examines five aspects of the potentially like products: (1) physical characteristics and uses, (2) interchangeability, (3) channels of distribution, (4) common manufacturing facilities and production employees, and (5) customer or producer perceptions.<sup>26/</sup> In addition, although not explicitly incorporated into the Commission's like product test, Commission decisions frequently have considered the similarity or dissimilarity of prices for imports and putative like products.<sup>27/</sup> Although the Commission never has articulated a unifying, principled basis for combination of these factors into a like product definition, all of these factors provide information relevant to assessment of the

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<sup>26/</sup> See, e.g., Fabric and Expanded Neoprene Laminate from Taiwan, Inv. No. 731-TA-371 (Final) USITC Pub. 2032 at 4 and n.5 (November 1987).

<sup>27/</sup> See, e.g., Stainless Steel Pipe and Tube from Sweden, Inv. No. 731-TA-354 (Final) USITC Pub. 2033 at 5 and n.11 (November 1987); Certain Seamless Steel Pipe and Tubes from Japan, Inv. No. 731-TA-87 (Final) USITC Pub. 1347 at 6 (February 1983); Certain Bimetallic Cylinders from Japan, Inv. No. 731-TA-383 (Preliminary) USITC Pub. 2017 at 7 (March 1987).

degree of competition between the imports subject to investigation and the product that might be defined as like the imports.

If these traditional factors seem sensible as sources of rough information on the product that most directly competes with subject imports, they nonetheless have been subject to criticism. Plainly, these factors leave a judgment to be made in each case: the exact scope of the like product category still must be determined, and the factors seldom dictate any definite boundary lines. The typical case does not involve a single, discrete product such as white carnations of a given size, shape, freshness, stem-length, and so on, that is produced in the U.S. and also imported, and that does not compete fairly directly with any other product. Rather, the more likely case involves comparison of a group of imported products that differ in various attributes and a spectrum of more or less competitive U.S. products that also differ in various attributes. The question then becomes whether white and pink carnations of certain qualities are like only white and pink carnations of similar qualities, like all white and pink carnations, like all carnations, like all flowers with qualities essentially similar to the subject imports, or like all domestic cut flowers.

In making the judgment among these possibilities, the Commission has not given the various factors it considers a



lexical priority, much less attempted any formulation of its judgment in terms of cardinal (numerical) weights for these factors. The Commission instead has selected among the possible like product definitions ad hoc. Perhaps for that reason, as commentators have noted, it is not difficult to find examples of seemingly inconsistent results in the Commission's like product determinations, even within a fairly short time.<sup>28/</sup>

#### Defining Like Products: The Formulaic Approach

Two Commissioners, in order to provide increased clarity and consistency, recently proposed a formulaic approach to like product decisions.<sup>29/</sup> They proposed that the definition of like product be framed in terms of the elasticity of substitution and of the cross-price-elasticities of supply. The Commissioners argued that these concepts largely recapitulate the considerations that traditionally have been

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<sup>28/</sup> See, e.g., N.D. Palmeter, Injury Determinations in Antidumping and Countervailing Duty Cases--A Commentary on U.S. Practice, 21 Journal of World Trade Law 123, 131 (1987); Note, Economically Meaningful Markets: An Alternative Approach to Defining "Like Product" and "Domestic Industry" Under the Trade Agreements Act of 1979, 73 Va. L. Rev. 1459 (1987).

<sup>29/</sup> Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Preliminary) USITC Pub. 2071 at 21-34 (March 1988) (Additional Views of Chairman Liebeler and Vice Chairman Brunsdale).

used in Commission decisions but allow the considerations to be framed numerically, hence more precisely. Nonetheless, my colleagues suggested the use of these elasticity concepts only as complements to the factors usually considered by the Commission and not as substitutes for them.

Although I am sympathetic to the enterprise proposed, I am not certain that this proposal accurately describes the relationship between the suggested criteria and the criteria historically used by the Commission<sup>30/</sup> nor am I certain that these are the technical tools that best describe the inquiry in which the Commission should be engaged.<sup>31/</sup> I also am

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<sup>30/</sup> For example, the opinion of these Commissioners states that "[w]hen we ask 'How interchangeable are the imported product and a possible like domestic product?', it is akin to asking 'How high is the elasticity of substitution?'" Id. at 23 (footnote omitted). Traditionally, interchangeability has been used by the Commission to assess physical or technical compatibility, among domestic products, while examination of product uses has been the heading under which similarity of function has been explored. See, e.g., Color Picture Tubes from Canada, Japan, the Republic of Korea, and Singapore, Inv. Nos. 731-TA- 370-373 (Preliminary) USITC Pub. 1937 at 8-9 (December 1987). Elasticity of substitution will be positively correlated with both interchangeability and similarity of function. It is not, however, fully congruent with either concept.

<sup>31/</sup> For reasons developed infra, I believe that the Commission's traditional formulation of the like product inquiry describes the appropriate focus for the Commission. For technical reasons, the translation of this inquiry into economic terms would be more usefully framed in terms principally of cross-price- elasticities of demand (instead of the elasticity of substitution) and subordinately, in terms of cross-price-elasticities of supply. Empirical methods available to economists better allow direct estimation of the  
(continued...)

skeptical that sufficient information can be obtained, particularly in the context of a preliminary investigation,<sup>32/</sup> to allow numerical values to be fixed with a degree of confidence appropriate to our task. Of course, at some level of generality, the specification of numerical ranges can be performed with sufficient confidence that errors in the range will affect the precise boundary lines without altering the information by an order of magnitude. When ranges of this generality are used, however, the difference between quantitative and qualitative description becomes quite small, perhaps vanishingly small.

Moreover, even if meaningful, numerical estimates within relatively compact ranges were available to us, I doubt that these would greatly improve the clarity and predictability of our like product determinations. Simply put, the use of the proffered numerical measures would not eliminate difficulties

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<sup>31/</sup>(...continued)

cross-price-elasticity of demand than of the elasticity of substitution. Estimation of the latter requires additional knowledge of the elasticity of demand for the aggregated product category of which the unfairly traded product and the domestic like product comprise two components. Since the ordinal relationships among cross-price-elasticities of demand and among elasticities of substitution will always correspond (at least in concept), it is preferable to form the inquiry in terms of the measure that requires the least information to estimate.

<sup>32/</sup> The Commission must make a preliminary determination within 45 days of the receipt of a petition. 19 U.S.C. § 1673b(a).

now faced at both the beginning and the end of like product analysis. One necessary predicate for the calculations my colleagues suggest is a definition of the product categories for which elasticities of substitution and cross-elasticities of supply will be calculated. This definitional process requires attention to the factors suggested in the Commission's traditional analysis, which may be one reason that my colleagues have not proposed wholesale replacement of that analysis. Further, the new analysis would require application of the same sort of line-drawing judgment that, in large part, has led to inconsistencies in our like product definitions.<sup>33/</sup> Commissioners would be called upon to decide where along the continuum of elasticities for various product classes to draw the line separating those that constitute a single like product from those that constitute discrete products. Over time, this line-drawing process might produce a bright-line test for like product definition, but in the near term at least it cannot avoid the sort of judgments now presented in different guise. Finally, the use of elasticity measures for both supply and demand relationships, while faithful to the Commission's traditional approach, replicates yet another source of difficult judgment-calls: if the supply

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<sup>33/</sup> Palmeter, supra note 28, at 131.

and demand relationships suggest different like product definitions, which should control?

Defining Like Products: Tradition and Competition

I am unpersuaded that my colleagues' suggested new approach is preferable to the Commission's traditional approach to like product analysis, but I do not disagree with the essential insight that informs their suggestion. At bottom, the suggestion rests on the premise that the Commission's like product analysis must be rooted in attention to the nature of the markets for closely competing domestic products and the markets for those products' production factors. As the legislative history of the 1979 Act reveals, the like product definition should include the articles that are most directly competitive with and most directly affected by the LTFV imports and should neither include articles that compete significantly less closely with the subject imports nor exclude articles that, although distinguishable, compete very closely with those imports.<sup>34/</sup>

The factors traditionally used by the Commission provide information necessary to exactly these judgments. This information can be organized into two categories: information

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<sup>34/</sup> S. Rep. 249, 96th Cong., 1st Sess. 90-91 (1979).

about consuming markets and information about producing markets.

The physical characteristics and uses of products, their interchangeability, their channels of distribution, and customer perceptions of their similarity or dissimilarity all provide information about the market for the products.

Interchangeability and high degrees of similarity in characteristics and uses and in channels of distribution indicate a likelihood that products compete closely. This should be reflected in customer perceptions of their similarity, which in turn should be reflected in similar prices for items of comparable quality.

The information gleaned from inquiry into the nature of the manufacturing facilities and employees for various articles provides information about the relationship between supply of the various products. Greater use of common facilities and employees suggests an increased likelihood that production of the particular articles at issue takes place in a single supply market.

I believe the inquiries that inform the Commission's analysis, both traditionally and in this investigation, are, thus, the proper inquiries under the statute, but I think the Commission has not always drawn the proper conclusion from them. The principal source of my disagreement involves the relation of the inquiries into consumer demand and producer

supply. The Commission has not followed a clear path in relating these inquiries one to the other.<sup>35/</sup> I believe that in the usual case the proper test for like products should require substantial coincidence of both supply and demand among domestic products.<sup>36/</sup> That is, the domestic like product, in addition to satisfying the requirement that they compete closely with subject imports, should comprise essentially one market for domestic consumers and be produced by one market for domestic producers. These considerations should define the product class that competes most directly with LTFV imports. Of course, our investigation will not always be limited to a single product class: where the subject imports compete in distinct markets for American consumers, our investigation appropriately may cover sufficient numbers of like products to correspond to the distinct import products under investigation.<sup>37/</sup>

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<sup>35/</sup> See Palmeter, supra note 28, at 131.

<sup>36/</sup> It is not necessary under the statute that domestic like products and imports compete in a single market, and indeed that very often will not be the case.

<sup>37/</sup> See, e.g., Certain Welded Carbon Steel Pipes and Tubes from the Philippines, and Singapore, Inv. Nos. 731-TA-293, 294, and 296, USITC Pub. 1907 (November 1986); Porcelain-on-Steel Cooking Ware from Mexico, the People's Republic of China, and Taiwan, Inv. Nos. 731-TA-297-299, USITC Pub. 1911 (November 1986); Operators for Jalousie and Awning Windows from El Salvador, Inv. No. 731-TA-319, USITC Pub. 1934 (January 1987); Certain Fresh Cut Flowers from Canada, Chile, Columbia, Costa Rica, Ecuador, Israel, and the Netherlands, Inv. Nos. 731-TA-327-331, USITC Pub. 1956 (March 1987).

### Like Products in 3.5 Inch Microdisks

Two different like product issues are presented in this investigation. First, how do markets for microdisks differ with the different densities and configurations of microdisks (high density, double-sided/double density, single-sided/double density)? Second, how do markets for finished microdisks differ from markets for the media used in microdisks? Petitioners argue that the differences by density, configuration, and finishing state are not sufficient to create more than one like product category.<sup>38/</sup> Various respondents urge us to find as many as four separate like products.<sup>39/</sup> For the reasons given below, I conclude that there are two separate like products subject to investigation.

### Like Product: Different Densities of Microdisks

The argument over the treatment of different densities of 3.5 inch microdisks illustrates the importance of a clear rule for resolution of like product disputes when the consumption and supply markets for products reveal disparate degrees of

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<sup>38/</sup> Post-Conference Brief of Verbatim at 4-13.

<sup>39/</sup> See, e.g., Post-Conference Brief of Fuji at 2-3; Post-Conference Brief of C.Itoh/C.I.Tech at 3.



congruence. In this investigation, the supply of high density and double density disks appears to derive from markets exhibiting a high degree of overlap, but the markets for consumption of these disks appears to be largely separate.

As the Commission's opinion indicates, the evidence reveals similarities in the facilities and employees used to produce 3.5 inch high density or double density microdisks (single or double sided) and an even more significant relationship between the abilities of firms to produce high density microdisks and double density microdisks with the same facilities and employees.<sup>40/</sup> Significantly, \* \* \* <sup>41/</sup> That is not to say that the facilities appropriate to production of these two types of microdisk are identical. It is possible to produce double density microdisks in some facilities that are not clean enough to produce high density diskettes.<sup>42/</sup> Given the similarities in facilities and employees used to produce these products, however, it appears that a change in price of either the high density or double density microdisks could induce rapid production expansion at

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<sup>40/</sup> Post-Conference Brief of Verbatim at 12 and n.17.

<sup>41/</sup> \* \* \* .

<sup>42/</sup> Post-Conference Brief of Fuji at 19-20.

the expense of production of the other product.<sup>43/</sup> This suggests that the production sides of these markets are sufficiently closely related as to constitute, for practical purposes, a single market.

A similarly close relationship, however, is not evident in the market for consumption of microdisks. Evidence on the record indicates that use of double density microdisks in high density drives is problematic.<sup>44/</sup> High density microdisks formatted for high density drives cannot be used either reliably or efficiently in double density drives.<sup>45/</sup> While high density disks can be used in a double density drive if formatted for that drive, this process can cause errors in information transmission.<sup>46/</sup> In addition, it is unlikely, given the substantially higher cost of high density microdisks, that any significant number of consumers would purchase a high density microdisk and format it in a double

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<sup>43/</sup> This sensitivity on the supply side to changes in the relative prices of high density and double density microdisks does not, of course, suggest that the demand for these microdisks is highly sensitive to price. See discussion below.

<sup>44/</sup> Although some machines with high density drives can use double density disks, most high density drive machines can only read, not write on, double density disks. See Post-Conference Brief of Sony at 18; Post-Conference Brief of Fuji at 18-19.

<sup>45/</sup> Report at A-4.

<sup>46/</sup> Report at A-4.

density drive, thereby using only half of the disk's data storage capability.<sup>47/</sup>

The distinct uses of the microdisks are evident in consumers' purchasing decisions. It is clear from the record that double density microdisks are generally purchased by owners of double density disk drives and high density microdisks are purchased by owners of high density disk drives; that is, in each instance by owners of drives specifically made to accommodate the corresponding diskette. Nor would purchasing habits be likely to change much in response to changes in the relative prices of these types of microdisk. Two factors are of particular importance here. First, there currently is a significant existing stock of each type of disk drive.<sup>48/</sup> Second, the cost of a microdisk is very small relative to the cost of acquiring a floppy disk drive. After sufficient time, of course, end users might adjust their purchases of disk drives in response to a change in the relative price of diskettes, in turn shifting some consumption from one type of microdisk to the other. But a change in price of either type of diskette would be quite

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<sup>47/</sup> Post-Conference Brief of Sony at 18, n.26; Report at A-4.

<sup>48/</sup> The existence of a large stock of high density disk drives can reasonably be inferred from the apparent consumption figures for high density and double density disk drives, although there are relatively many more double density disk drives than high density disk drives.

unlikely to induce much change by consumers from one type to the other type and would be extremely unlikely to effect such a change in the near term.

In contrast, single-sided and double-sided double density microdisks not only are produced in identical facilities and with common employees but also are much more similar from consumers' perspective and more highly substitutable for one another. Single-sided microdisks may be used in disk drives designed to accept double-sided microdisks without losing efficiency: none of the manufactured data storage capacity of the single-sided diskette is wasted when it is used in a double-sided double density floppy drive.<sup>49/</sup> Double-sided double density microdisks can be used in drives designed for single-sided microdisks. I conclude, therefore, that while high density microdisks and double density microdisks (both of which are within the scope of the LTFV import investigation defined by the Department of Commerce) are separate like products, single-sided and double-sided double density microdisks constitute a single like product.

Like Product: Components and Finished Products

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<sup>49/</sup> Report at A-3, n. 1.

The second substantial like product question raised in this investigation is whether the media for microdisks constitute separate like products from the finished disks. The Commission long has recognized that special considerations must be brought to analysis of like product questions when the candidates for like product treatment are a finished product and one or more of its components. In such cases, the Commission has looked at least six additional factors: whether the component is dedicated to use in the finished product, the amount of further processing necessary to conversion of the component into the finished product, the cost of such processing and value added, whether the article at an earlier stage of production embodies or imparts to the finished article an essential characteristic or function, whether there are independent markets for the finished and unfinished articles, and the degree of interchangeability of the articles at different stages of production.<sup>50/</sup>

Again, I believe that the Commission's traditional tests elicit information that is essential to answering the question put by the statute, but I do not think that the Commission has sufficiently emphasized what I believe is the most important analytic criterion. I believe that the critical determinant

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<sup>50/</sup> See, e.g., Certain Forged Steel Crankshafts from the Republic of Germany and the United Kingdom, Inv. Nos. 731-TA-351, 353 (Final) USITC Pub. 2014 (September 1987).

for resolution of this issue in many cases should be the degree of independence of the markets for the component and the finished product, as this factor will reflect the degree to which the effect of LTFV imports on the products will be similar. The greater the interdependence of the markets for the component and the finished product, the greater the congruence of imports' effects on them.

Like Product: Coated Media and Finished Products

Applying this approach, I concur with the Commission's determination that the coated media and the finished product are a single like product. This judgment is not free from question. There are several factors indicating that the coated media and the finished product should be separate like products: there are different channels of distribution,<sup>51/</sup> the two articles look different, there are different production technologies,<sup>52/</sup> the finishing process is costly and adds value to the finished product,<sup>53/</sup> and the articles are bought by different consumers (coated media by firms that participate

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<sup>51/</sup> Report at A-11-A-13.

<sup>52/</sup> Id. at A-2-A-5.

<sup>53/</sup> Id. at A-5 and A-14-A-15; Post-Conference Brief of Verbatim at 8; Post-Conference Brief of Fuji at 7.

directly in production of the finished disks, and finished disks by distributors and end users).

Although these factors might support a conclusion that the media and finished disks are separate, I believe that separation of these articles could make it more difficult to accomplish our statutory task -- evaluation of the effect of LTFV imports on the most affected American industry. In my view, the fact of greatest significance to resolution of the treatment of media and finished disks is that the media have no use apart from production of finished disks. All the media produced go into the production of finished microdisks. Concomitantly, the media is an essential part of the finished microdisk: a finished microdisk cannot be produced without the coated media.<sup>54/</sup> Therefore, the demand for the coated media is completely derived from the demand for the finished product. Inquiry into the effect of LTFV imports on the most directly affected segments of the domestic economy should incorporate examination of such products. Thus, I conclude that media and finished disks are part of a single like product.

Like Products and Domestic Industries: Conclusions.

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<sup>54/</sup> Report at A-4-A-5, A-11.

I conclude that there are two like products: high density 3.5 inch microdisks (including finished disks and media therefor) and double density microdisks (including finished single-sided and double-sided disks and media therefor). \* \*  
 \* producing high density disks and media should constitute one domestic industry. The firms producing double density microdisks and/or media for these disks should constitute the second domestic industry for this investigation.

I join the Commission's disposition of the issue of related parties in defining the domestic industry. I also join the Commission's disposition of the standing question except insofar as it addresses the question of petitioner's standing to complain of injury to producers of high density microdisks and media therefor. Having found only one like product and only one domestic industry, the Commission has no cause to reach the standing issue raised by respondents. Because I find two like products and two industries, I believe a serious question regarding petitioner's standing has been raised.

