

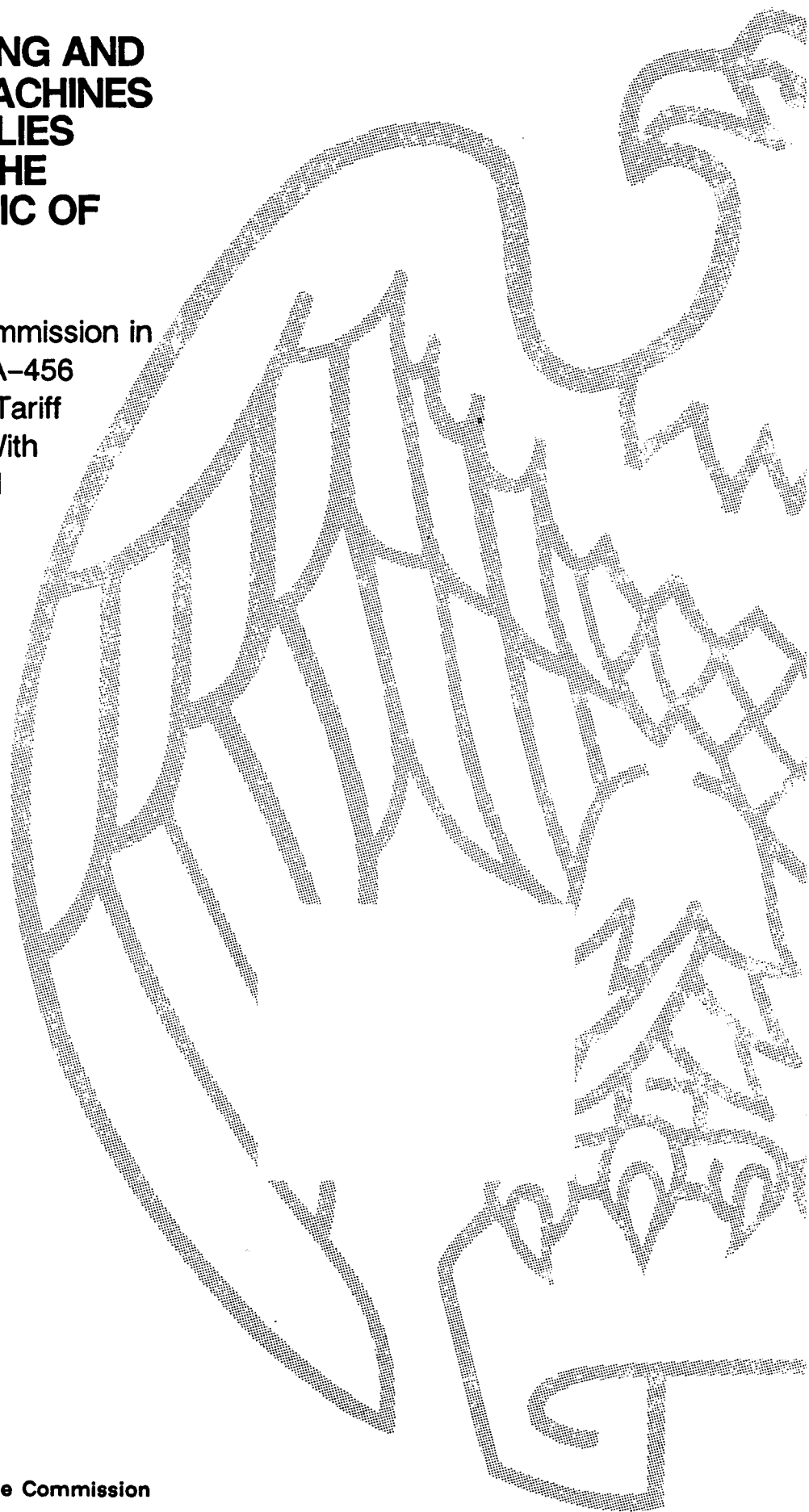
**PHOTOTYPESETTING AND
IMAGESETTING MACHINES
AND SUBASSEMBLIES
THEREOF FROM THE
FEDERAL REPUBLIC OF
GERMANY**