I do not, however, believe that we are in a position to resolve the standing question at this juncture. The Department of Commerce has not finally determined the products that might be subject to antidumping duties. Further, \* \*  
 \*. I believe that the Department should carefully consider whether high density microdisks and media therefor should be



within the scope of any final investigation, but I do not believe it would be proper for the Commission to conclude at this time that injury to the industry producing this product lies outside the ambit of the current investigation.

### III. Injury By Reason of LTFV Imports

After identifying the industry (or, as here, industries) whose products are most like the imports subject to investigation and most likely to be affected by them, the Commission next must assess the effects of the LTFV imports on those domestic industries. In other investigations, I have indicated my disagreement with the analytic framework presently used by the Commission to perform this assessment.<sup>55/</sup> It may be useful to elaborate the basis for that disagreement and the analytic framework I believe appropriate to analysis of injury from LTFV imports before addressing the facts of the instant investigation.

#### Bifurcated and Unitary Approaches: Statutory Construction

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<sup>55/</sup> See Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Preliminary) USITC Pub. 2071 (March 1988) (Additional Views of Commissioner Cass); Certain Stainless Steel Butt-Weld Pipe Fittings from Japan, Inv. No. 731-TA-376 (Final) USITC Pub. 2067 (March 1988) (Additional Views of Commissioner Cass).

In the opinion for the Commission in this investigation, as in many recent investigations, the Commission has divided analysis of the injury caused by LTFV imports into two separate inquiries. First, the Commission asks whether the domestic industry has suffered material injury. Second, having found such injury, the Commission attempts to ascertain whether the unfairly traded imports were a cause of that injury.<sup>56/</sup> This approach in effect asks whether the domestic industry is doing worse today than at some earlier period and then, if that question is answered in the affirmative, seeks to understand why.

I believe that this bifurcated approach is less faithful to the governing provisions of Title VII of the Tariff Act of 1930<sup>57/</sup> (amended most significantly by the Trade Agreements Act of 1979) than is unitary treatment of the questions now separated out as injury and causation. A unitary approach would not ask whether the domestic industry is performing well in comparison to other industries or in comparison to other time periods. Instead, it would compare the domestic industry's actual performance with what the domestic industry's performance would have been in the absence of unfairly traded imports during the period of investigation.

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<sup>56/</sup> See, e.g., Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Preliminary) USITC Pub. 2071 at 15-20 (March 1988).

<sup>57/</sup> Pub. L. No. 71-361, Title VII, § 701, ch. 497 (1930).

This approach minimizes the risk that, contrary to the intent evident in Title VII, a negative injury finding would be predicated on evidence that an industry was improving relative to some earlier period or is "healthy" (by whatever measure) compared to other domestic industries, or that an affirmative finding would be predicated solely on evidence that the industry's fortunes were in decline. The bifurcated approach to Title VII cases increases the first risk in particular, a risk with which the Congress has been concerned. Thus, for example, a Senate Report considering changes in our international obligations that might conflict with United States antidumping law explicitly states that: "An industry which is prospering can be injured by dumped imports just as surely as one which is foundering although the same degree of dumping would have relatively different impacts depending upon the economic health of the industry."<sup>58/</sup> Subsequently, in revising and reenacting the antidumping law under the Trade Agreements Act of 1979,<sup>59/</sup> the Senate reaffirmed its commitment to this approach.<sup>60/</sup> The Court of International

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<sup>58/</sup> S. Rep. No. 1385, 90th Cong., 2d Sess. pt. 2, at 11 (1968), reprinted in 1968 U.S. Code Cong. & Admin. News 4548-49.

<sup>59/</sup> Pub. L. No. 96-39, Title I, § 101, 93 Stat. 144 (1979).

<sup>60/</sup> S. Rep. No. 249, 96th Cong., 1st Sess. 87 (1979).

Trade recently has criticized the Commission for departing from this understanding:

[T]he ITC should not be engaged in a determination of whether an industry is "healthy." A "healthy" industry can be experiencing injury from importations and an "unhealthy" industry can be unaffected by importations. The purpose of the ITC's investigation is to determine whether imports are a cause of any effect on an industry which would amount to "material injury."61/

The text of the statute reinforces this reading of its intent. Unlike the statutory language under section 201, the provisions of the Act dealing with LTFV sales do not separately describe elements relevant to the determination of injury and elements relevant to the causation determination.62/

Title VII does contain a section labelled simply "Material Injury."63/ The text of this provision, however, makes clear that while the Congress anticipated that the Commission might separately evaluate the materiality of injury,64/ but it did not contemplate an inquiry into the industry's fortunes apart from the effects of the LTFV

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61/ Republic Steel Corp. v. United States, 591 F. Supp. 640, 649 (CIT 1984), reh'g denied, 9 CIT 100 (1985), dismissed (Order of August 13, 1985).

62/ Compare 19 U.S.C. § 2251(b)(2)(A) & (C) with 19 U.S.C. § 1677(7).

63/ 19 U.S.C. § 1677(7).

64/ 19 U.S.C. § 1677(7)(A).

imports. The Commission is told that, in assessing the existence of material injury, it must consider the volume of subject imports, the effect of those imports on prices in the United States for like products, and the impact of these imports on domestic production of like products.<sup>65/</sup> Such specifically enumerated factors clearly relate the condition of the industry to its probable condition if it did not face unfairly traded imports. Although these factors appear under the heading of material injury, the statute contains no separate heading for causation and no separate definition of factors relevant only to causation. The simplified rendering of "material injury by reason of unfair imports" as just "material injury" in the Act's headings is a sensible convenience; it does not reflect an intention that the Commission separately assess the condition of the domestic industry relative to its prior performance before turning to the impact of LTFV imports.

Additionally, the statute provides that, in its material injury analysis, the Commission is to consider whether the volume of imports, or any increase in that volume, either in absolute terms or relative to production and consumption in the United States is significant.<sup>66/</sup> Those same factors are

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<sup>65/</sup> 19 U.S.C. § 1677(7)(B).

<sup>66/</sup> 19 U.S.C. § 1677(7)(C)(i).

listed as causal factors in section 201.67/ The combination of factors relating to the condition of the industry with factors relating to the impact of imports under the single definition of "material injury" suggests that Congress contemplated a unitary approach to the questions of injury and causation. Thus, I believe the text, purpose, and history of the Act are fully compatible with a unitary approach to the assessment of injury caused by LTFV imports.

Bifurcated and Unitary Approaches: Commission Practice,  
Judicial Precedent, and Legislative Attention

Despite the consistency of the text and history of Title VII with a unified analysis of the effects of LTFV imports on domestic industry, it has been recent Commission practice to bifurcate the analysis of the condition of the domestic industry and the effect of unfairly traded imports on that industry. I would not lightly disregard Commission practice if the Commission had a long history of consistent adherence to such an approach, if there were judicial precedent binding the Commission to such an approach, or if the legislative history of congressional enactments subsequent to Commission decisions taking this approach indicated a congressional intent that subsequent legislation, although silent on this

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67/ 19 U.S.C. § 2251(b) (1) (C).

matter, be construed as confirmation of the bifurcated approach to decisions under Title VII. None of these is the case, although, as discussed below, both Commission practice and judicial precedent suggest that the bifurcated approach has been accepted by this Commission and by the Court of International Trade as consistent with, though not mandated by, the Act.

Following passage of the Trade Agreements Act of 1979, early Commission decisions in Title VII investigations did not systematically follow a bifurcated framework for analyzing injury and causation. Instead injury and causation often were combined under the heading "Material injury by reason of LTFV imports."<sup>68/</sup> There was no separate section labelled "Condition of the industry" in which a conclusion was reached regarding material injury by itself.

In 1980, in Sugar and Sirups from Canada,<sup>69/</sup> a minority of the Commission separately considered injury and causation. This minority consisted of Commissioner Moore and Commissioner Stern (who would later forcefully argue that bifurcation was inappropriate). The majority, however, dealt

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<sup>68/</sup> See, e.g., Spun Acrylic Yarn from Japan and Italy, Inv. Nos. 731-TA-1 and 2, USITC Pub. 1046 (March 1980).

<sup>69/</sup> Inv. No. 731-TA-3, USITC Pub. 1047 at 15-17 (March 1980).

with injury and causation as an integrated inquiry.<sup>70/</sup> Between 1980 and 1983, Commission opinions generally contained three subsections to the "Material injury by reason of LTFV imports" section of the opinion, corresponding to the principal statutory criteria for analysis of this issue.<sup>71/</sup> Beginning in 1983, Commission opinions began to incorporate a section entitled "Condition of the industry." Those decisions, however, for some time continued the integrated analysis of injury and causation; the condition of the industry section merely contained a factual discussion of the performance of the domestic industry without reaching any conclusion as to material injury and without discussing imports at all.<sup>72/</sup>

Thus, the Commission's practices until relatively recently do not establish a consistent pattern of adherence to

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<sup>70/</sup> Id. at 8-12.

<sup>71/</sup> See 19 U.S.C. § 1677(7)(B)(i)-(iii); see, e.g., Unrefined Montan Wax from East German, Inv. No. 731-TA-30 USITC Pub. 1180 (August 1981); Strontium Nitrate From Italy, Inv. No. 731-TA-33, USITC Pub. 1155 (June 1981); Certain Amplifier Assemblies and Parts Thereof From Japan, Inv. No. 731-TA-48, USITC Pub. 1266 (July 1982).

<sup>72/</sup> See, e.g., Stainless Steel Sheet and Strip from the Federal Republic of Germany and France and Stainless Steel Strip from the United Kingdom, Inv. Nos. 731-TA-92 and 731-TA-95, USITC Pub. 1391 (June 1983); Nitrocellulose from France, Inv. No. 731-TA-96, USITC Pub. 1409 (July 1983); Cotton Shop Towels from the People's Republic of China, Inv. No. 731-TA-103, USITC Pub. 1431 (September 1983).



a bifurcated approach. Moreover, in cases where the threat of injury is important, the Commission's practice has been, and continues to be, to inquire whether the industry is likely to suffer material injury as a consequence of unfairly traded imports, conflating the "injury" and "causation" steps that are separated in examining current and past effects.

Nor is the bifurcation of these issues commanded by judicial precedent. The Commission's bifurcated analysis was, however, approved by the Court of International Trade in American Spring Wire Corp. v. United States.<sup>73/</sup> The Court stated that the "Commission must make an affirmative finding only when it finds both (1) present material injury . . . and (2) that the material injury is 'by reason of' the subject imports."<sup>74/</sup> While this statement has been relied on as support for the bifurcated approach, the posture in which the case was decided and a reading of the full opinion in that case suggest that the court did not read the Act as requiring a separate analysis of injury and causation issues. The Commission in the various PC Strand determinations reviewed in American Spring Wire had declared that "[e]ven assuming that this injury meets the statutory standard of 'material injury,' our analysis of the effects of imports of PC strand from

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<sup>73/</sup> 590 F. Supp. 1273 (CIT 1984), aff'd sub nom. Armco, Inc. v. United States, 760 F.2d 249 (Fed. Cir. 1985).

<sup>74/</sup> 590 F. Supp. at 1276.

France during that six month period demonstrates that any such injury is not by reason of the subject imports."<sup>75/</sup> On appeal of these determinations to the Court of International Trade, petitioners argued that the Commission's decision was not supported by substantial evidence because the Commission had suggested that "material injury" had been shown on the facts of the case; given that finding, petitioners urged, Title VII requires an affirmative determination. Counsel for the Commission argued that the statute required, in addition to the existence of injury, a causal link to the unfairly traded imports. Counsel for the Commission then argued that the Commission implicitly had determined that no material injury existed; therefore there was no need to consider causation other than in the alternative. Further, counsel insisted that the Commission found that causation was lacking.

The court in American Spring Wire accepted the argument that both material injury and causation need to be present for an affirmative determination, but it did not suggest that they need to be considered in the disjunctive. The court agreed that the statute requires a causal connection between the

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<sup>75/</sup> Prestressed Concrete Steel Wire Strand from France, 701-TA-153 (Final), USITC Publication 1325 at 6 (1982) [footnote omitted]; see also Prestressed Concrete Steel Wire Strand from Brazil, Inv. No. 701-TA-152, USITC Pub. 1358 at 6 (March 1983); Prestressed Concrete Steel Wire Strand from the United Kingdom, Inv. No. 731-TA-89, USITC Pub. 1343 at 6 (Feb. 1983); Prestressed Concrete Steel Wire Strand from Spain, Inv. No. 701-TA-164, USITC Pub. 1281 at 6 (August 1982).

injury to the domestic industry and the imports subject to investigation, and it found that the Commission implicitly had determined that the domestic industry was not materially injured.<sup>76/</sup> The court simply pointed out that the statutory language "injury by reason of less than fair value imports" requires not only that an industry be suffering some harm, such as might be claimed by any industry in declining financial health, but also that LTFV imports be a cause of harm. Far from commanding the Commission to bifurcate its analysis, this decision appears more consistent with a unified approach, which avoids the potential error alleged by plaintiff in American Spring Wire.

The judicial precedents, like the Commission's prior practice, thus, at best allow the Commission to construe the statute as authorizing a separate inquiry into injury and, hence, a separate injury showing. The precedents do not require the Commission to follow this approach and do not indicate that, if we chose a different approach, the courts would find our decisions in conflict with the Tariff Act.

The final possibility that might bind us to use a bifurcated approach is that the Congress and President, through legislation amending the Tariff Act, implicitly approved the Commission's use of a bifurcated approach and

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<sup>76/</sup> 590 F. Supp. at 277.

disapproved a unified approach. There is, however, no indication whatsoever of such an intent in the only substantive statutory amendment passed since the Trade Agreements Act of 1979 put in place the language that now governs disposition of investigations under Title VII.<sup>77/</sup>

Hence, I find that none of the various authoritative legal sources that should guide our decisions precludes a unitary analysis of the effects of LTFV imports. I turn next to organization of that analysis.

#### Statutory Framework

The framework for analysis of the effects of LTFV imports is spelled out in Title VII of the Tariff Act. The statute directs the Commission to consider sixteen enumerated factors in determining whether a domestic industry is materially injured by reason of imports at less than fair value (LTFV).<sup>78/</sup> These same factors also must guide our decision at the preliminary stage of investigations under Title VII, albeit under a less exacting evidentiary standard. These factors are noted in the opinion of the Commission, but the

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<sup>77/</sup> See Trade and Tariff Act of 1984, Pub. L. No. 98-573, Title VI, § 601, 98 Stat. 2948 (1984).

<sup>78/</sup> 19 U.S.C. §1677(7)(C)(ii), (iii).

role played by each of them in our decision may not be entirely clear.

The factors identified by the statute as relevant to our decision can be sorted into three categories. Some statutorily listed factors -- domestic employment and wages -- focus on injury to employees in the domestic industry. Some statutorily-listed factors -- such as the impact of LTFV imports on profits, return on investment, cash flow, ability to raise capital, and level of investment -- focus instead on injury to those who have invested capital in domestic firms comprising this industry. The remaining factors listed by the Act -- the volume of imports, domestic output, sales, market share, inventories, capacity utilization, productivity, and the effect of LTFV imports on prices of the like product (including the extent to which LTFV imports undercut or depress domestic prices for the like product -- focus on information that is not directly indicative of adverse effects but is important to inferring the extent of adverse effects from LTFV imports. The statute, thus, directs the Commission to assess the effect of LTFV imports at reducing returns to (actual and potential) employees and investors in the domestic industry and suggests various factual inquiries that should facilitate that assessment.

Organization of these factors into a coherent analysis of the factual connection between LTFV imports and returns to

employees and investors in the domestic industry is left to the Commission. While a single analytic structure may not be appropriate to all cases, in general the factors given by the statute and the order in which they are listed in the statute<sup>79/</sup> suggest a three-part inquiry into the causation of material injury.<sup>80/</sup> First, the Commission must examine the market for the subject imports. Second, the Commission must evaluate the manner in which the change in the market for these imports (from what would obtain in the absence of unfairly traded imports) affects domestic prices and domestic

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<sup>79/</sup> Title VII first describes the determination that the Department of Commerce must make regarding the existence of the unfair trade practice. Then Title VII describes the considerations that should guide the Commission's determination respecting the existence of material injury from unfairly traded imports, directing the Commission 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." 19 U.S.C. § 1677(B).

<sup>80/</sup> The aggregation of the sixteen statutory factors into three types of inquiry does not suggest that only three of the factors have real importance. The three inquiries comprehend all of the statutory factors. Aggregation is suggested here not to emphasize the importance of some factors and de-emphasize others, but instead as a means of organizing the factors to facilitate analysis. At the same time, it must be confessed that the Commission has not always been able within the statutory time limits on its investigations to gather information on all of the statutorily listed factors. Thus, for example, the Commission's reports rarely contain significant information on investment in the domestic industry, return on investment, or ability to raise capital.

production of the like product. Third, the Commission must explore the manner in which the changes in the market for the like product affect employment and investment in the domestic industry.<sup>81/</sup>

In each of these inquiries respecting the effects of LTFV imports, the Commission must compare the data we observe with an estimate of what the data would have been in the absence of imports traded at less than fair value. In drawing comparisons to a counterfactual condition, the Commission's conclusions inevitably will be based in judgments that are subject to question. For this reason, courts often have emphasized the considerable discretion enjoyed by the Commission in fashioning its judgments.<sup>82/</sup> At the same time, the absence of observable data for all for the matters necessary to the Commission's judgment makes the development of a clear analytic structure consistent with the statutory directives especially important.

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<sup>81/</sup> Whether the injury to the domestic industry caused by the LTFV imports rises to the level of materiality requisite under the Title VII can be addressed as a fourth question. Insofar as that is done, however, the fourth inquiry becomes a process of applying the statutory test for materiality to the information developed in the prior three inquiries; that is, this last inquiry would reach a legal conclusion but would not extend the factual analysis of the other inquiries.

<sup>82/</sup> See, e.g., *Keyes Fibre Company v. United States*, \_\_ CIT \_\_, Ct. No. 85-08-01100, Slip Op. 88-31 at 9 (March 16, 1988).

The structure I adopt here draws conclusions from the facts adduced in the investigation relevant to each of the three inquiries and also builds on conclusions in the preceding inquiries. Examination of the change in import prices and volumes brought about by the ability of exporters to sell products in the United States at less than fair value suggests information relevant to the second inquiry, regarding the change in the volumes sold by domestic producers and the prices at which those goods are sold. The change in prices and sales of domestically produced goods, in turn, provides information relevant to assessment of the difference LTFV imports ultimately make to the returns to employees and investors in the domestic industry.

#### LTFV Imports: Analytic Issues

The first inquiry, focusing on the imports subject to investigation, incorporates the statutory injunction for the Commission to examine the volume of subject imports. The inquiry also comprehends some information that is not developed or assessed directly by the Commission.

The inquiry seeks to identify and compare the actual volumes and prices of the imports subject to investigation and those volumes and prices that would have obtained had the imports been fairly traded. To make this comparison with



confidence, it is necessary to know when the dumping began, the volume of goods traded unfairly, the magnitude of the price differential between the foreign (home) market and the U.S. market prices of the imports (the dumping margin),<sup>83/</sup> and the reason for the dumping.<sup>84/</sup> From these facts, an estimate of the prices and volumes that would have obtained had the imports been traded at a single price both in the home market and the U.S. market.

Unfortunately, much of this information will not be known to us in the ordinary case. Indeed, typically, we do not have firm information on any of these matters. We do, however, generally have information sufficient to support reasonable estimates. Thus, for example, while we do not know the actual volume of imports sold at less than fair value, the Department of Commerce does identify the class of products that includes firms found or alleged to have been dumping, and Commerce can

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<sup>83/</sup> See, *Copperweld Corp. v. United States*, \_ CIT \_, Slip Op. 88-23 at 16 (Feb. 24, 1988); see also, *Hyundai Pipe Co. v. United States International Trade Commission*, \_ CIT \_, Slip Op. 87-18 at 7 (Feb. 23, 1987).

<sup>84/</sup> It may also be necessary to secure information on the supply of imports not under investigation, including their U.S. market share and whether they are traded in the United States at a fixed world price or not. The price of such imports would be highly responsive to changes in demand if quantity restrictions, such as quotas, applied. Moreover, it may be necessary to learn more about the nature of demand for products of the firms selling at LTFV, as well as how consumers in the United States and in the exporting country would have responded to changes in price.

exclude from any antidumping order one or more foreign manufacturers, producers or exporters that it determines have not sold the subject products at less than fair value.<sup>85/</sup> Similarly, while usually we cannot know the exact margins of dumping, the Department of Commerce normally calculates margins for at least 60 percent of the dollar volume of exports to the United States from any country subject to investigation.<sup>86/</sup> These calculations should approximate the actual dumping margin sufficiently to inform our determination of the effects of the LTFV imports. The Commission does not revisit these calculations but accepts them for purposes of its investigation. So, too, while some understanding of the constancy or inconstancy of dumping over the period investigated is necessary to interpret the information gathered, the Commission does not inquire when dumping began or what its margin was at different times. Even though the Department of Commerce calculates dumping margins only for a six-month period, Commission practice has been to assume that the dumping was constant throughout the three-year period of investigation.<sup>87/</sup>

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<sup>85/</sup> 19 C.F.R. § 353.45.

<sup>86/</sup> *Id.* § 353.38(a).

<sup>87/</sup> In some investigations, the evidence may appear clearly inconsistent with that assumption. I do not here address that atypical case.

Similarly, the Commission does not inquire into the reasons for dumping. As the history of the current law, discussed earlier, reveals, Congress surely did not desire to impose duties only against dumping caused by any one motivation, especially not a very unlikely one.<sup>88/</sup> The Commission must, however, have some appreciation of the causes of dumping to be able to assess its affects: the reason for dumping in large measure determines the degree to which the ability to sell at LTFV will change the prices and volumes of imports. As in many other legal determinations, decisions can be premised not on subjective evaluation of actual motives but on a reasonable explanation of those that may be expected in the ordinary case to inform the actions observed.<sup>89/</sup>

For dumping, there may be several motivations, including the unlikely motive of predation and the more likely desire to capture the value of an established brand name in a market where that name is known but not to add a premium for that name when its goods are introduced into a new market. But the most likely general explanation for charging different prices in two markets is that the producer enjoys more market power in one market than in the other and seeks to increase overall returns by charging more where the producer is able to and

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<sup>88/</sup> See discussion in Part I, supra.

<sup>89/</sup> See, e.g., Screws v. United States, 325 US 91 (1945); O. Holmes, The Common Law (1881), at 54 (1963 ed.).

less where he faces more competition.<sup>90/</sup> From this relatively straightforward premise, we can approximate the changes in import volumes and prices that derive from an ability to sell at LTFV in the U.S. once we estimate the volumes sold in the home market and the U.S. market and the dumping margin.

While the particulars of this initial inquiry are not spelled out in the Tariff Act, I believe that this approach can be fairly inferred from the law. The statute does not explicitly instruct us to consider each of the factors relied on here, such as dumping margins, but the Act does clearly ask us to evaluate the effect of the LTFV imports and directs our attention initially to the volume of imports, a principal factor in assessing the changes in imports consequent to LTFV

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<sup>90/</sup> This common sense assumption accords with long-established understanding among commentators who have studied differential pricing in international markets. See, e.g., G. von Haberler, *The Theory of International Trade With its Application to Commercial Policy* 296-317 (1936). The very notion of market power is intertwined with the degree to which the market is open to competition, as market power largely depends on limited availability of substitute products for consumers. The greater the number and closeness of consumer substitutes, the less is market power, since the ability of firms to raise prices while maintaining sales is limited by the ability of consumers to substitute to other firms' products.

In suggesting that most dumping can reasonably be said to be motivated by desire for increased profits, I do not suggest that this invariably is the case or that information respecting the effects of dumping cannot be analyzed in situations where another basis for dumping is manifest.

sales.<sup>91/</sup> In light of this, court decisions have approved consideration of factors such as dumping margins to which the Commission is not specifically directed by law.<sup>92/</sup>

LTFV Imports: Double Density Microdisks<sup>93/</sup>

At this stage of an investigation, the Department of Commerce has not reached any conclusions on dumping margins for the subject imports, but the petition contains allegations respecting the existence and margin of dumping. Petitioners have alleged that the three largest Japanese producers of 3.5

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<sup>91/</sup> 19 U.S.C. § 1677(7)(B)(i),(ii).

<sup>92/</sup> See *Copperweld Corp. v. United States*, \_ CIT \_, Slip Op. 88-23 at 16 (Feb. 24, 1988); see also *Hyundai Pipe Co. v. United States International Trade Commission*, \_ CIT \_, Slip Op. 87-18 at 7 (Feb. 23, 1987).

<sup>93/</sup> Much of the data available in this investigation is not disaggregated for double density and high density microdisks. Only shipment data were provided for each type of microdisk. Therefore, analysis of the effect of imports on the respective domestic industries requires extrapolation from the available data. As high density microdisks account for a very small portion of the aggregated data, I have analyzed the effects on double density microdisks in relative detail using aggregate data and treat the effects on high density microdisks in less detail below. See 19 U.S.C. § 1677(4)(D).

inch microdisks<sup>94/</sup> charge prices \* \* \* percent higher in the Japanese market than in their U.S. export market.

Although the petition alleges that high density as well as double density microdisks have been sold at LTFV, the margins alleged in the petition are based on comparisons performed by the petitioner between prices of double density microdisks in the two markets.<sup>95/</sup> For purposes of this preliminary investigation, I take the allegations in the petition as the best estimate of the margin of dumping for double density microdisks.<sup>96/</sup> I will discuss high density disks separately toward the end of these Views.

The remaining information necessary to determine the likely change in price for double density microdisks sold in the U.S. as a consequence of LTFV sales -- relative volumes of sales in Japan and the United States -- is not available at this time. We do know the volumes of double density disk and media sales in the U.S., and we also have some information respecting the relative volumes of combined disk sales (high

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<sup>94/</sup> Petition at 37-39. These producers are Sony, Hitachi Maxell, and Fuji. Report at A-6.

<sup>95/</sup> Id.

<sup>96/</sup> See, e.g., Nitrile Rubber from Japan, Inv. No. 731-TA-384 (Preliminary), USITC Publication No. 2027 at 10, n.34 (Oct. 1987).

density and double density) in the two countries.<sup>97/</sup> As high density constitutes a small proportion of U.S. sales, I believe it appropriate to base conclusions in this preliminary investigation regarding double density disks on the combined figures for relative sales volumes in Japan and the U.S. These figures show that for finished 3.5 inch microdisks Japanese exporters' sales volume in the U.S. market was between four and ten times as large as their sales volume in Japan,<sup>98/</sup> while for media their volumes in the two markets kept relative parity until this year, when Japanese exporters are expected to sell only two-thirds as many media in the U.S. as in Japan.<sup>99/</sup>

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<sup>97/</sup> See Report at A-29-A-30, B-12-B-14. The relative sales information, however, is quite imperfect, as currently available data compare home market sales from a much smaller number of companies than the number for which U.S. export information is available. See notes 98 & 99 *infra*.

<sup>98/</sup> *Id.* at A-29. Since only two firms provided data, Japanese home market shipments are understated. Thus the proportion of the total sales in the two markets which is sold in the United States is overstated. As explained below, this has the result of understating the apparent decline in the U.S. price caused by LTFV sales. Any estimate of this price decline for the finished double density product, thus, should be revised upward to account for this exclusion from the data.

<sup>99/</sup> *Id.* at A-30. It should be noted, however, that the figures reported for Japanese shipments of media exclude the production of \* \* \*. As explained below, the understatement of media shipments in Japan results in lowering the apparent decline in U.S. price consequent to LTFV sales. Any estimate of this price decline for media, thus, should be revised upward to account for this exclusion from the data.

Given the substantial alleged margins and the existence of a smaller but still significant market for the finished disks in Japan and a comparable market for the media in Japan and the U.S., the probable effect of the LTFV sales was to lower the U.S. sales price by a large part of the dumping margin. The decrease in U.S. sales price may have been as much as fifteen percent for finished disks, and may have been even more for media.<sup>100/</sup> If the final dumping margins calculated by the Department of Commerce are similar to those alleged in the petition, the existence of LTFV sales could account for significant price effects in imports of these products.

As several segments of the market for these products (specifically, the mass merchandise and unbranded segments) appear to be more sensitive to the price of the products,<sup>101/</sup>

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<sup>100/</sup> The decrease in sales price will reflect the sales-weighted average of market power in the home market and the U.S. market. The upper bound for this price decrease will be a percentage of the dumping margin equal to the home market percentage of combined U.S. and home market sales. The smaller the share of an exporter's sales in the U.S. market relative to his home market and the lower his market power in the U.S. relative to his home market, the greater will be the decline in price accompanying LTFV sales. In light of the exclusions of firms from the home market shipments data for both finished disks and media noted supra, the probable decrease in U.S. sales price cannot presently be determined with confidence.

<sup>101/</sup> Report at A-14.



the reduction in price may have had significant effect on the volume of import sales in the U.S. market. Imports expanded their volume of sales considerably in these market segments, although their shares of these segments declined somewhat over the period of investigation.<sup>102/</sup> Overall, the volume of shipments for the subject imports increased substantially as the market for microdisks grew, and although shares declined, especially in the market for media, these imports still retained a \* \* \* percent share in media in 1987 and a more than \* \* \* percent share in finished disks.<sup>103/</sup>

#### Domestic Prices and Production: Analytic Issues

The second inquiry builds on the first. It asks, in light of the changes in the market for the imported products consequent to the LTFV imports, what changes have occurred in prices and production of the like product? The information gathered by the Commission and the parties on trends in prices and production of the like product plainly are useful to this inquiry, but they cannot, of themselves, answer the question respecting the effect of LTFV imports. So, in the instant

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<sup>102/</sup> Id. at B-12. The data available in Appendix B are limited to sales for which the Commission received price information.

<sup>103/</sup> Id. at A-34-A-36.

investigation, the fact that prices for one like product -- double density disks and media -- generally declined through nearly the entire period of investigation does not necessarily demonstrate that LTFV imports depressed prices for the domestic product, nor does the fact that production has risen for both like products or that prices recently have increased necessarily demonstrate the absence of adverse effects from the imports.<sup>104/</sup>

Recognizing that the linkage between imports and changes in domestic products prices and sales often will be difficult to establish directly, the Act directs our attention to a series of factors that might provide additional bases for inferences regarding this linkage. To that end, the Commission is told, for instance, to look at evidence that the LTFV imports competed in the domestic market at a lower price than the like products (price undercutting) or that competition from the LTFV imports drove down prices for the like products (price depression).<sup>105/</sup> The degree to which

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<sup>104/</sup> Id. at A-66-A-68, Tables 21-23.

<sup>105/</sup> 19 U.S.C. § 1677(7)(C)(ii). The references to price undercutting and price depression or suppression connote different market situations. The former refers to price differences between the LTFV imports and the like product in the U.S. market generally accounted for by some product differences perceived by consumers. Such perceived differences may be persistent, as in the case of quality differences, or temporary, as in the case of branded products sold at promotionally lower prices over a period of time while  
(continued...)

these phenomena occur depends not only on the prices at which the imports are sold but also critically on the manner in which demand for the domestic product responds to the price of the imports. The responsiveness of demand for the like product to changes in the price of imports in turn is generally a function of the substitutability of the import and the domestic product and the products' relative shares of the domestic market. Even though these factors may not be readily observable, information usually will be available from which inferences about them can be drawn.

The statute also commands attention to several other factors that might support or contradict an inference regarding the effects of LTFV imports on domestic price and production. Information on inventories, capacity utilization, and productivity can be relevant to this inquiry, as they can suggest reasons the subject imports would have more or less effect than might at first appear.<sup>106/</sup> For example, if capacity utilization in the domestic industry is low, that might suggest significant ability to increase production if

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<sup>105/</sup>(...continued)

consumers become acquainted with the product. Price suppression or depression refers to the effect on the price of the like product caused by the presence of LTFV imports and occurs to some extent anytime dumping is taking place and the like product is a substitute for the LTFV imports.

<sup>106/</sup> 19 U.S.C. § 1677(7)(C)(iii).

the absence of LTFV imports increased demand for the like product. Concomitantly, if domestic capacity were (virtually) fully utilized, the LTFV imports would not exert significant influence over domestic production, although the imports will then affect price more significantly.

#### Domestic Prices and Production: Double Density Disks

In this investigation, the relationship between the subject imports and the domestic industry's production and prices is open to different judgments. On the information available to us at this time, it is arguable that the LTFV imports have had a depressing effect on prices and sales of double density disks and media. The high market share for the subject imports<sup>107/</sup> and the evidence of significant substitutability between imports and domestic disks<sup>108/</sup> suggest that the reduction in price of imports consequent to the LTFV sales would have a significant depressing effect on prices for the domestic like product. The decline in prices for U.S. produced disks and media over most of the period of

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<sup>107/</sup> Report at A-34-A-36.

<sup>108/</sup> The domestic and imported double density disks are technically interchangeable and appear closely substitutable for a number of uses. Id. at A-41 n. 1.

investigation might be taken as confirmation of this inference.109/

Several facts, however, suggest the possibility that imports have not had such an effect on domestic prices. First, there is evidence that the products, although technologically compatible, are not perfect substitutes; this appears to be especially true in some uses, as in sales to original equipment manufacturers (OEMs), who, evidence suggests, are especially sensitive to quality differences and who have not uniformly accepted domestic products as meeting quality standards.110/ Second, accompanying the decline in prices has been an enormous expansion in domestic output, rising in aggregate more than 500 percent for media and 385 percent for finished disks.111/ Third, productivity increased more than eighty percent for media and 600 percent for finished disks over the period of the investigation.112/ This information supports the assertion that the decline in prices for the domestic product is the natural consequence of the

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109/ This inference might be supported not only by the decline in U.S. prices but also by the relatively greater decline in imports' prices than in prices of the domestic product. See id. at A-42.

110/ See id. at A-13, A-39-A-40; Post-Conference Brief of Sony at 47; Post-Conference Brief of Fuji at 44-49; Post-Conference Brief of Apple at 4-11.

111/ Report at A-16.

112/ Id. Report at A-21.

maturing of the market;<sup>113/</sup> there apparently are substantial economies of scale in production as well as "learning curve effects" that are both time- and scale-linked.<sup>114/</sup> While it cannot be known exactly what effect these factors alone would have had on the prices for double density disks and media, the decline in prices for 3.5 inch microdisks and media apparently has paralleled closely the decline in prices for 5.25 inch microdisks and media, a product relatively free from import competition.<sup>115/</sup>

Further, the domestic industry has experienced tremendous growth in capacity, more than doubling capacity for production of media and raising capacity for production of finished disks by more than 500 percent.<sup>116/</sup> At the same time, capacity utilization has increased significantly, at least for production of finished disks. Domestic producers report that

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<sup>113/</sup> Of course the Commission is instructed not to weigh the relative importance of multiple causes of injury to the domestic industry. S. Rep. No. 249, 96th Cong., 1st Sess. 57-58, 75 (1979). In evaluating competing explanations of injury to the domestic industry, I do not propose that we adopt a requirement that LTFV imports account for any given proportion of that injury. However, insofar as other causes fully explain the effects observed, such inquiry may cast doubt on the existence of any causal link between the LTFV imports and harm to the domestic industry.

<sup>114/</sup> See, e.g., Post-Conference Brief of Nashua at 7-8; report at A-21-A-23.

<sup>115/</sup> See Brief of Nashua at 5-7, Exhibit 1 ( \* \* \* ).

<sup>116/</sup> Report at A-16.

they are running at nearly eighty percent of capacity, more than double the utilization rate of 1985 and a high figure given the absence of determinate criteria for capacity calculations.<sup>117/</sup> Some reports indicate that shortages have developed at current prices, which is corroborated by the recent increases in prices and by the demand for imports of these disks among the competing U.S. microdisk producers, all but one of whom purchased finished imports and several of whom purchased imported media.<sup>118/</sup> Finally, the evidence on relative prices of U.S. products and imports reflects no consistent pattern over the course of the investigation.<sup>119/</sup>

Thus, the evidence does not at this point establish any clear effect of the LTFV imports on prices and sales of the competing, domestic like product. But the evidence does provide some basis for the conclusion that the reduction in price of LTFV imports, discussed above, has reduced the prices and shipments of the like product.

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<sup>117/</sup> Id. The capacity utilization rates for media production are considerably lower, running at about half the level of utilization for finishing and roughly the same as the utilization level in 1985.

<sup>118/</sup> Id. at A-14, A-19-A-20. The existence of a bottleneck in domestic finishing of microdisks is suggested by the decrease in domestic inventories for finished disks and coincident increase in domestic inventories for media as well as by the higher utilization rates for finishing and higher demand by U.S. producers for imports of finished disks than for imports of media. See also id. at A-17-A-18.

<sup>119/</sup> Id. at A-42.

Employment and Investment Effects: General Issues

The final inquiry into the effects of LTFV imports on the domestic industry relates the inferences drawn in the prior inquiries to the information available regarding the returns realized by the domestic industry. The questions relevant to this inquiry are, given the conclusions reached respecting the nature of the market for the subject imports and the effect of the LTFV imports on prices and production in the domestic industry, to what extent has employment in the domestic industry declined or become less remunerative as a result of the LTFV imports, and to what extent have returns on investment in the domestic industry declined as a result of the LTFV imports?<sup>120/</sup> Because the domestic industry subject to examination often is not coincident with firms' actual operations -- generally, our investigation considers only a part of each company's operations -- direct measurement of actual financial returns (and, to a lesser degree, employment) is difficult. Connection of estimates respecting the returns to capital and labor in the domestic industry to changes consequent to LTFV imports is even more difficult. Title VII specifies a number of factors that can assist the Commission

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<sup>120/</sup> 19 U.S.C. § 1677(B)(iii).



in these inquiries -- actual and potential negative effects on employment and wages, and actual and potential negative effects on profits, return on investment, cash flow, ability to raise capital, and level of investment -- but the Commission usually must infer effects from very imperfect data.