Determination of the Commission in
Investigation No. 731-TA-456
(Preliminary) Under the Tariff
Act of 1930, Together With
the Information Obtained
in the Investigation

USITC PUBLICATION 2281

MAY 1990

**United States International Trade Commission
Washington, DC 20436**



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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

UNITED STATES INTERNATIONAL TRADE COMMISSION
Investigation No. 731-TA-456 (Preliminary)

PHOTOTYPESETTING AND IMAGESETTING MACHINES AND SUBASSEMBLIES THEREOF
FROM THE FEDERAL REPUBLIC OF GERMANY

Determination

On the basis of the record¹ developed in the subject investigation, the Commission determines, 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 the Federal Republic of Germany of phototypesetting and imagesetting machines and subassemblies thereof,² provided for in subheadings 8442.10.00 and 8442.40.00

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

²For purposes of this investigation, the term "phototypesetting and imagesetting machines and subassemblies thereof" refers to phototypesetting and imagesetting machines and certain subassemblies of such machines, consisting of hardware and dedicated software capable of producing high-resolution (600 or more dots per inch) type and/or images on a photographic medium, either film or paper. The photographic medium output permits a high quality of final printed output. This output serves the needs of various users for high-resolution printing and publishing. Included in the hardware are image controllers/processors, image recorders, imagesetters and phototypesetters.

Image controllers/processors are sophisticated computers that are capable of manipulating text and graphics in a manner that allows them to be output on a page of photographic medium. Computer codes are received from a front-end device (computer workstation) and are rasterized (i.e., converted into a pattern of on and off pulses that create images or characters). These rasterized patterns/codes can be received by various output devices for transfer to the photographic media. Phototypesetters and imagesetters create graphic and text output on photosensitive media (paper or film) by scanning a laser beam across the media. As each scans, it turns the laser on and off to create tiny light spots. When these spots hit the photosensitive media, the exposure creates tiny black dots called pixels.

The subassemblies included in the scope of the investigation are limited to customized printed circuit board assemblies for the equipment operating system and for compressing data, raster image processor assemblies, and laser image and optical assemblies. Some subassemblies may be classified as parts. Furthermore, the subassemblies included are not capable of being used for products other than phototypesetting and imagesetting machines.

of the Harmonized Tariff Schedule of the United States (previously classified in item 668.25 and reported under items 668.2520 and 668.2540 of the former Tariff Schedules of the United States), that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On March 20, 1990, a petition was filed with the Commission and the Department of Commerce by Varityper, Inc., East Hanover, NJ, and Tegra, Inc., Billerica, MA, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of phototypesetting and imagesetting machines and subassemblies thereof from the Federal Republic of Germany. Accordingly, effective March 20, 1990, the Commission instituted preliminary antidumping investigation No. 731-TA-456 (Preliminary).

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 28, 1990 (55 F.R. 11448). The conference was held in Washington, DC, on April 11, 1990, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

We unanimously determine that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of phototypesetting and imagesetting machines and subassemblies thereof from the Federal Republic of Germany (FRG). 1/

The Legal Standard in Preliminary Investigations

The legal standard in preliminary antidumping investigations is set forth in section 733(a) of the Tariff Act of 1930, as amended. 2/ That section requires the Commission to determine whether, based on the best information available at the time of the preliminary determination, there is a reasonable indication of material injury to a domestic industry, or threat thereof, or material retardation of establishment of an industry, by reason of the imports under investigation. 3/

In American Lamb Co. v. United States, 4/ the United States Court of Appeals for the Federal Circuit addressed the standard for preliminary determinations. The Court held that the reasonable indication standard requires more than a finding that there is a possibility of material injury, and the Commission is to determine if the evidence obtained demonstrates that a reasonable indication exists. The Commission may render a negative preliminary determination only if "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of such

1/ Material retardation of the establishment of an industry is not an issue in this investigation and will not be discussed further.

2/ 19 U.S.C. § 1673b(a).

3/ Maverick Tube Corp. v. United States, 687 F. Supp. 1569, 1573 (CIT 1988).