In the usual case, conclusions respecting the change in returns consequent to LTFV imports will rest heavily on the inferences respecting price and sales effects. If prices for the domestic like product have declined relative to what they would have been without the LTFV sales, some decline in returns to the U.S. industry is likely. The extent of the price decline, the extent to which it also effected a decline in sales, and the degree to which the domestic industry's costs of production vary with the quantities produced will determine the magnitude of the decline in returns. Even if prices decline only slightly in response to LTFV imports, domestic production may decline significantly if the demand for the domestic product is highly sensitive to changes in price. This may not cause returns to decline materially for investors in the domestic industry if the industry uses relatively little fixed investment for production and instead relies on labor and inputs that can be contracted for as need arises. The change in production, however, in such a case would lead to a substantial reduction in employment.

The evidence of actual returns to investors and employees, where it can be obtained, can corroborate the inferences drawn in this manner or can call them into question and suggest a basis for reexamination of the earlier inferences. Similarly, some of the other data, the significance of which is suggested by the statute, can help fill in the outlines sketched by this analysis. Productivity changes, for example, could explain some of the changes in employment. Seldom, however, will the data that attempt to measure returns directly be dispositive.

#### Employment and Investment Effects: The Double Density Industry

In this investigation, we do not have a firm basis for assessing the effects of LTFV imports on returns to the domestic industry producing double density disks. That largely follows from the difficulty of eliciting a firm basis for inferences regarding price and production changes.

There is some evidence that supports the conclusion that returns to the domestic industry have been materially reduced by the LTFV imports. If the prices of the domestic products have been significantly depressed, a substantial reduction in net returns would be likely. The existence of strong economies of scale is tied closely to the relatively high capital investment necessary to production of microdisks.

Economies of scale are largely a function of the relative proportions of fixed cost to variable cost of production. The existence of high fixed inputs and large economies of scale also is corroborated by the very large increases in productivity that accompanied the dramatic expansion in domestic production.<sup>121/</sup> There also is some evidence of declining returns to the domestic industry, although the basis for the only calculations that have been able to be generated from the data available is open to question.<sup>122/</sup>

A further ground for concluding that returns to the domestic industry have been reduced by LTFV imports is the decline in production, relative to what it would have been had no LTFV sales been made, that probably accompanied a decrease in price. While the industry appears to have substantial fixed investment, it is not clear how much is dedicated to one specific use. This weakens the case for harm to investors, but may support the argument that employees have been harmed. The industry has shown considerable ability rapidly to

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<sup>121/</sup> See Report at A-16, A-22.

<sup>122/</sup> The data do not provide information on a basis congruent with capital investment, profit reports or distributions, financial ratings, or reports publicly available outside the context of this investigation. Consequently, the reference point for assessing returns is calculation of investment on an accounting basis that well may not replicate actual investment values and further may not apportion them in a non-strategic manner.

increase capacity,<sup>123/</sup> and, had it faced no competition from LTFV imports, it might also have expanded employment more than the very modest increase recorded over the period of investigation.<sup>124/</sup> Also, it may be noteworthy that both average and total compensation declined despite the increase in the workforce.<sup>125/</sup>

Conversely, there is some evidence indicating that any downward pressure on the returns from production of double density microdisks may be the result of cost factors unrelated to imports. One such factor concerned the relatively high cost of media as a component of domestic microdisks (as compared to imports), allegedly due to higher failure rates for those media.<sup>126/</sup>

#### High Density Disks

Very little of the data currently available disaggregate high density disks, either finished or media, from double density disks. Double density disks account for the great bulk of shipments over the period of investigation, with high

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<sup>123/</sup> Report at A-16.

<sup>124/</sup> See id. at A-22.

<sup>125/</sup> Id.

<sup>126/</sup> See id. at A-15-A-16.

density disks accounting for only \* \* \* percent of domestic shipments and ten percent of imports in 1987. High density had \* \* \* .<sup>127/</sup> While aggregated data hence necessarily have a great congruence with the data specific to double density disks, the data are not sufficient for separate analysis of the high density market at this time.

For the purposes of this preliminary investigation, I have analyzed the high density microdisk industry in terms of material injury, not material retardation. I have chosen to do so because the evidence indicates that an industry currently exists and is producing high density microdisks and because the data respecting high density microdisks are conflated in data respecting performance of, and injury to, the double density microdisks industry. In any final investigation, however, the question of material retardation may be open to argument.

#### IV. Conclusions

For the reasons given above, and in light of the standard applicable to preliminary investigations, I determine that there is a reasonable indication that the domestic, double density 3.5 inch microdisk industry and the domestic, high

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<sup>127/</sup> Id. at A-19, A-34, B-15.

density 3.5 inch microdisk industry are suffering material injury by reason of LTFV imports from Japan. These determinations are influenced significantly by the evidentiary standard applicable in preliminary investigations. In any final investigation, an affirmative determination would be much more difficult to reach on evidence such as that currently available.

## INFORMATION OBTAINED IN THE INVESTIGATION

### Introduction

On February 26, 1988, petitions were filed with the U.S. International Trade Commission and the U.S. Department of Commerce by counsel on behalf of Verbatim Corp., Charlotte, NC. The petitions allege 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 are alleged to be sold in the United States at less than fair value (LTFV). 1/ 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 materially retarded, by reason of such imports.

Notice of the institution of this investigation and of a conference 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 March 9, 1988 (53 F.R. 7581). 2/ The conference was held in Washington, DC, on March 21, 1988. 3/

Effective March 23, 1988, the U.S. Department of Commerce initiated an antidumping investigation to determine whether the subject merchandise is being, or is likely to be, sold in the United States at LTFV. 4/

The Commission's briefing and vote on this investigation was held on April 5, 1988. The statute directs the Commission to make its determination within 45 days after receipt of a petition, or in this case, by April 11, 1988.

### Background

3.5" microdisks are part of the general class of floppy disks used to record and store computer data; 3.5" media refers to the magnetically coated material contained within a finished microdisk, as described in detail below. 5/ The petitioner in this investigation, Verbatim Corp., produced 3.5" media and

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1/ 3.5" microdisks and media therefor are provided for in item 724.45 of the Tariff Schedule of the United States (TSUS).

2/ A copy of the Federal Register notice is presented in app. A.

3/ A list of witnesses who appeared at the conference is presented in app. B.

4/ In its notice of initiation, Commerce tentatively included within the scope of its investigation 3.5" media produced in Japan and assembled into finished 3.5" microdisks in another country prior to importation into the United States from the other country (indirect imports). A copy of Commerce's notice of initiation is presented in app. C.

5/ Throughout this report, the term "microdisk" refers exclusively to 3.5" microdisks. The terms "disk" and "diskette" refer generally to a finished floppy disk, unless used with a qualifier to specify a particular size or format.

converted the media into finished microdisks in the United States between 1984 and mid-1986, at which time Verbatim moved all of its finishing operations offshore. At present, Verbatim produces only 3.5 media in the United States. Although Verbatim does not currently produce 3.5 finished microdisks in this country, it nonetheless maintains that producers of 3.5 microdisks and producers of 3.5 media constitute one industry. Verbatim further argues that as a coater of 3.5 media, it is involved in producing that part of a finished microdisk requiring the greatest technological input and embodying the essential characteristic of the final product, and that pricing and import trends of finished microdisks directly affect 3.5 media producers.

### The Product.

#### Description and uses

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. The media 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. When the floppy disk 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.

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. 1/ 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. Coating thickness influences the resolution of the media. In general, as the packing density of the material used to coat the disk increases, the layer of coating must be thinner. For example, to achieve satisfactory resolution in high-density media, coating thickness had to be cut in half.

Three sizes of flexible disks are currently available for use in conjunction with computers: 8 and 5.25 diskettes, and 3.5 microdisks. 2/ In addition, the 5.25 and 3.5 diskettes are each offered in single-sided,

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1/ 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.

2/ The term microdisk refers generally to the class of floppy disks smaller than 5.25. Several formats were developed in the 3 range by different companies. However, in 1984, the 3.5 format developed by Sony was adopted by the American National Standards Institute (ANSI) and the European Computer Manufacturers Association (ECMA) as the industry standard and is the only format subject to this investigation. 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.



double-density (SS DD), double-sided, double-density (DS DD), and high-density (HD) formats. 1/ The coercivity, track density, and storage capacity of the various 5.25" and 3.5" formats are as follows:

<u>Media format</u>	<u>Media coercivity (oersteds)</u>	<u>Tracks per inch</u>	<u>Unformatted capacity (KB)</u>
5.25" 1/			
SS DD.....	300	96	340
DS DD.....	300	96	680
HD.....	600	96	1,600
3.5"			
SS DD.....	600-650	135	500
DS DD.....	600-650	135	1,000
HD.....	700-750	135	2,000

1/ The 5.25" floppy disks are also available in single-sided, single-density and double-sided, single-density formats, each containing 48 TPI and storage capacity of 170K and 340K, respectively.

3.5" microdisks.--In addition to the higher coercivity, track density, and storage capacity of 3.5" media, as outlined above, the physical design of the 3.5" finished microdisk is different from its 8" and 5.25" predecessors in several ways. First, and most obviously, a 3.5" diskette is smaller, containing only two-thirds the surface area of a 5.25" floppy disk. Second, whereas 8" and 5.25" media cookies are encased in a flexible vinyl jacket that is spot sealed, 3.5" media is contained in a rigid plastic case, called a clam shell. 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 lock. Industry sources state that the design of the microdisk is more harmoniously accepted into the disk drive than other formats, facilitates centering of the hub, and enables use of more tracks per inch.

Both high-density and double-density 3.5" microdisks share this design. However, they are distinct in the composition of the media coating, the way in which the coating is applied, and the disk drives with which they may be used. 2/ In order to achieve the higher capacity of the HD disk, the coating

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1/ In essence, SS DD and DS DD disks differ only in that SS DD diskettes have been tested and certified on only one side, whereas DS DD have been tested and certified on both.

2/ Respondents further argue that to insure optimal functioning of a high-density disk, a manufacturer should use a smaller hub, an identification hole allowing the drive to determine if the inserted disk is high density or double density, and finer liner material. Additionally, burnishing is performed at a higher speed using less pressure, and assembly must be done in a "clean room" environment because HD media is particularly sensitive to contamination from foreign particles. Sony brief, pp. 14-16.

particles must be smaller and must be able to store a greater magnetic charge. 1/ In addition, the coating thickness of 3.5" HD media is less than one-half that of 3.5" DD media. According to respondents, the higher coercivity and thinner coating require that other changes be made to the overall composition of the coating material. 2/

High-density 3.5" microdisks were designed to be formatted to a capacity of 1.44MB and to be used in conjunction with a HD disk drive. In fact, throughout this investigation various parties have argued that a 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 on a HD disk drive cannot be read or written to by a non-HD drive. It is possible to format a 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 that a diskette formatted in this way would have only one-half the intended capacity. 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. 3/

#### Manufacturing process 4/

Although the sequence at certain stages of the manufacturing process for 3.5" microdisks may vary according to individual producers, the basic phases are as follows: formulation and dispersion (including filtering), coating and curing, drying and calendering, "slit and punch", and finishing (converting) and certification.

Formulation and dispersion.--The first part of this process involves the melding of 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. \* \* \*. \* \* \*. \* \* \*.

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

2/ Sony brief, p. 14.

3/ Roberta Hardaker, op. cit.

4/ This section was developed from material contained in the Petition.

Coating and curing.--

\* \* \* \* \*

Drying and calendering.--

\* \* \* \* \*

Slit and punch.--

\* \* \* \* \*

Finishing process.--The 3.5" microdisk finishing process consists of two steps, burnishing and assembly. The cookie first undergoes burnishing or the polishing of its surface with fine lapping tape to achieve optimum smoothness. Burnishing is critical to produce high-quality media and is generally considered the most difficult step in the finishing process. Assembly of the 3.5" microdisk consists of applying a steel hub to the disk; attaching a soft synthetic liner to both halves of the hard plastic shell (which serves to wipe the surface of the disk as it rotates); installing a wiper spring and friction pad; and inserting the disk between the two shell halves and connecting the halves together. A shutter and shutter spring and write lock are also attached to the jacket of the 3.5" diskette.

Assembly of the 5.25" and 8" diskettes involves burnishing, attaching the liner material, and inserting the cookie into a soft covering, typically made of a vinyl chloride polymer.

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 (OEM's) is also performed in order to approve, or "qualify," manufacturers' products for purchase.

### U.S. tariff treatment

Imports of the subject products are classified in residual or "basket" category, TSUSA item 724.4570, which also includes numerous other unrecorded magnetic recording media products, except those for audio or video recording. The applicable column 1 (most-favored-nation) duty rate since January 1, 1987, has been 4.2 percent ad valorem. Under the proposed Harmonized Tariff Schedule (HTS), these goods fall under subheading 8523.20.00, which covers unrecorded magnetic discs, including coated media in cookie form. The proposed duty rate under the HTS is the same as that in the Tariff Schedules of the United States Annotated (TSUSA).

### Nature and Extent of Alleged Sales at LTFV

To estimate dumping margins, the petitioner compared prices for SS DD and DS DD 3.5" microdisks observed in the United States with prices for the same products observed in Japan, based on pricing practices of the three largest Japanese producers, Sony, Hitachi Maxell, and Fuji. Based on the petitioner's estimates, the alleged dumping margins range from \*\*\* percent to \*\*\* percent.

### The U.S. Industry

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), 1/ and vertically integrated companies that both coat and convert. U.S. coaters produce 3.5" media in the United States 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. Eight known firms coated and/or finished 3.5" media in the United States during January 1985-December 1987. 2/ As presented in table 1, \*\*\* firms produced 3.5" media in the United States, \*\*\* of which have fully integrated finishing operations in this country. \*\*\* firms converted 3.5" microdisks in the United States, \*\*\* of which imported from Japan some amount of the media used in the production of such diskettes. Of

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1/ Converters vary in the nature of their assembly operations: some manufacture the injection-molded plastic shells (also called clam shells), assemble the component parts, burnish and insert the media, and finally, certify and package the microdisks; others purchase all components, including the clam shell, and assemble, certify, and package the finished microdisk; still others purchase "sub-assemblies" (clam shells with all component parts already attached) and merely burnish and insert the media and certify and package the finished microdisk.

2/ A pattern of new entry is apparent in the U.S. 3.5" microdisk industry. In addition to the eight firms that reported production of 3.5" microdisks and/or media therefor during 1985-87, the Commission received questionnaire responses from \*\*\* firms that began production of the 3.5" microdisks or media in 1988, or are in the process of developing the capability to produce such products. These firms are \* \* \*. \* \* \* decided to get out of the floppy-disk manufacturing business entirely.

Table 1

3.5" microdisks and media therefor: U.S. producers' operations and their shares of apparent U.S. consumption, 1987

Firm name and plant location	Owns and operates U.S. establishment(s) performing—						1987 share of U.S. market for—	
	Media coating	Shell fabrication	Shell assembly	Microdisk finishing	Certification	Labeling & packaging	3.5" media 1/	finished microdisks 1/
							—In percent—	
BASF Corp. Bedford, MA.....								
Computer Resources Cleveland, OH.....								
3M Weatherford, OK.....								
Sentinel Technologies Hyannis, MA.....								
Shape, Inc. 2/ Tucson, Az.....		*	*	*	*	*		
Verbatim Corp. 3/4/5/ Sunnyvale, CA.....								
Wabash Datatech 3/ Folsom, CA.....								
Xidex ***.....								
Santa Clara, CA.....								
Total U.S. shipments.....							74.7	21.7

1/ Shares are based on U.S. shipments (domestic shipments and company transfers) of domestically produced finished microdisks as a percent of U.S. apparent consumption in 1987.

2/ \*\*\*.

3/ \*\*\*. If market share is attributed to firms based on shipments for consumption, even if such shipments are finished under consignment by another firm, the following shares would result: 3M (\*\*\*), Shape (\*\*\*), Verbatim (\*\*\*), and Wabash (\*\*\*).

4/ \*\*\*. Verbatim also finishes microdisks at its plant in Limerick, Ireland, \*\*\* of which it imports into the United States.

5/ Figures only reflect Verbatim's domestic shipments. In addition to the \*\*\* million units reflected in Verbatim's share of the U.S. market, the company exported \*\*\*.

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

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

these firms, \*\*\* have operations capable of molding shells, assembling component parts, and testing and packaging finished microdisks, and \*\*\* firms purchase subassemblies. Currently, \* \* \* in the United States is purchasing the injection-molded clam shell unassembled and conducting U.S. assembly and testing operations, although \* \* \*.

Minnesota Mining and Manufacturing Co. (3M), St. Paul, MN, \* \* \*, which is located in Weatherford, OK. In addition, 3M \* \* \*. Approximately \*\*\* percent of all 3.5" microdisks shipped in the United States by 3M in 1987 were \* \* \*. In 1986, \* \* \* percent of 3M's total U.S. shipments for that year. 3M also \* \* \*.

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 shipping 3.5" microdisks, until mid-1986, Verbatim both coated and finished 3.5" media at its facilities in Sunnyvale, CA. In August 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 \* \* \* at its plant in Limerick, Ireland. Verbatim also owns 50-percent of Kasei-Verbatim, a joint venture that coats and finishes both 3.5" and 5.25" floppy disks in Japan. Currently, Verbatim \* \* \*. In the interest of maintaining a U.S. source of finished microdisks, Verbatim \* \* \*. \* \* \*.

Shape Inc., Biddeford, ME, is \* \* \* of 3.5" microdisks in the United States. Shape West, a wholly owned subsidiary located in Tucson, AZ, \* \* \*, primarily \* \* \*, \* \* \*, and \* \* \*. Unlike other converters, Shape does \* \* \*.

Xidex Magnetics Corp., Palo Alto, CA, is the largest U.S. producer of 5.25" floppy disks and is the \* \* \*. Xidex's operations are \* \* \*. At present, Xidex \* \* \*. \* \* \*.

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 \* \* \*. BASF \* \* \*.

Wabash Datatech, Inc., Huntley, IL, was acquired by Shape in June 1986. Shape currently owns 80 percent of Wabash; the balance is held by Wabash's local management. Wabash \* \* \*, which it \* \* \*. \* \* \*. \* \* \*.

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

Sentinel Technologies, Hyannis, MA, also \* \* \* of 3.5" microdisks using \* \* \*. \* \* \*.

In addition to the petitioners, \* \* \*, \* \* \*, and \* \* \* support the petition in this investigation. \* \* \* and \* \* \* take no stance on the petition. No U.S. firm which produced 3.5" microdisks and/or media therefor during the period of investigation opposes the petition.

### U.S. Importers

The Commission sent importer's questionnaires to 19 firms believed to import 3.5" microdisks and/or media from Japan and received responses from all 19 firms. 1/ According to the data submitted, all of these firms imported the subject products from Japan between January 1985 and December 1987. Of those firms reporting imports from Japan of 3.5" microdisks and/or media therefor, \*\*\* firms are related to Japanese producers of microdisks. These \*\*\* firms accounted for \*\*\* percent of 1987 reported imports of 3.5" finished microdisks from Japan. \*\*\* firms import media from Japan to convert into 3.5" finished microdisks in the United States. \*\*\* firms import 3.5" microdisks from third countries containing media produced in Japan or the United States. U.S. importers and their respective shares of apparent U.S. consumption are shown in table 2.

### 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. The consumption data are presented separately for 3.5" finished microdisks and media therefor and are composed of reported shipments of U.S.-produced 3.5" finished microdisks and media therefor and reported imports from Japan and all other countries in the U.S. market by each of the major known importers.

Apparent U.S. consumption of 3.5" finished microdisks, by quantity, increased by 520 percent from 1985 to 1987 and apparent U.S. consumption of 3.5" media grew by more than 200 percent during the same 3-year period (table 3). Consumption data for finished microdisks and 3.5" media are presented separately for the purposes of this report; however, all media produced in the United States is shipped to domestic subcontractors or independent converters, transferred internally, or exported to foreign affiliates for use in finished microdisks, and is thus also reflected in the apparent U.S. consumption data for finished microdisks.

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1/ \* \* \*

Table 2

3.5" microdisks and media therefor: U.S. importers and their shares of apparent U.S. consumption, 1987

Firm name and location	Importer of—		1987 share of U.S. market for—	
	Media	Finished microdisks	Media	Finished microdisks
	—In percent—			
* * *				
* * *.....				
* * *				
* * *.....				
* * *				
* * *.....				
CI Tech 1/				
Elmsford, NY.....				
* * *				
* * *.....				
Fuji Photo Film U.S.A. 2/				
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				
Cambridge, MA.....				
* * *				
* * *.....				
Sony Corp. of America				
Park Ridge, NJ.....				
TDK Electronics				
Port Washington, NY.....				
* * *				
* * *.....				
Verbatim Corp.				
Charlotte, NC.....				
* * *				
* * *.....				
Total imports.....			25.6	78.3

1/ CI Tech is the U.S. importer of microdisks exported from Japan by C. Itoh & Co., Ltd.

2/ Includes Fuji Photo Film Hawaii.

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.



Table 3

3.5" finished microdisks and media therefor: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87

(In thousands of units)			
Item	1985	1986	1987
Finished microdisks:			
U.S. imports.....	17,201	51,665	111,069
U.S.-produced domestic shipments <u>1/</u> .....	5,674	10,505	30,854
Apparent U.S. consumption.....	22,875	62,170	141,923
Media:			
U.S. imports.....	8,164	***	14,181
U.S.-produced domestic shipments <u>1/</u> .....	10,134	***	41,201
Apparent U.S. consumption.....	18,298	***	55,382

1/ Includes company transfers.

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

#### Channels of distribution

3.5" media.--In virtually all instances, open-market sales 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 represents approximately \*\*\* percent of apparent U.S. consumption of media in 1987. Additionally, direct imports of media from unrelated companies account for roughly \*\*\* percent of 1987 apparent U.S. consumption of media.

3.5" finished microdisks.--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). The shares of U.S.-produced shipments and U.S. shipments of imports, by channel of distribution, are presented in table 4.

Most sales to distributors are of branded product, sold in boxes of 10, and labeled with the manufacturer's brand name. 2/ 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

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/ 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 4

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

(In percent)				
Item	Estimated share of total U.S. shipments made to--			
	Distri- butors	Mass merchan- disers	OEM's	Other
U.S.-produced domestic shipments: <u>1/</u>				
1985.....	62.7	0	36.4	1.0
1986.....	53.4	3.4	40.4	2.9
1987.....	63.4	1.5	27.7	7.4
U.S. shipments of imports:				
1985.....	41.7	9.8	43.3	5.2
1986.....	43.1	12.2	40.9	3.8
1987.....	36.5	14.9	45.9	2.7
Total, U.S. shipments:				
1985.....	44.9	8.3	42.2	4.6
1986.....	44.7	10.8	40.8	3.7
1987.....	42.5	11.9	41.8	3.7

1/ Shipments of finished microdisks produced under consignment for another firm were not reported by channel of distribution. The quantity of toll, or consignment shipments, reported during the period of investigation were \*\*\* units in 1985, \*\*\* units in 1986, and \*\*\* units in 1986. Of these, \*\*\* were ultimately shipped to distributors and OEM's. \* \* \*.

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

government, educational institutions, and other organizations that purchase the branded product in large quantities. Prices for branded product are generally higher than unbranded. In 1987, sales to distributors accounted for just over 40 percent of total U.S. shipments.

Sales to mass merchandisers include general retail outlets, including Sears, K-Mart, and Price Clubs, where second brands such as Verbatim's "Bonus" or Xidex's "Precision" offer lower pricing than the top-of-the-line products. Sales in this channel are relatively small, representing approximately 12 percent of total U.S. shipments in 1987.

For the purposes of this report, OEM's include hardware manufacturers, which use microdisks to record computer programs that they include with sales of hardware or that they use internally in product and software development; 1/ and

1/ \* \* \*.

software publishers/duplicators. 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, it is likely to remain healthy because newly published software will be offered in the 3.5" format from the outset.

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/

Sales of 3.5" microdisks to OEM's 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 and therefore require numerous and repeated tests of a finishers product over a period of time. In addition, many OEM's qualify by plant location as well as producer. For example, \* \* \*.

### Market 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

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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/ Commission staff has heard numerous accounts and received extensive documentation from major OEM's, and 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, one of whom appeared as a witness at the preliminary conference on Mar. 21, 1988, and filed a brief in connection with this investigation, 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. Transcript, pp. 193-205. Various U.S. converters, including \* \* \*, \* \* \*, \* \* \*, and \* \* \*, will not purchase Verbatim 3.5" media because of poor quality and unreliability. Staff interviews with officials from these firms. \* \* \*.

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 PC's with 3.5" disk drives. In 1984, Hewlett Packard introduced the first computer containing a 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. Producers of 3.5" microdisks and microdisk components apparently did not anticipate such rapid acceptance of the new format, which has led to a supply shortage that is expected to last at least through the remainder of 1988.

Generally, price and quality are the dominant factors affecting the demand for a particular type or brand of 3.5" microdisk; however, given the tight supply situation that currently exists, availability is also key. A comparison of the prices of U.S.-produced and imported 3.5" microdisks and media can be found in the section entitled "Prices." With respect to finished microdisks, whether price or quality factors weigh more heavily in purchasing decisions generally depends upon the channel through which the product is sold. Price generally predominates for distributors and mass merchandisers that purchase branded product for ultimate sale at the retail level. Quality tends to be most important for OEM's, which use 3.5" microdisks for recording operating system programs for their computers or which sell microdisks under their own label as an accessory through company catalogues and computer supply stores. <sup>1/</sup>

With respect to media, microdisk converters make purchasing decisions based on a variety of factors, depending on the market they supply and on the demands of individual producer's finishing processes and equipment. The cost of the media or "cookie" accounts for between 10 and 20 percent of the cost of a finished microdisk; therefore, converters purchasing decisions are very price sensitive. <sup>2/</sup> However, the actual unit cost of a cookie depends on yield. Generally, coaters do not guarantee a yield level when they sell media and will accept returns only when there is a major problem with an entire batch or shipment. Consequently, the price of media must be considered in relation to the yield a converter is able to obtain, which is largely related to the quality of the media itself and its appropriateness for a given finisher's burnishing, assembly, and testing equipment. The technical advances enabling 100 percent more storage capacity on 1/3 less surface area have presented new challenges to media producers. In addition, the greater complexity of the configuration of a 3.5" microdisk places new demands on finishers of the product.

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<sup>1/</sup> Testimony of James Berger, Apple Computer, transcript, pp. 193-205.

<sup>2/</sup> Petitioner claims that media production accounts for approximately \*\*\* percent of total microdisk production costs. Petition, p. 18 and petitioner's brief, p. 8. Petitioner includes in media cost, 3.5" media-related R&D, 3.5" media coating operations, and 3.5" microdisk assembly losses that can be attributed to problems with the media. According to production cost data submitted to the Commission, Verbatim's total media costs were \$\*\*\* per unit, or \*\*\* percent of the total cost of a microdisk finished in Mexico and \*\*\* percent of a microdisk finished in Ireland. This figure includes an allowance for "certification" (yield) loss of \$\*\*\* but apparently does not include an allocation for R&D. Respondents argue that media production accounts for a much smaller percent of the total cost of a finished microdisk. According to cost data submitted to the Commission by counsel for Japanese producers, media costs ranged from \*\*\* to \*\*\* percent of total cost.

### Yields and cost

Throughout this investigation, respondents have argued that Verbatim's quality problems have 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 production costs, (2) its yields, and (3) the "quality" of the yields, i.e., the number of units sold that command a high-end price relative to those that can only be sold for a lower price.

Pursuant to these issues, the Commission requested Verbatim and counsel for the Japanese producers to supply data on their firms' costs of production and yields. Based on the data submitted, direct cost comparisons among firms were not possible because producers allocated costs differently, because some provided costs only on a percentage basis, and because some did not specify whether the data reflected yielded or unyielded costs. Nonetheless, one may generalize from the data that in 1987 the cost of a 3.5" cookie as a share of the total cost of a Japanese-produced 3.5" microdisk ranged from \*\*\* to \*\*\* percent. In all instances, the shell accounted for \*\*\* of the total cost of a finished microdisk, ranging from \*\*\* percent to nearly \*\*\* percent. The shutter generally represented \* \* \*, ranging from \*\*\* percent to \*\*\* percent.

\* \* \*, the only Japanese producer that broke out yield loss on a cost basis, reported that the media accounted for \*\*\* percent of the total cost of a 3.5" finished microdisk produced in its facility on a yielded basis, and \*\*\* percent on an unyielded basis. \*\*\* also reported that yield loss at the finishing stage accounted for \*\*\* percent of the total cost of a 3.5" finished diskette.

In its cost data, Verbatim reported \*\*\* of the total cost of a cookie, or \*\*\* percent, as " \* \* \*." As a result, Verbatim's yielded media cost as a share of the total cost of a 3.5" microdisk finished in Mexico was \*\*\* percent, whereas its unyielded media cost was \*\*\* percent. In addition, Verbatim reported \*\*\* of the \*\*\* estimated cost of finishing a microdisk in Mexico, or \*\*\* percent, as " \* \* \*." Verbatim's yielded and unyielded media costs of a microdisk finished in Ireland were \*\*\* percent and \*\*\* percent, respectively.

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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 therefor 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, \* \* \*.

In addition to cost data, Verbatim and the Japanese producers provided a breakout of their yields at various stages in the production process. According to those data, Verbatim reported a yield of \*\*\* percent at the burnishing stage, whereas Fuji and TDK reported yields of \*\*\* percent and \*\*\* percent, respectively. Hitachi and Kao \* \* \*. \*\*\* of the \*\*\* Japanese producers providing yield data on certification reported yields of \*\*\* to \*\*\* percent, based on the number of 3.5" microdisks that pass final certification as a percent of total cookies burnished and passed on for assembly. \*\*\* and \*\*\* reported yields of approximately \*\*\* to \*\*\* percent at certification.

### 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 provided in this section of the report were compiled from questionnaire responses submitted by the eight firms known to be producing 3.5" finished microdisks and/or media in the United States, as discussed above in the section entitled "The U.S. Industry."

#### U.S. production, capacity, and capacity utilization

U.S. production of 3.5" finished microdisks increased by 385 percent from 1985 to 1987 (table 5). Capacity to produce such finished microdisks more than doubled between 1985 and 1987. As a result of the more rapid increase in production, capacity utilization jumped from 35.9 percent in 1985 to 78.6 percent in 1987.

Table 5  
3.5" microdisks and media therefor: U.S. production, capacity, and capacity utilization, 1985-87

Item	1985	1986	1987
Finished microdisks:			
Production (1,000 units).....	7,587	16,753	36,815
Capacity (1,000 units).....	21,161	31,405	46,816
Capacity utilization (percent)...	35.9	53.3	78.6
Media:			
Production (1,000 units).....	10,919	25,604	70,451
Capacity (1,000 units).....	26,564	101,848	172,228
Capacity utilization (percent)....	41.1	25.1	40.9

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

Similarly, production of 3.5" media demonstrated rapid growth, increasing almost sixfold during the period of investigation. Capacity to produce media increased at about the same pace, thus capacity utilization was about 40 percent in both 1985 and 1987. However, between 1985 and 1986 capacity utilization dropped sharply, to 25.1 percent, because of the entry of Wabash into the 3.5" media business and the addition of large amounts of new capacity by existing producers.

The vast majority of finished microdisks finished in the United States contain media coated either in the United States or in Japan. <sup>1/</sup> 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 6).

Table 6

3.5" finished microdisks: U.S. production, by sources of media, 1985-87

\* \* \* \* \*

#### U.S. producers' shipments and inventories

Domestic shipments of U.S.-produced 3.5" finished microdisks climbed steadily during the period of investigation, increasing by 349 percent from 1985 to 1987 (table 7). Company transfers became a factor in 1987, reflecting \* \* \*. In 1987 \* \* \*. Export shipments of U.S.-produced finished microdisks, which accounted for approximately \*\*\* percent of total shipments during 1987, increased by more than 500 percent from 1985 to 1987. \* \* \* and \* \* \* accounted for \* \* \* exports during this period. \* \* \*.

Shipments of U.S.-produced 3.5" media also increased substantially during 1985-87. Domestic shipments more than tripled from 1985 to 1987 and company transfers grew more than threefold. However, export shipments recorded by far the largest gain, increasing from \*\*\* units in 1985 to more than \*\*\* million units in 1987. Most of this increase can be attributed to \* \* \*. The growth in company transfers of media reflects \* \* \*.

During 1985-86, end-of-period inventories of 3.5" finished microdisks increased from \*\*\* percent to \*\*\* percent as a ratio to total shipments of U.S.-produced 3.5" microdisks. From 1986 to 1987, end-of-period inventories fell to \*\*\* percent of total shipments. End-of-period inventories of 3.5" media as a ratio to total shipments fluctuated during the period under consideration, increasing from \*\*\* percent in 1985 to \*\*\* percent in 1986, then dropping by approximately 8 percentage points from 1986 to 1987.

U.S. producers' domestic shipments of single-sided, double-density (SS DD), double-sided, double-density (DS DD), and high density (HD) 3.5" finished microdisks are presented in table 8. The decline of the SS DD format and the growth of the DS DD format nearly mirrored one another during the period under consideration. The share of total U.S. shipments accounted for by the SS DD format dropped from \*\*\* percent in 1985 to \*\*\* percent in 1987, and the DS DD

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<sup>1/</sup> \* \* \*.

Table 7

3.5" finished microdisks and media therefor: U.S.-produced domestic shipments, export shipments, and end-of-period inventories, 1985-87

(In thousands of units)			
Item	1985	1986	1987
Finished microdisks:			
Domestic shipments.....	***	***	***
Company transfers.....	***	***	***
Export shipments.....	***	***	***
Total shipments.....	***	***	***
End-of-period inventories.....	***	***	***
Ratio of inventories to total shipments.....	***	***	***
Media:			
Domestic shipments.....	***	***	***
Company transfers.....	***	***	***
Export shipments.....	***	***	***
Total shipments.....	***	***	***
End-of-period inventories.....	***	***	***
Ratio of inventories to total shipments.....	***	***	***

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



Table 8  
3.5" finished microdisks: U.S. producers' domestic shipments, by types, 1985-87

Item	1985	1986	1987
SS DD:			
Quantity (1,000 units).....	***	***	***
Value (1,000 dollars).....	***	***	***
Unit value.....	\$1.85	\$0.95	\$0.77
Share of total shipments (percent).....	***	***	***
DD/DD:			
Quantity (1,000 units).....	***	***	***
Value (1,000 dollars).....	***	***	***
Unit value.....	\$1.17	\$1.33	\$0.94
Share of total shipments (percent).....	***	***	***
HD:			
Quantity (1,000 units).....	***	***	***
Value (1,000 dollars).....	***	***	***
Unit value.....	***	***	***
Share of total shipments (percent).....	***	***	***

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

format climbed from \*\*\* percent to approximately \*\*\* percent over the same 3-year period. The unit value of a SS DD microdisk declined by approximately 58 percent from 1985 to 1987, and that of a DS DD microdisk declined by roughly 20 percent over the same period.

The table also illustrates the introduction of high density 3.5" diskettes into the U.S. market in \*\*\*, \* \* \*. At present, \* \* \*. According to a number of purchasers of 3.5" microdisks contacted during this investigation, \* \* \*. \* \* \*. \* \* \*, Japanese producers are taking advantage of the opportunities in the high-density market, where margins are higher and demand is growing strongly as a result of the introduction of IBM's PS/2 computer in April 1987.

\* \* \* of 3.5" media were of 600 to 650 oersted cookies for use in SS DD and DS DD microdisks. There were \* \* \* of 700 to 750 oersted cookies used to make high-density microdisks during 1985-87. \* \* \*. Similarly, \* \* \*.

#### U.S. producers' domestic purchases and imports

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

\* \* \* imported finished microdisks during 1985-87. In 1987, U.S. producers accounted for roughly \*\*\* percent of all 3.5" finished microdisks imported from Japan and just over \*\*\* percent of total imports of such diskettes. Verbatim alone accounted for \*\*\* percent of all finished microdisks imported by U.S. microdisk manufacturers in 1987. \* \* \* of Verbatim's imports were from its joint venture in Japan and of diskettes containing media produced in its Sunnyvale, CA, facility, and finished by affiliates in Mexico and Ireland, as indicated in the following tabulation:

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

Both integrated and nonintegrated U.S. microdisk producers reported some purchases of media from U.S. coaters, but they relied primarily on imports for their media requirements, as indicated in the following tabulation (in thousands of units):

	<u>1985</u>	<u>1986</u>	<u>1987</u>
Purchases of U.S. media by U.S. finishers.....	***	***	***
Imports of media from Japan by U.S. finishers.....	***	***	***
Imports of media from all other countries by U.S. finishers.....	***	***	***

#### Employment and productivity 1/

The total number of employees in the establishments in which 3.5" microdisks and/or media are produced dropped by 8.3 percent from 1985 to 1986. Over the same period, the number of production and related workers in those establishments dropped by 2.4 percent. These figures increased by 10.7

1/ \* \* \*, \* \* \*, and \* \* \* did not provide employment data. This section covers employment trends only as they relate to \* \* \*, \* \* \*, \* \* \*, \* \* \*, and \* \* \*; and compensation and productivity trends as they relate to \* \* \*, \* \* \*, \* \* \*, and \* \* \*.

percent and 17.6 percent, respectively, between 1986 and 1987 (table 9). The number of production and related workers producing 3.5" finished microdisks, accounting for 5 to 6 percent of all establishment employees during the period of investigation, decreased during 1985-86, then increased from 1986 to 1987, representing an overall gain of 6.5 percent from 1985 to 1987. Production and related workers involved in coating 3.5" media represented \*\*\* percent of total establishment employees in this industry. However, employment of these workers nearly tripled from 1985 to 1987.

Although Verbatim reported substantial workforce reductions during 1985-87, each of the other firms reporting employment data added workers during the 3-year period. 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. <sup>1/</sup> In addition, Verbatim claims that \*\*\*.