4/ 785 F.2d 994 (Fed. Cir. 1986).

injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation." 5/ 6/

Like Product and Domestic Injury

In determining whether there is a reasonable indication of material injury or threat thereof to a domestic industry, the Commission must make threshold factual determinations with respect to "like product" and "domestic industry." Section 771(4)(A) of the Tariff Act of 1930 defines the term "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. . . ." 7/ "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" 8/

The Department of Commerce (Commerce) defines the imported merchandise that is subject to the investigation, and the Commission determines the domestic products "like" the imports. The imported articles subject to this investigation are phototypesetting and imagesetting machines and subassemblies thereof from the FRG. In the Notice of Initiation, Commerce has defined this product as follows:

5/ Id. at 1001.

6/ Vice Chairman Cass' understanding of the meaning of this language is described in New Steel Rails from Canada, Invs. Nos. 701-TA-297 and 731-TA-422 (Preliminary), USITC Pub. 2135 (Nov. 1988) (Additional Views of Commissioner Cass) and Generic Cephalixin Capsules from Canada, Inv. No. 731-TA-433, USITC Pub. 2143 (Dec. 1988) (Dissenting Views of Commissioner Cass).

7/ 19 U.S.C. § 1677(4)(A).

8/ 19 U.S.C. § 1677(10).

Imports covered by this investigation are shipments of phototypesetting and imagesetting machines and certain subassemblies thereof, consisting of hardware and dedicated software capable of producing high resolution (600 or more dots per inch) type and/or images on photographic medium, either film or paper. . . . Included in the hardware are image controller/processors, image recorders, imagesetters and phototypesetters. . . .

The subassemblies included in the scope of this investigation are limited to customized printed circuit board assemblies for the equipment operating system and for compressing data, raster image processor assemblies, and laser image and optical assemblies. Some subassemblies may be classified as parts. Furthermore, the subassemblies included are not capable of being used for products other than phototypesetting and imagesetting machines. . . . 9/

While the Commission accepts Commerce's determination as to which merchandise is within the class of merchandise allegedly sold at less than fair value (LTFV), the Commission determines what domestic products are like the ones in the class defined by Commerce. 10/

The Commission's decision regarding the appropriate like product or products in an investigation is essentially a factual determination, and the Commission has applied the statutory standard of "like" or "most similar in characteristics and uses" on a case-by-case basis. 11/ In determining what domestic products are like the imports subject to the investigation, the Commission generally considers a number of factors including: (1) physical characteristics; (2) end uses; (3) interchangeability of the products; (4) channels of distribution; (5) production processes; (6) customer or producer

9/ 55 Fed. Reg. 14099 (April 16, 1990).

10/ Algoma Steel Corp., Ltd. v. United States, 688 F. Supp. 639 (CIT 1988), aff'd, 865 F.2d 240 (Fed. Cir.), cert. denied, 109 S.Ct. 3244 (1989).

11/ Asociacion Colombiana de Exportadores de Flores v. United States ("ASOCOFLORES"), 693 F. Supp. 1165, 1169 (CIT 1988).

perceptions of the products; (7) the use of common manufacturing facilities and production employees; and (8) price. 12/

When considering whether semifinished or component parts are to be included within a like product consisting of a finished article, the Commission examines: (1) the necessity for, and the costs of, further processing, (2) the degree of interchangeability of articles at the different stages of production, (3) whether the article at an earlier stage of production is dedicated to use in the finished article, (4) whether there are significant independent uses or markets for the finished and unfinished articles, and (5) whether the article at an earlier stage of production embodies or imparts to the finished article an essential characteristic or function. 13/

Typesetting or imagesetting are two composition functions that are essential to printing and publication processes. 14/ Typesetting refers to the setting of type and simple straight lines. Imagesetting is a newer form of composition that refers to the typesetting process, but in an enhanced application that incorporates the ability to output images, including photographs. 15/

12/ E.g., Light-Duty Integrated Hydrostatic Transmissions and Subassemblies Thereof, With or Without Attached Axles, from Japan, Inv. No. 731-TA-425 (Preliminary), USITC Pub. 2149 (Jan. 1989) ("Transmissions"); 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 (Sept. 1987); Certain Copier Toner from Japan, Inv. No. 731-TA-373 (Preliminary), USITC Pub. No. 1960 (Mar. 1987).