\* \* \* 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 by over 40 percent during 1985-87. Conversely, total wages and total compensation paid to production and related workers producing 3.5" media each nearly tripled during the same period. Average hourly wages paid to production and related workers producing 3.5" finished microdisks rose by 6.8 percent from 1985 to 1987 and average hourly wages paid to those involved in coating operations increased from 1985 to 1986, then decreased between 1986 and 1987, representing an overall increase during 1985-87 of approximately 8 percent.

The productivity of workers producing both finished microdisks and media showed strong gains between 1985 and 1987, increasing by more than 600 percent and by 82 percent, respectively, over the 3-year period. Workers producing microdisks and media therefor are not represented by any union.

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<sup>1/</sup> 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." The press release also refers to Kodak's positive experiences with "a skilled, high-technology work force in Mexico."

Table 9

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

Item	1985	1986	1987
Average employment: <u>1/</u>			
All employees.....	5,187	4,758	5,265
Production and related workers producing--			
All products.....	3,658	3,572	4,200
Finished microdisks.....	***	***	***
Media.....	***	***	***
Hours worked: <u>2/</u>			
Finished microdisks (1,000 hours).....	***	***	***
Media (1,000 hours).....	***	***	***
Wages paid: <u>2/</u>			
Finished microdisks (1,000 dollars).....	***	***	***
Media (1,000 dollars).....	***	***	***
Total compensation paid: <u>2/</u>			
Finished microdisks (1,000 dollars).....	***	***	***
Media (1,000 dollars).....	***	***	***
Average hourly wages paid: <u>2/</u>			
Finished microdisks.....	\$8.64	\$9.17	\$9.23
Media .....	\$12.95	\$15.34	\$13.98
Average hourly compensation paid: <u>2/</u>			
Finished microdisks.....	\$10.95	\$11.00	\$10.50
Media.....	\$15.95	\$19.17	\$17.30
Productivity: <u>2/</u>			
Finished microdisks (units per hour).....	***	***	***
Media (units per hour).....	***	***	***

1/ Data are for \* \* \*, \* \* \*, \* \* \*, \* \* \*, and \* \* \*.

2/ Data are for \* \* \*, \* \* \*, \* \* \*, and \* \* \*.

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

Financial experience of U.S. producers

Six producers, which accounted for 71.8 percent of domestic shipments of 3.5" microdisks and/or media in 1987, furnished usable income-and-loss data for both their overall establishment operations and for those producing 3.5" microdisks and/or media.

Overall operations.--Average net sales for both the establishments and subject product for the 1985-87 period are shown below (in thousands of dollars):

*	*	*	*	*	*
*	*	*	*	*	*

The establishment income-and-loss experience for Verbatim is shown in table 10. A summary of each producer's establishment income-and-loss data is presented in table 11.

Table 10

Income-and-loss experience of Verbatim, Inc., on the overall operations of its establishments within which 3.5" microdisks and/or media are produced, accounting years 1985-87

*	*	*	*	*	*
---	---	---	---	---	---

Operations on 3.5" microdisks and media.--The industry generally sustained operating losses on their 3.5" microdisks and/or media. It is not unusual for companies to incur losses during the first few years of new product introduction. <sup>1/</sup> Quality control, low initial volume, research and development, and various startup costs can impact the operating results of a new product.

*	*	*	*	*	*
*	*	*	*	*	*

The income-and-loss experience of Verbatim on its microdisk and media operations is shown in table 12. Media sales \* \* \*, by \*\*\* percent, from \$\*\*\* in 1985 to \$\*\*\* in 1987. \* \* \* were \$\*\*\* in 1985, \$\*\*\* in 1986, and \$\*\*\* in 1987. Operating \* \* \*, as a percent of sales, were \*\*\*, \*\*\*, and \*\*\* in 1985,

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<sup>1/</sup> At the conference on Mar. 21, 1988, Mr. Ervin (USITC) discussed various factors relating to the ability of Verbatim, Inc., to recover its investment in two and one-half years of production. The petitioners responded that they did not yet see any progress in recovering their cumulative costs. Transcript, p. 52.

Table 11

Income-and-loss experience of 6 U.S. producers on the overall operations of their establishments within which 3.5" microdisks and/or media are produced, by companies, accounting years 1985-87 1/

Item	1985	1986	1987
	Value (1,000 dollars)		
Net sales:			
* * *.....	***	***	***
* * * <u>2/</u> .....	***	***	***
* * *.....	***	***	***
* * *.....	***	***	***
* * *.....	***	***	***
Total.....	***	***	***
Operating income (loss):			
* * *.....	***	***	***
* * * <u>2/</u> .....	***	***	***
* * *.....	***	***	***
* * *.....	***	***	***
* * *.....	***	***	***
Total.....	***	***	***
	Percent of net sales		
Operating income (loss):			
* * *.....	***	***	***
* * * <u>2/</u> .....	***	***	***
* * *.....	***	***	***
* * *.....	***	***	***
* * *.....	***	***	***
Total.....	(26.3)	(38.9)	(23.1)
<u>1/</u> * * *.			
<u>2/</u> * * *.			

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

Table 12

Income-and-loss experience of Verbatim, Inc., on its operations producing 3.5" microdisks and media therefor, accounting years 1985-87

\* \* \* \* \*

1986, and 1987, respectively. Finished microdisk sales \* \* \* \*\*\* percent from \*\*\* in 1985 to \$\*\*\* in 1986. The bulk of 1987 microdisk operations were \* \* \* and \* \* \*.

Operating \* \* \* of finished microdisks were \$\*\*\* in 1985 and \$\*\*\* in 1986. Operating \* \* \*, as a percent of sales, were \*\*\* and \*\*\* in 1985 and 1986, respectively. The company has a toll agreement with \* \* \* to finish microdisks. Verbatim sells 3.5" media to \* \* \* for \$\*\*\* per cookie and pays \* \* \* \$\*\*\* for each finished microdisk. Sales under this arrangement were \$\*\*\* in 1987. Operating \* \* \* were \$\*\*\* in 1987. The \* \* \* margin, as a percent of sales, was \*\*\* in 1987. Verbatim transfers its media to foreign affiliates at a cost of \$\*\*\* per cookie, compared with the \* \* \*. \* \* \*.

An income-and-loss summary of the 3.5" microdisk and/or media industry is presented in table 13. As sales growth accelerated, operating loss margins, as a percent of sales, declined sharply. Net sales increased by 29.2 percent from \$\*\*\* million in 1985 to \$\*\*\* million in 1986. Sales were \$\*\*\* in 1987, representing an increase of 53.0 percent from those during the prior year. Operating losses were \$\*\*\* in 1985, \$\*\*\* in 1986, and \$\*\*\* in 1987. Operating losses, as a percent of sales, were (165.7), (138.1) and (71.1) in 1985, 1986, and 1987, respectively.

Investment in productive facilities.--Five producers provided data concerning their investment in productive facilities for establishment operations and microdisks and/or media. Microdisk and/or media investment increased by \$\*\*\* between 1985 and 1987. Reported investment in property, plant, and equipment is shown in the following tabulation (in thousands of dollars):

<u>As of</u> <u>Dec. 31--</u>	<u>Overall establishment 1/</u>		<u>Microdisks and or/media 2/3/</u>	
	<u>Original cost</u>	<u>Book value</u>	<u>Original cost</u>	<u>Book value</u>
1985.....	234,689	131,844	***	***
1986.....	240,725	112,193	***	***
1987.....	236,885	99,455	***	***

1/ \* \* \*.

2/ \* \* \*.

3/ \* \* \*.

Capital expenditures.--Four producers supplied information concerning their capital expenditures for establishment operations and microdisks and/or media. Capital expenditures are shown in the following tabulation (in thousands of dollars):

\* \* \* \* \*

Table 13

Income-and-loss experience of 6 U.S. producers on their operations producing 3.5" microdisks and/or media, by products, accounting years 1985-87

Item	1985	1986	1987
	Value (1,000 dollars)		
Net sales:			
Media:			
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
Subtotal.....	***	***	***
Microdisks:			
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
Subtotal.....	***	***	***
Total.....	***	***	***
Operating income or (loss):			
Media:			
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
Subtotal.....	***	***	***
Microdisks:			
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
* * *	***	***	***
Subtotal.....	***	***	***
Total.....	***	***	***
	Percent of net sales		
Operating income or (loss):			
Media.....	***	***	***
Microdisk.....	***	***	***
Weighted average.....	(165.7)	(138.1)	(71.1)

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

Research and development expenses.--A summary of microdisk and/or media research and development expenses by producer is presented in the following tabulation (in thousands of dollars):

\* \* \* \* \*



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

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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."

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

Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Allegedly 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) and information on U.S. inventories of the subject product (item (V)) follow.

#### The industry in Japan

The Commission requested and received data on Japanese production of 3.5" microdisks and media therefor from the six Japanese producers represented by counsel in this investigation, all of whom also import the product directly into the United States. <sup>1/</sup> All of these companies are fully integrated producers of 3.5" finished microdisks (and other magnetic media products). While some media may be sold to independent converters, the vast majority is used internally in the production of finished microdisks. These firms and their respective shares of total Japanese production of 3.5" finished microdisks reported in 1987 are presented in the following tabulation:

<u>Company name</u>	<u>Share of total 1987 Japanese production of finished microdisks (percent)</u>
Fuji Photo Film Co., Ltd.....	***
Hitachi Maxell, Ltd.....	***
Kao Corporation.....	***
Sony Corporation.....	***
Victor Company of Japan..... (Victor)	***
TDK Corporation.....	***
Total.....	100.0

---

<sup>1/</sup> On Mar. 8, 1988, the Commission requested data on the Japanese industry producing 3.5" microdisks and media therefor via a telegram to the U.S. Embassy in Tokyo. A response was received on Mar. 30 listing 17 Japanese producers of the subject products.

According to data supplied by counsel for these six Japanese producers of 3.5" microdisks, production and shipments have expanded at a very rapid pace, as they have in the United States (table 14). Between 1985 and 1987, production more than quadrupled, and it is expected to increase by another 50 percent by the end of 1988. Japanese capacity to produce 3.5" finished microdisks has grown at a somewhat slower pace. Capacity increases appear to have been chiefly the result of \* \* \*. Capacity utilization in Japan has thus increased from 69.0 percent in 1985 to 91.2 percent in 1987, where it is expected by counsel to remain in 1988.

Table 14

3.5" finished microdisks: Japan's production, capacity, capacity utilization, export shipments, and home-market shipments, 1985-87, and projected 1988

Item	1985	1986	1987	1988
Production (1,000 units).....	33,017	79,747	154,483	231,663
Capacity (1,000 units) <u>1/</u> .....	47,839	93,379	169,313	252,950
Capacity utilization (percent).....	69.0	85.4	91.2	91.6
Export shipments to:				
United States (1,000 units).....	20,795	43,895	80,003	95,339
All other (1,000 units).....	9,631	13,381	38,169	53,234
Total exports (1,000 units).....	30,426	57,276	118,172	148,573
Home-market shipments (1,000 units) <u>2/</u>	***	***	***	***
Total shipments (1,000 units).....	***	***	***	***
End-of-period inventories				
(1,000 units).....	2,813	7,976	8,208	<u>3/</u>

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

2/ Because only \*\*\* firms reported home-market shipments, shipment data is understated.

3/ Data not provided.

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

Export shipments to the United States, accounting for roughly 68 percent of total exports from Japan of 3.5" finished microdisks in 1987, increased by 285 percent from 1985 to 1987. Total exports increased at a similar rate during the period under investigation. Only \*\*\* of the six Japanese firms covered in this discussion reported home-market shipments of finished microdisks, thus it is difficult to determine the size of the Japanese market for this product.

Japanese inventories of 3.5" microdisks increased by almost 200 percent from 1985 to 1987 but decreased as a share of total shipments from \*\*\* percent in 1985 to \*\*\* percent in 1987. If reports of the current supply shortage of 3.5" microdisks are accurate, it is possible that Japanese inventories have been further reduced.

Production of 3.5" media increased over 300 percent between 1985 and 1987, and is expected to double by the end of 1988 (table 15). Capacity to produce 3.5" media grew by almost 68 percent between 1985 and 1987. Capacity utilization rose from approximately 13 percent in 1985 to 33 percent in 1987 and is estimated to increase to over 65 percent by yearend 1988. Exports of 3.5" media to the United States grew by 127 percent during 1985-87. According to the estimates provided to the Commission, \*

Table 15

3.5" media: Japan's production, capacity, capacity utilization, export shipments, home-market shipments, and end-of-period inventories, 1985-87, and projected 1988 1/

Item	1985	1986	1987	1988
Production (1,000 units).....	13,065	29,408	53,715	118,400
Capacity (1,000 units).....	97,139	121,299	162,873	181,050
Capacity utilization (percent).....	13.4	24.2	33.0	65.4
Export shipments to:				
United States (1,000 units).....	***	***	***	***
All other (1,000 units).....	***	***	***	***
Total exports (1,000 units).....	***	***	***	***
Home-market shipments (1,000 units)...	***	***	***	***
Total shipments (1,000 units).....	***	***	***	***
End-of-period inventories				
(1,000 units).....	***	***	***	<u>2/</u>

1/ \* \* \* did not report data on media because all media produced by the company is for internal use. Other firms appear to have reported production and capacity information but did not account for that portion of production which they consumed internally in the production of finished microdisks.

2/ Data not provided.

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

### Third-country production

*	*	*	*	*	*
*	*	*	*	*	*

### Planned U.S. investment by Japanese producers

*	*	*	*	*	*
*	*	*	*	*	*

U.S. inventories of 3.5" microdisks from Japan

The 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 16). The ratio of end-of-period inventories to reported imports from Japan rose from \*\*\* percent in 1985 to \*\*\* percent in 1986, before falling to \*\*\* percent in 1987. There were no reported end-of-period inventories of media from Japan.

Table 16

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

Item	1985	1986	1987
	<u>Quantity (1,000 units)</u>		
End-of-period inventories of reported imports from:			
Japan.....	***	***	***
All other.....	***	***	***
Total.....	3,360	13,765	12,541
Reported imports from:			
Japan.....	***	***	***
All other.....	***	***	***
Total.....	17,201	51,665	111,069
	<u>Ratio to reported imports</u>		
Ratio of end-of-period inventories to reported imports from:			
Japan.....	***	***	***
All other.....	***	***	***
Total.....	19.5	26.6	11.3

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

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

Consideration of the Causal Relationship Between  
Allegedly 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 TSUS item 724.451. This tariff classification also applies to numerous unrecorded magnetic media products not within the scope of this investigation. For the purposes of this report, data on U.S. imports were compiled from responses to the Commission's questionnaires.

Imports of 3.5" finished microdisks from Japan increased by just over 500 percent, in terms of quantity, and by over 240 percent, in terms of value, from 1985 to 1987 (table 17). Total imports increased by a slightly greater amount due \* \* \*.

Unit values of imports from Canada in 1987 were \* \* \* than those from either Japan or Mexico. \* \* \*. 1/

As with U.S. shipments of domestically produced microdisks, the share of total U.S. imports of 3.5" microdisks accounted for by SS DD 3.5" diskettes declined from \*\*\* percent of total U.S. imports in 1985 to 21.9 percent in 1987 (table 18). However, \* \* \*, imports of high-density microdisks \* \* \* captured a 10-percent share of total imports of 3.5" diskettes in 1987.

Unit values of imports of SS DD and DS DD dropped by 56 percent and 58 percent, respectively, from 1985 to 1987. The unit value of imports of high-density microdisks \* \* \*. High-density imports carried a unit value premium of \$1.35 over imports of the DS DD format in 1987.

U.S. imports of 3.5" media from related parties in Japan and in countries other than Japan decreased by 71 percent and by 100 percent, respectively, between 1985 and 1987 (table 19). In contrast, imports of 3.5" media from unrelated parties in Japan increased by 235 percent during the 3-year period. There were \* \* \* U.S. imports of 3.5" media from unrelated parties in countries other than Japan during the period of investigation.

Unit values imports of 3.5" media from related parties in Japan decreased by 58 percent and unit values of imports from unrelated parties in Japan dropped by 42 percent between 1985 and 1987. \* \* \* of imports of 3.5" media during the period of investigation were of 600 to 650 oersteds, for use in double-density microdisks.

---

1/ Unit values of total U.S.-produced shipments decreased by approximately 45 percent over the same period, from \$1.97 in 1985 to \$1.09 in 1987.

Table 17

3.5" finished microdisks: U.S. imports from Japan, Canada, Mexico, and all other countries, 1985-87

Country	1985	1986	1987
<u>Quantity (1,000 units)</u>			
Japan.....	***	***	***
Canada.....	***	***	<u>1/</u> ***
Mexico.....	***	***	<u>2/</u> ***
All other countries <u>3/</u> .....	***	***	***
Total.....	17,201	51,665	111,069
<u>Value (1,000 dollars)</u>			
Japan.....	***	***	***
Canada.....	***	***	***
Mexico.....	***	***	***
All other countries.....	***	***	***
Total.....	30,089	59,784	110,157
<u>Unit value (per unit)</u>			
Japan.....	\$1.75	\$1.14	\$0.99
Canada.....	***	***	***
Mexico.....	***	***	***
All other countries.....	***	***	***
Average.....	1.75	1.16	0.99
<u>1/</u> * * *.			
<u>2/</u> * * *.			
<u>3/</u> * * *.			

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

Table 18

3.5" finished microdisks: U.S. imports, by types, 1985-87

Item	1985	1986	1987
SS DD:			
Quantity (1,000 units).....	***	***	23,535
Value (1,000 dollars).....	***	***	16,530
Unit value.....	\$1.59	\$1.05	\$0.70
Share of total			
imports (percent).....	***	***	21.9
DS DD:			
Quantity (1,000 units).....	***	***	73,233
Value (1,000 dollars).....	***	***	66,310
Unit value.....	\$2.19	\$1.30	\$0.91
Share of total			
imports (percent).....	***	***	68.1
HD:			
Quantity (1,000 units).....	***	***	10,745
Value (1,000 dollars).....	***	***	24,308
Unit value.....	***	***	\$2.26
Share of total			
imports (percent).....	***	***	10.0

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

Table 19

3.5" media: U.S. imports from Japan and all other countries, 1985-87

\*                      \*                      \*                      \*                      \*

#### Market penetration of imports

Given that commercial quantities of 3.5" microdisks were first sold in the United States in 1984, the ratio of imports from Japan to apparent U.S. consumption has always been high (table 20). During the period of investigation, the ratio of imports from Japan to U.S. apparent consumption, in terms of quantity, increased from \*\*\* percent in 1985 to \*\*\* percent in 1986. This \*\*\*-point gain was \*\*\* by a loss of approximately \*\*\* percentage points between 1986 and 1987, resulting in a 1987 market penetration of \*\*\* percent. The share of U.S. apparent consumption held by imports from "all other countries" increased from \*\*\* percent in 1985 to just over \*\*\* percent in 1987. \* \* \* of this increase can be attributed to \* \* \*. In sum, while the market penetration of imports from Japan increased between 1985 and 1986, it dropped in 1987 to \* \* \*. Therefore, the 3.1 percentage point decline in U.S. market share held by domestically produced 3.5" microdisks during the period is the result of \* \* \*.



Table 20  
3.5" finished microdisks: U.S. imports, U.S.-produced domestic shipments, and  
apparent U.S. consumption, 1985-87

Item	1985	1986	1987
<u>Quantity (1,000 units)</u>			
U.S. imports from--			
Japan.....	***	***	***
All other countries.....	***	***	***
Total, all imports.....	17,201	51,665	111,069
U.S.-produced domestic shipments.....	5,674	10,505	30,854
Apparent U.S. consumption.....	22,875	62,170	141,923
<u>Ratio to consumption (percent)</u>			
Ratio to consumption of--			
U.S. imports from--			
Japan.....	***	***	***
All other countries.....	***	***	***
Total, all imports.....	75.2	83.1	78.3
U.S.-produced domestic shipments.....	24.8	16.9	21.7
<u>Value (1,000 dollars)</u>			
U.S. imports from--			
Japan.....	***	***	***
All other countries.....	***	***	***
Total, all imports.....	30,089	59,784	110,157
U.S.-produced domestic shipments.....	11,154	13,409	33,677
Apparent U.S. consumption.....	41,243	73,193	143,834
<u>Ratio to consumption (percent)</u>			
Ratio to consumption of--			
U.S. imports from--			
Japan.....	***	***	***
All other countries.....	***	***	***
Total, all imports.....	73.0	81.7	76.6
U.S.-produced domestic shipments.....	27.0	18.3	23.4

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 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. All told, the share of imports from Japan in terms of value decreased by \*\*\* percentage points from 1985 to 1987 while the share of imports from all other countries increased by approximately \*\*\* percentage points. The net result was a decrease in the share of apparent U.S. consumption held by domestically produced microdisks of 3.6 percentage points between 1985 and 1987.

Imports of media as a share of U.S. apparent consumption declined steadily from 1985 to 1987 (table 21). The share of U.S. consumption held by imports of media from Japan, in terms of quantity, dropped by \*\*\* percentage points and the share held by imports from all other countries, namely \* \* \*, declined by over \*\*\* percentage points. As a result, the ratio of U.S. shipments of domestically produced 3.5" media to U.S. apparent consumption of such media increased from 55.4 percent in 1985 to 74.4 percent in 1987.

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1/ Data, by value, is not discussed because a number of the firms reporting imports and/or shipments of 3.5" media did not provide data, by value.

Table 21

3.5" media: U.S. imports, U.S.-produced domestic shipments, and apparent U.S. consumption, 1985-87 <sup>1/</sup>

Item	1985	1986	1987
<u>Quantity (1,000 units)</u>			
U.S. imports from--			
Japan .....	***	***	***
All other countries <sup>2/</sup> .....	***	***	***
Total, all imports.....	8,164	***	14,181
U.S.-produced domestic shipments.....	10,134	***	41,201
Apparent U.S. consumption.....	18,298	***	55,382
<u>Ratio to consumption (percent)</u>			
Ratio to consumption of--			
U.S. imports from--			
Japan.....	***	***	***
All other countries.....	***	***	***
Total, all imports.....	44.6	33.3	25.6
U.S.-produced domestic shipments.....	55.4	66.7	74.4
<u>Value (1,000 units)</u>			
U.S. imports from--			
Japan .....	***	***	***
All other countries <sup>2/</sup> .....	***	***	***
Total, all imports.....	***	***	***
U.S.-produced domestic shipments.....	***	***	***
Apparent U.S. consumption.....	***	***	***
<u>Ratio to consumption (percent)</u>			
Ratio to consumption of--			
U.S. imports from--			
Japan.....	***	***	***
All other countries.....	***	***	***
Total, all imports.....	68.3	80.5	44.8
U.S.-produced domestic shipments.....	31.7	19.5	55.2

<sup>1/</sup> Data, by value, is understated because \* \* \*, which accounted for approximately \*\*\* percent of total U.S. imports of media in 1987, and \* \* \*, which accounted for \*\*\* percent of U.S.-produced domestic shipments, did not report shipments of media, in terms of value.

<sup>2/</sup> Imports include media from \* \* \*.

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.

## Prices

Microdisks and media are priced on a unit basis. 1/ 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. 2/ Since this level is very close to the companies' minimum purchase requirements, most sales are above it and are made on a delivered basis. Transportation costs for microdisks are relatively insignificant because of their small size and light weight. 3/

There are several factors that determine the price for finished 3.5" microdisks: double-density or high-density (coercivity level), single-sided or double-sided, branded or nonbranded, 4/ and pre-packaged in boxes or sold in bulk. Prices for media are determined by the coercivity level only.

In general, high-density diskettes are more expensive than double-density diskettes, double-sided diskettes are more expensive than single-sided diskettes, 5/ 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 packaging (200 to 500 diskettes per package), whereas branded microdisks are usually prepackaged in boxes of 10, although boxes of 1, 2, 5, 15, 20 and 50 disks are also available from certain suppliers. \* \* \*, offers different packaging for specific customers, e.g., \* \* \*.

## 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 OEM's such as computer hardware companies and software duplicators. Different pricing structures exist for each market segment. In general, prices to OEM's are lower than prices to distributors or mass merchandisers. Most unbranded, bulk product is sold to OEM's, although some also goes to distributors. While OEM's provide a major share

1/ Media are sold in units called "cookies."

2/ \* \* \*.

3/ 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.

4/ \* \* \*, 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. \* \* \*.

5/ Single-sided microdisks are primarily double-sided rejects, i.e., those that fail certification on one side of the disk (see Conference transcript, p. 177).

of microdisk sales, they also provide the lowest margin to the supplier, making them less desirable purchasers to some producers. \* \* \*

Incentive programs for finished microdisks.--U.S. producers and importers of microdisks offer a variety of incentive programs to encourage sales of their product. Such incentives include free disks, cash, trips, etc. These programs are generally used in conjunction with sales of other products, including 5.25" and 8" floppy diskettes, and may be offered differently depending on the specific market segment. 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. Although it is very difficult to distinguish these programs based on product source, there does not appear to be any distinct pattern based on product source between the incentive programs of the reporting U.S. producers and U.S. importers. 1/ The incentive programs offered by U.S. producers and importers include price protection, free goods, rebates, market development funds, cooperative advertising allowance, spiffs, cash/credit terms, warehouse allowances, and pallet allowances. These programs are described in appendix E.

#### Nonprice 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. 2/ These purchasers prefer to deal with only a select number of suppliers in order to "cut down on paperwork, ... invoices, and billings." 3/ \* \* \*, argues that a full product line is critical to optimize a firm's sales potential. According to \* \* \*, when \* \* \* first entered the U.S. dealer market in 1984 to sell their 3.5" product, dealers were not very receptive. It was only after \* \* \* 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 OEM's. Software companies and software

1/ 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.

2/ Because of their large requirements for diskette products, OEM's are more likely to select separate vendors for the 5.25" and the 3.5" product.

3/ Conference transcript, p. 105.

duplicating companies seek suppliers who produce a wide selection of colored microdisks. \* \* \*, explains 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 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 \* \* \*. Of the OEM's contacted in the current 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 of colors and better availability of the colors.

The quality of the microdisk is another factor in the purchasing decisions of OEM's. There are many different quality standards for microdisks by OEM's. Some OEM's 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 Verbatim is not qualified to sell to such major OEM's as Apple and IBM. The petitioner has argued that the standards of some OEM's do not properly reflect the quality of the product. <sup>1/</sup> Moreover, they argue that Verbatim is qualified to sell to a number of other OEM's who also have qualification procedures.

The Commission requested U.S. producers and U.S. importers to provide a list of OEM's with formal qualification procedures to whom they have been qualified to sell microdisks, including the date of their qualification. U.S. importers listed \*\*\* OEM's to whom they are qualified to sell 3.5" microdisks. These include \* \* \*. U.S. producers listed \*\*\* OEM's to whom they are qualified to sell microdisks. These include \* \* \*. Although U.S. producers and importers have met different OEM's quality criteria, U.S. producers report that their earliest OEM qualification took place \* \* \*, whereas U.S. importers report that they have been qualified for some of their OEM's \* \* \*.

Questionnaire price data.--The Commission requested U.S. producers and importers to provide quarterly price data from January 1985 through December 1987 for their sales of 3.5" microdisks and/or media to customers in the United States. Price data were requested for sales of media, sales of branded microdisks to distributors, sales of unbranded microdisks to distributors, sales of microdisks to mass merchandisers, sales of microdisks to OEM's, and toll sales for finishing the microdisks. <sup>2/</sup>

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<sup>1/</sup> Conference transcript, p. 57.

<sup>2/</sup> No tolling price data were received by the Commission during this investigation. \* \* \*. Toll account shipments represents approximately \*\*\* percent of U.S. apparent consumption of microdisks in 1987.

For media sales and toll sales, producers and importers were requested to provide quarterly price data for their largest customer in each year. For microdisk sales, U.S. producers and importers were requested to provide quarterly price data for their three largest purchasers of microdisks, by customer type, and by product in each year. Price data were requested separately for the three microdisk products: single-sided, double-density (SS DD), double-sided, double-density (DS DD), and high-density (HD) microdisks. For media sales, price data were requested separately for the two types of media: double-density, and high-density. For each product within each customer category, U.S. producers and importers were requested to provide the total quantity and value of sales for each quarter. 1/

\*\*\* U.S. producers and \*\*\* U.S. importers reported price data during the current investigation, although not for all periods or for each category/product requested. The responding U.S. producers accounted for approximately 70.5 percent of the total reported U.S.-produced domestic shipments to unrelated purchasers of microdisks and 99 percent of the media in 1987. The responding U.S. importers accounted for 98.7 percent of domestic shipments to unrelated purchasers of Japanese 3.5" microdisks and 100 percent of the Japanese media in 1987.

Price trends for media.--U.S. producers and importers of Japanese media sold only double-density media to unrelated purchasers during the period of the investigation. Table 22 presents the unit values for these sales. 2/ The price for media generally fell through the period of investigation. In the only quarter in which prices of U.S. media and Japanese media could be compared, October-December 1987, the price for imported Japanese media \* \* \*. 3/

Table 22

3.5" media: Weighted-average net unit value of double-density media sold to unrelated purchasers, by U.S. producers and importers of Japanese media, by quarters, January 1985-December 1987

\* \* \* \* \*

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1/ 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, \* \* \*. Due to this problem, domestic producers were unable to distinguish between imported and domestic product on shipments to individual purchasers. However, they did provide yearly estimates of their imported shipments as a percentage of total shipments. Commission staff used these estimates in developing the price series.

2/ See app. D for the quantity of cookies sold. Media sales to unrelated U.S. purchasers represent approximately \*\*\* percent of U.S. apparent consumption of media in 1987.

3/ \* \* \*.

\* \* \* \* \*

Price trends for microdisks 1/--Prices of all three microdisk products generally fell for both U.S. producers and importers during the period of investigation, as shown in tables 23-25. 2/ However, during the last two quarters of 1987, prices generally flattened or slightly increased. During the first quarter of 1988, U.S. producers Xidex and Verbatim, and U.S. importers Sony, Maxell, and Fuji announced price increases for all microdisk products. Purchasers contacted during the course of this investigation have substantiated that prices are rising for U.S.-produced and imported microdisk products.

Prices for SS DD microdisks for sales to all customers declined between \*\*\* percent and \*\*\* percent (table 23). Prices for the imported Japanese product declined \*\*\* percent for sales of branded product to distributors, \*\*\* percent for sales of unbranded product to distributors, \*\*\* percent for sales of finished microdisks to mass merchandisers, and \*\*\* percent for sales to OEM's. Prices for the U.S.-finished product declined \*\*\* percent for sales of branded product to distributors, and \*\*\* percent for sales to OEM's (the only 2 categories with product being sold during the whole period). Prices for Verbatim microdisks \* \* \*.

During the 3-year period 1985-87, prices for DS DD microdisks declined approximately \*\*\* to \*\*\* percent for imported Japanese product, and in the 2-year period 1986-87, prices fell \*\*\* to \*\*\* percent for the U.S. product (table 24). 3/ Prices also leveled off or slightly increased for all customers in 1987 except mass merchandisers, whose prices continued to decline. During the entire period, prices for the imported Japanese product fell \*\*\* percent for sales of branded microdisks to distributors, \*\*\* percent for sales of unbranded microdisks to distributors, \*\*\* percent for sales to mass merchandisers, and \*\*\* percent for sales to OEM's. During 1986-87, prices for the U.S.-finished product declined \*\*\* percent for sales of branded microdisks to distributors, \*\*\* percent for sales to mass merchandisers, and \*\*\* percent for sales to OEM's; and for 1986-87, prices for Verbatim microdisks declined \* \* \*.

Prices for high-density microdisks declined (\*\*\* to \*\*\* percent) during 1987, the only year in which significant sales were reported (table 25). The imported Japanese product primarily controlled the high-density market, with \* \* \*. \* \* \*.

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1/ Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished. \* \* \*. Verbatim's prices are presented for comparison purposes.

2/ See app. D for volume levels corresponding to these unit values. Price data reported by U.S. producers for unbranded product sold to distributors and finished product sold to mass merchandisers are based on small sales.

3/ No significant sales of DS DD product were reported by U.S. producers in 1985.



Table 23

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 quarters, January 1985-December 1987 <sup>1/</sup>

Period	Sales to distributors						Sales to mass merchandisers			Sales to OEM's		
	Branded product			Unbranded product			U.S.-			U.S.-		
	U.S.-			U.S.-			U.S.-			U.S.-		
	Verbatim	finished	Japan	Verbatim	finished	Japan	Verbatim	finished	Japan	Verbatim	finished	Japan
1985:												
Jan.-Mar.....	\$ ***	\$ ***	\$2.29	\$ ***	-	\$ ***	\$ ***	-	\$ ***	\$ ***	\$ ***	\$2.02
Apr.-June....	***	***	2.07	***	-	***	***	-	***	***	***	1.80
Jul.-Sept....	***	***	1.74	***	-	***	***	-	***	***	***	1.59
Oct.-Dec.....	***	***	1.62	***	-	***	***	-	***	***	***	1.32
1986:												
Jan.-Mar.....	***	***	1.40	***	\$ ***	1.27	***	<u>2/</u> ***	***	***	***	1.22
Apr.-June....	***	***	1.17	***	***	1.04	***	\$ ***	1.23	***	***	1.14
Jul.-Sept....	***	***	1.07	***	***	.96	***	***	1.17	***	***	.88
Oct.-Dec.....	***	***	.90	***	***	.88	***	***	1.21	***	***	.90
1987:												
Jan.-Mar.....	***	***	.91	***	<u>2/</u>	.80	***	***	1.02	***	***	.89
Apr.-June....	***	***	.87	***	<u>2/</u>	.76	***	***	1.00	***	***	.78
Jul.-Sept....	***	***	.85	***	<u>2/</u>	.76	***	***	.94	***	***	.80
Oct.-Dec.....	***	***	.87	***	<u>2/</u>	.77	***	***	<u>3/</u> .84	***	***	.76

<sup>1/</sup> Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished.

\* \* \*. Verbatim's prices are presented for comparison purposes.

<sup>2/</sup> \* \* \*.

<sup>3/</sup> The price becomes \*\*\* cents when the influence on price by U.S. microdisk producers who import is removed.

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

Table 24

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 quarters, January 1985-December 1987 <sup>1/</sup>

Period	<u>Sales to distributors</u>						<u>Sales to mass merchandisers</u>			<u>Sales to OEM's</u>		
	<u>Branded product</u>			<u>Unbranded product</u>								
	U.S.-			U.S.-			U.S.-			U.S.-		
	Verbatim	finished	Japan	Verbatim	finished	Japan	Verbatim	finished	Japan	Verbatim	finished	Japan
1985:												
Jan.-Mar.....	***	-	***	***	-	***	***	-	2/	***	-	***
Apr.-June....	***	-	***	***	-	***	***	-	2/	***	-	***
Jul.-Sept....	***	-	***	***	-	***	***	-	\$ ***	***	-	-
Oct.-Dec.....	2/	2/	2.18	***	-	***	***	-	2/	***	-	1.86
1986:												
Jan.-Mar.....	***	***	2.02	***	-	1.66	***	-	***	***	***	1.76
Apr.-June....	***	***	1.85	***	***	1.53	***	***	1.96	***	***	1.59
Jul.-Sept....	***	***	1.65	***	-	1.34	***	***	1.85	***	***	1.39
Oct.-Dec.....	***	***	1.50	***	-	1.18	***	***	1.71	***	***	1.18
1987:												
Jan.-Mar.....	***	1.24	1.34	***	***	1.09	***	***	1.54	***	.93	1.07
Apr.-June....	***	1.23	1.28	***	***	.98	***	***	1.48	***	.94	1.02
Jul.-Sept....	***	1.15	1.26	***	***	.99	***	***	1.42	***	.90	1.00
Oct.-Dec.....	***	1.26	1.31	***	***	.97	***	***	1.34	***	.93	1.01

<sup>1/</sup> Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished.

\* \* \*. Verbatim's prices are presented for comparison purposes.

2/ \* \* \*.

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

Table 25

Finished high-density microdisks: Weighted-average net unit values of products sold to unrelated purchasers by U.S. producers and importers of Japanese microdisks, by type of customers and by quarters, October 1986-December 1987 1/

Period	<u>Sales to distributors</u>		<u>Sales to mass merchandisers</u> Japan	<u>Sales to OEM's</u> Japan
	<u>Branded</u>	<u>Unbranded</u>		
	U.S.- finished	Japan		
1986:				
Oct.-Dec.....	-	-	-	<u>2/</u>
1987:				
Jan.-Mar.....	***	***	-	-
Apr.-June.....	***	3.83	-	***
Jul.-Sept.....	***	3.68	***	***
Oct.-Dec.....	***	<u>3/</u> 3.68	***	<u>4/</u> 2.87

1/ Prices for microdisks are presented by country of finishing process, i.e., whether U.S.-finished or Japanese-finished.

2/ \* \* \*.

3/ Price becomes \$\*\*\* when the influence on price by U.S. microdisk producers who import is removed.

4/ Price becomes \$\*\*\* when the influence on price by U.S. microdisk producers who import is removed.

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

### Price comparisons

The reported sales information for U.S. producers' and importers' quarterly shipments to unrelated customers during January 1985 to December 1987 resulted in 64 direct quarterly price comparisons within four categories between the weighted-average unit values of the domestic and imported Japanese microdisks (table 26). <sup>1/</sup>

Of the 33 comparisons for the SS DD product within the 4 categories, the Japanese import was less expensive than the U.S.-finished product in 19 quarters. Margins of underselling during the entire period ranged from \*\*\* percent to \*\*\* percent. In 1987, the margins ranged between \*\*\* percent and \*\*\* percent. Margins of overselling during 1985-87 ranged from \*\*\* percent to \*\*\* percent.

Of the 27 comparisons for DS DD microdisks within the 4 categories, there were 7 quarters in which the price of the Japanese import was lower than the price for the U.S.-finished product. In 1987, only 1 category, unbranded product sold to distributors, had a direct comparison in which the Japanese price was lower, by \*\*\* percent, than the U.S. unbranded product sold to distributors. Margins of underselling ranged from \*\*\* percent to \*\*\* percent. Margins of overselling for DS DD microdisks ranged from \*\*\* percent to \*\*\* percent.

Of the \*\*\* comparisons for high-density microdisks, all were in the category of branded product sold to distributors, and the Japanese product was lower in price in all of the quarters. The margins of underselling ranged from \*\*\* to \*\*\* percent below the U.S. price.

Dividing these price comparisons by customer type, the following can be observed. There were 32 quarterly price comparisons on sales of branded and unbranded microdisks to distributors. The imported Japanese product was less expensive in half of the observations. Margins of underselling ranged between \*\*\* percent and \*\*\* percent. Margins of overselling ranged between \*\*\* percent and \*\*\* percent. Microdisk sales to mass merchandisers resulted in 13 quarterly price comparisons, in which the Japanese product was less expensive in 6 quarters. Margins of underselling ranged between \*\*\* percent and \*\*\* percent, whereas margins of overselling ranged between \*\*\* percent and \*\*\* percent. Microdisk sales to OEM's resulted in 19 quarterly price comparisons, in which the Japanese product was less expensive in 8 quarters. Margins of underselling ranged between \*\*\* percent and \*\*\* percent, whereas margins of overselling ranged between \*\*\* percent and \*\*\* percent.

Table 26

Finished 3.5" microdisks: Average margins of underselling (overselling) by the subject imports from Japan, by quarters, January 1985-December 1987

\* \* \* \* \*

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<sup>1/</sup> Price comparisons were made between the price of the U.S.-finished product and the price of the Japanese-finished product.

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that during the period January 1985 through December 1987 the value of the Japanese yen advanced sharply, by 89.7 percent, against the U.S. dollar (table 27). 1/ Adjusted for relative movements in producer price indices in the United States and Japan, the real value of the Japanese currency registered an overall appreciation equivalent to 61.7 percent in that period.

Lost sales

Seventeen specific allegations of lost sales were supplied to the Commission by \* \* \*. 2/ Alleged lost sales amounted to \$\*\*\* involving \*\*\* units of SS DD product, and \*\*\* units of DS DD product. All of the lost sales occurred between \* \* \* and \* \* \* and involved \* \* \*. Commission staff contacted 9 of the 17 purchasers cited, accounting for alleged lost sales of \$\*\*\*.

\* \* \* 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 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

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1/ International Financial Statistics, February 1988.

2/ \* \* \*.

Table 27

U.S.-Japanese exchange rates: 1/ Nominal exchange-rate equivalents 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-December 1987

Period	U.S. Producer Price Index	Japanese Producer Price Index	Nominal exchange- rate index ----U.S. dollars/yen----	Real exchange- rate index <u>3/</u>
1985:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	100.1	99.3	102.8	102.0
July-September....	99.4	98.2	108.0	106.7
October-December..	100.0	95.9	124.4	119.4
1986:				
January-March.....	98.5	93.7	137.2	130.4
April-June.....	96.6	89.7	151.5	140.7
July-September....	96.2	87.3	165.4	150.1
October-December..	96.5	85.9	160.8	143.0
1987:				
January-March.....	97.7	85.5	168.2	147.3
April-June.....	99.2	85.1	180.6	154.9
July-September....	100.3	86.2	175.4	150.6
October-December..	100.8	<u>4/</u> 85.9	189.7	<u>4/</u> 161.7

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 movements in producer price indices in the United States and Japan. Producer prices in the United States increased 0.8 percent during the period January 1985 through December 1987. In contrast, producer prices in Japan fell 14.1 percent during that period.

4/ Data are derived from Japanese Producer Price Indices reported for October only.

Note.--January-March 1985=100.

Source: International Monetary Fund, International Financial Statistics, February 1988.

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 she purchased product from directly. However, \* \* \* did purchase foreign product from distributors when \* \* \* requested that specific type of product.

### Lost revenues

No specific allegations of lost revenues were reported during the current 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

THE COMMISSION'S FEDERAL REGISTER NOTICE

## INTERNATIONAL TRADE COMMISSION

### 3.5 Inch Microdisks and Media Therefor From Japan

**AGENCY:** United States International Trade Commission.

**ACTION:** Institution of a preliminary antidumping investigation and scheduling of a conference to be held in connection with the investigation.

**SUMMARY:** The Commission hereby gives notice of the institution of preliminary antidumping investigation No. 731-TA-389 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673(a)) to determine whether 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 in the United States is materially retarded, by reason of imports from Japan of 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, provided for in item 724.45 of the Tariff Schedules of the United States, that are alleged to be sold in the United States at less than fair value. As provided in section 733(a), the Commission must complete preliminary antidumping investigations in 45 days or in this case by April 11, 1988.

For further information concerning the conduct of this investigation and rules of general application, consult the Commission's Rules of Practice and Procedure, Part 207, Subparts A and B (19 CFR Part 207), and Part 201, Subparts A through E (19 CFR Part 201).

**EFFECTIVE DATE:** February 26, 1988.

**FOR FURTHER INFORMATION CONTACT:** Jennifer Hinshaw (202-252-1179), 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 202-252-1809. Persons with mobility impairments who will need special assistance in gaining access to the Commission

should contract the Office of the Secretary at 202-252-1000.

#### SUPPLEMENTARY INFORMATION:

##### Background

This investigation is being instituted in response to a petition filed on February 26, 1988, by Verbatim Corp., Charlotte, North Carolina.

##### 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 seven (7) days after 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. The Secretary will not accept a document for filing without a certificate of service.

##### Conference

The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 9:30 a.m. on March 21, 1988, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contract Jennifer Hinshaw (202-252-1179) not later than March 15, 1988, to arrange for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference.

##### Written Submissions

Any person may submit to the Commission on or before March 23, 1988, a written statement of information pertinent to the subject of the

investigation, as provided in § 207.15 of the Commission's rules (19 CFR 207.15). 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 rules (19 CFR 201.8). All written submissions except for confidential business 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 confidential treatment is desired must be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Confidential Business Information." Confidential submissions and requests for confidential treatment must conform with the requirements of §201.6 of the Commission's rules (19 CFR 201.6).

**Authority:** This investigation is being conducted under authority of the Tariff Act of 1930, title VII. This notice is published pursuant to § 207.12 of the Commission's rules (19 CFR 207.12).

By order of the Commission.

Kenneth R. Mason  
Secretary.

Issued: March 2, 1988.

[FR Doc. 88-5176 Filed 3-8-88; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B  
CALENDAR OF PUBLIC CONFERENCE

CALENDAR OF THE PUBLIC CONFERENCE

March 21, 1988

Investigation No. 731-TA-389 (Preliminary)

3.5" MICRODISKS AND MEDIA THEREFOR FROM JAPAN

Those persons listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigation on March 21, 1988, at the U.S. International Trade Commission, 500 E Street, NW, Washington, DC.

In support of the imposition of antidumping duties

Jones, Day, Reavis & Pogue--Counsel  
Washington, DC  
on behalf of--

Verbatim Corporation

Richard T. Bourns  
President  
James Olson  
Sr. Vice President & Chief Human Resources Officer  
Edward A. Deller  
Director of Business Research, Mass Memory Division  
  
Mark Love, Vice President  
Kenneth R. Button, Chief Economist  
Economic Consulting Services, Inc.

Thomas F. Cullen, Jr.)  
Jerome J. Zaucha )--OF COUNSEL

In opposition to the imposition of antidumping duties

Wilmer, Cutler & Pickering--Counsel  
Washington, DC  
on behalf of--

Sony Corporation of America

Toshiro Kobayashi  
Manager, Disk Department, Magnetic Products Group

John D. Greenwald )--OF COUNSEL

-more-

In opposition to the imposition of antidumping duties--Continued

Skadden, Arps, Slate, Meagher & Flom--Counsel  
Washington, DC  
on behalf of--

Fuji Photo Film Company Ltd. & Related Companies

Toshiyuki Hirai  
Sr. Assistant to the President, Fuji Photo Film U.S.A.  
Steven Solomon  
General Manager, Computer Media Division, Fuji Photo Film U.S.A.

Thomas R. Graham )--OF COUNSEL

Morgan, Lewis & Bockius--Counsel  
Washington, DC  
on behalf of--

TDK U.S.A. Corp. and TDK Electronics Corp.

Frank Kramer  
Industrial Sales Manager, Computer Products Sales & Marketing

Kenneth G. Weigel )--OF COUNSEL

Andrew R. Wechsler, Economist  
Economists Incorporated, Washington, DC

Steptoe & Johnson--Counsel  
Washington, DC  
on behalf of--

Nashua Corporation

Philip D. Winslow, Marketing Manager, Flexible Media Division  
A. Suzanne Meszner-Eltrich, Counsel

Gracia Berg )--OF COUNSEL

Baker & McKenzie--Counsel  
Washington, DC  
on behalf of--

Apple Computer, Inc.

James Burger, Chief Counsel, Government

Thomas P. Ondeck )  
Kevin O'Brien )--OF COUNSEL





APPENDIX C

COMMERCE'S FEDERAL REGISTER NOTICE

material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before April 11, 1988. If that determination is affirmative, we will make a preliminary determination on or before August 4, 1988.

**EFFECTIVE DATE:** March 23, 1988.

**FOR FURTHER INFORMATION CONTACT:** John Brinkmann, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-3965.

**SUPPLEMENTARY INFORMATION:**

**The Petition**

On February 26, 1988, we received a petition in proper form filed by Verbatim Corporation on behalf of the domestic 3.5" microdisk industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of 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 within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

**United States Price and Foreign Market Value**

United States price was based on published prices for sales to independent distributors in the United States. Petitioner deducted, where appropriate, discounts, free goods, other price-reducing benefits received by each distributor, U.S. inland freight, U.S. Customs brokerage, U.S. tariff, and ocean freight and insurance. Since ESP sales are involved, petitioner also made adjustments for sales commissions and indirect selling expenses.

Petitioner based foreign market value on the prices paid by the first arm's-length purchasers of 3.5" microdisks in the Japanese domestic market adjusted for home market indirect selling expenses, Japanese inland freight and warehousing, packing, and differences in circumstances of sale.

Based upon a comparison of United States price and foreign market value, petitioner alleges dumping margins of between 36.5 percent and 68.1 percent.

**Initiation of Investigation**

Under section 732(c) of the Act, we must determine, within 20 days after a petition is filed, whether it sets forth the allegations necessary for the initiation of an antidumping duty investigation, and whether it contains information

reasonably available to the petitioner supporting the allegations.

We examined the petition on 3.5" microdisks and coated media thereof from Japan and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of 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. If our investigation proceeds normally, we will make our preliminary determination by August 4, 1988.

**Scope of Investigation**

The United States has developed a system of tariff classification based on the international harmonized system of Customs nomenclature. Congress is considering legislation to convert the United States to this Harmonized System (HS). In view of this, we will be providing both the appropriate *Tariff Schedules of the United States Annotated* (TSUSA) item numbers and the appropriate HS item numbers with our product descriptions on a test basis, pending Congressional approval. As with the TSUSA, the HS item numbers are provided for convenience and Customs purposes. The written description remains dispositive.

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at 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 by 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 HS 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.

**International Trade Administration**

(A-588-802)

**Initiation of Antidumping Duty Investigation; 3.5" Microdisks and Coated Media Thereof From Japan**

**AGENCY:** Import Administration, International Trade Administration, Commerce.

**ACTION:** Notice.

**SUMMARY:** On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of 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 are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of this product materially injure, or threaten

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.

Coated media produced in Japan and finished into 3.5" microdisks in another country prior to importation into the United States from the other country is tentatively included in the scope of the investigation. In the course of this proceeding we will determine whether to continue to include these indirect imports in the scope of this investigation.

#### **Notification of ITC**

Section 732(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonproprietary information. We will allow the ITC access to all privileged and business proprietary information in our files, provided it confirms in writing that it will not disclose such information either publicly or under administrative protective order without written consent of the Acting Assistant Secretary for Import Administration.

#### **Preliminary Determination by ITC**

The ITC will determine by April 11, 1988 whether there is a reasonable indication that imports of 3.5" microdisks and coated media thereof from Japan materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

This notice is published pursuant to section 732(c)(2) of the Act.

March 17, 1988.

**Gilbert B. Kaplan,**

*Acting Assistant Secretary for Import Administration.*

[FR Doc. 88-6343 Filed 3-22-88; 8:45 am]

BILLING CODE 3510-DS-M



APPENDIX D

SALES QUANTITIES OF MICRODISK PRODUCTS REPORTED  
BY U.S. PRODUCERS AND IMPORTERS

Table D-1

3.5" double-density media: Total reported quantity sold of U.S.-produced  
and imported Japanese product, by quarters, January 1985-December 1987

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Table D-2

Finished 3.5" SS DD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by quarters, January 1985-December 1987

(In units)								
Period	<u>Sales to distributors</u>				<u>Sales to mass</u>		<u>Sales to OEM's</u>	
	<u>Branded product</u>		<u>Unbranded product</u>		<u>merchandisers</u>			
	U.S.- finished	Japan	U.S.- finished	Japan	U.S.- finished	Japan	U.S.- finished	Japan
1985:								
Jan.-Mar.....	***	195,220	-	***	-	***	***	688,550
Apr.-June....	***	348,700	-	***	-	***	***	1,091,700
Jul.-Sept....	***	382,570	-	***	-	***	***	520,400
Oct.-Dec.....	***	388,680	-	***	-	***	***	463,050
1986:								
Jan.-Mar.....	***	513,915	***	320,200	<u>1/</u>	***	***	535,787
Apr.-June....	***	370,241	***	169,174	***	60,204	***	632,454
Jul.-Sept....	***	311,442	***	223,233	***	113,680	***	1,128,217
Oct.-Dec.....	***	314,145	***	432,247	***	99,437	***	750,942
1987:								
Jan.-Mar.....	***	742,768	<u>1/</u>	482,000	***	196,410	***	412,961
Apr.-June....	***	739,242	<u>1/</u>	365,200	***	116,800	***	649,556
Jul.-Sept....	***	662,798	<u>1/</u>	416,300	<u>1/</u>	144,100	***	714,602
Oct.-Dec.....	***	301,574	<u>1/</u>	229,758	***	138,307	***	977,065
<u>1/ * * *.</u>								

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

Table D-3

Finished 3.5" DS DD microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by quarters, January 1985-December 1987

(In units)								
Period	Sales to distributors				Sales to mass merchandisers		Sales to OEM's	
	Branded product		Unbranded product					
	U.S.-finished	Japan	U.S.-finished	Japan	U.S.-finished	Japan	U.S.-finished	Japan
1985:								
Jan.-Mar.....	-	***	-	-	-	1/	-	***
Apr.-June.....	-	***	-	***	-	1/	-	***
Jul.-Sept.....	-	***	-	***	-	***	-	***
Oct.-Dec.....	1/	108,310	-	***	-	1/	-	301,500
1986:								
Jan.-Mar.....	***	207,443	***	68,450	***	***	-	318,950
Apr.-June.....	***	354,161	***	126,487	***	74,583	***	1,870,242
Jul.-Sept.....	***	541,715	***	175,650	***	148,034	***	2,204,862
Oct.-Dec.....	***	634,513	***	362,760	***	347,537	***	1,628,500
1987:								
Jan.-Mar.....	365,200	993,584	***	554,500	***	526,837	276,020	2,183,716
Apr.-June.....	417,428	844,015	***	578,110	***	620,644	364,400	2,709,090
Jul.-Sept.....	282,140	981,219	***	445,600	***	860,400	749,010	4,823,209
Oct.-Dec.....	448,660	1,238,021	***	496,227	***	1,194,030	543,200	7,868,112

/ \* \* \*

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



Table D-4

Finished 3.5" high-density microdisks: Total reported quantity sold of U.S.-finished and imported Japanese products, by types of customer and by quarters, October 1986-December 1987 1/

Period	(In units)				
	<u>Sales to distributors</u>		<u>Sales to</u>		<u>Sales to</u>
	<u>Branded product</u>		<u>mass merch.</u>		<u>OEM's</u>
	U.S. Finished	Japan	Unbranded product Japan	Japan	Japan
1986:					
Oct.-Dec.....	-	-	-	-	<u>2/</u>
1987:					
Jan.-Mar.....	***	***	-	-	***
Apr.-June.....	***	63,740	-	***	***
Jul.-Sept.....	***	166,480	***	***	***
Oct.-Dec.....	***	219,850	***	***	68,900

1/ No observations from January 1985 to September 1986.

2/ \* \* \*.

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



APPENDIX E

INCENTIVE PROGRAMS FOR 3.5" MICRODISKS

## 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 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.--Eight of 12 importers and 5 of 6 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). However, \* \* \* offered \* \* \*, and one importer, \* \* \*, offered \* \* \*. \* \* \*, an importer of microdisks, had one free goods program from \* \* \* to \* \* \* that offered \* \* \*. \* \* \* offered a program that gave \*\*\* percent free goods only to \* \* \* for orders of \* \* \*. \* \* \* 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.--Five of 6 U.S. producers and 5 of 12 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, during \* \* \*, \* \* \* gave distributors a \*\*\* percent rebate on the incremental value of purchases exceeding \* \* \* sales by \*\*\* percent. \* \* \*, 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, \* \* \*. \* \* \* offered rebates of \*\*\* percent on purchases between \$\*\*\* and \$\*\*\*, and \*\*\* percent on purchases over \$\*\*\*. \* \* \* reported that it offered rebate programs \* \* \*, 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." <sup>1/</sup> Four of 12 importers offered these funds to specific purchasers, which represented between \*\*\* to \*\*\* percent of those sales. \* \* \* offered this program to mass merchandisers and distributors on purchases of all floppy disk products. \* \* \* reported that it currently allocates \*\*\* of branded product sales to its MDF program. However, \* \* \* indicated that other incentive programs such as \* \* \* draw from this

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<sup>1/</sup> Petition, p. 43.

account. \* \* \* U.S. producer who offers market development funds. It currently allocates \*\*\* percent of net revenue to an MDF, and an additional \*\*\* percent of net revenue to \* \* \* 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 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 \*\*\* to \*\*\* 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. U.S. producers, such as \* \* \*, currently offer a \*\*\*-percent allowance, although both \* \* \* and \* \* \* have offered a \*\*\*-percent allowance during the period of investigation.

Spiffs.--Spiffs are payments to distributor sales representatives as a reward for achieving sales goals of a specified product. Four importers and 4 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 \$\*\*\* per disk sold to sales representatives, down from a spiff of \$\*\*\* per disk prior to 1986. \* \* \* and \* \* \* 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 \* \* \*. Spiff programs account for \*\*\* percent of \* \* \*s total sales of 3.5 product and are a component of their 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 or the co-operative advertising allowance.

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. \* \* \*.

Warehouse allowances.--\* \* \* who offered a warehouse allowance during the period of investigation to encourage sales of its product to distributors. \* \* \*.

Pallet allowances.--\* \* \* who offered this program. \* \* \*.

Other programs.--Four importers and 2 producers reported other purchasing incentives. \* \* \*. \* \* \*.

\* \* \* \* \*