13/ Certain Telephone Assemblies and Subassemblies Thereof from Japan and Taiwan, Invs. Nos. 731-TA-426 and 428 (Final), USITC Pub. 2237 (Nov. 1989) ("Telephones") at 5, n. 9; Transmissions, USITC Pub. 2149 at 19, n. 64.

14/ Petition at 3; Report to the Commission (Report) at A-2.

15/ Id.

Phototypesetting refers to any systems that can produce composition from simple straight matter to full-page, multi-column formats on photographic paper, film or paper plates. 16/ All phototypesetting requires three elements: a master character image, a light source, and a photo- or light-sensitive material. 17/ These systems form characters by a series of minute dots or lines, which are then filled in and transferred to photographic material. The units then use either a light cast through an image of the characters, or a video display (cathode-ray-tube or CRT) that produces the image on a screen. 18/

Essentially all of the imported machines under investigation use lasers. Laser imagesetters scan across the photo sensitive page one line at a time, turning the laser on and off to create tiny light spots. When these spots hit the photo sensitive page, the exposure creates minute black dots called pixels. The overlapping dots create the desired characters or images. 19/

The quality of the printed output produced by phototypesetters and imagesetters is referred to as "resolution" and is measured by dots or spots to the inch (spi). 20/ The scope of this investigation includes machines capable of producing a resolution of greater than 600 spi.

The phototypesetting and imagesetting process generally consists of four basic stages--(1) the inputting of data through, e.g., a keyboard (the

16/ INTERNATIONAL PAPER CO., POCKET PAL (14th ed., May, 1989) ("Pocket Pal") at 46 (submitted to staff by petitioner).

17/ Id. at 47.

18/ Id. at 47, 189; Tr. 82.

19/ Petition at 17; Tr. 83.

20/ Report at A-3; Tr. 31.

"front-end" operations); (2) translating the input onto an electronic page; (3) creating an image from the electronic page to a photographic medium (either film, paper, or plate) or onto plain paper; and, (4) where appropriate, development of the photographic film. 21/ Neither the equipment used in the front-end operations nor the film developing equipment are within the scope of this investigation, as defined by Commerce.

The scope includes all hardware and dedicated software used in the "back-end" operations, described in steps (2) and (3) above. 22/ This equipment includes two assemblies--the raster image processor (RIP), which creates a set of data instructions (a "bit map") by assigning dots on a page layout; and the image recorder, which puts the dots on a photographic medium, usually film. 23/ Whereas the same company can produce all of the assemblies in the process, a system can consist of assemblies manufactured by different producers. 24/

Also included in the scope are certain subassemblies or parts dedicated for use in the phototypesetting or imagesetting equipment. These

21/ See Report at 2.

22/ The scope of the investigation includes software only to the extent that it is incorporated into the phototypesetting or imagesetting hardware. The predominant software for use in these machines is PostScript, developed in 1984 by Adobe, Inc., a software company. See Report at A-3. Unlike the proprietary languages previously used, PostScript permits device-independent manipulation of high resolution graphics and printing layout. Petition at 6, Exhibit D. 1., p. 0189; Tr. 79.

Although there is general agreement that PostScript sets the standard for this equipment, some companies, including petitioner Varityper, have developed PostScript "clones" in place of, or in addition to, PostScript itself. Tr. 66-68; Petition at Exhibit D. 1., p. 0184. Varityper uses its clone in a separate product line. Tr. 67. In addition, some producers continue to sell their own non-PostScript compatible proprietary software.

23/ Report at A-3.

24/ Petition at 4-5, Exhibit D. 1., p. 0186; Tr. 102.

subassemblies are limited to certain customized printed circuit boards (PCBs) contained or incorporated in the RIPs, the laser box that turns the laser beam on and off to create the light spots ("laser image assembly"), and the optical assembly contained in the recorder. 25/

The parties have argued, and we agree, that plain paper equipment should not be included in the like product. 26/ Accordingly, as suggested by the parties, we define the like product to include only phototypesetters and imagesetters that use a photographic medium. 27/ There are, however, two other like product questions that must be addressed in this investigation:

1. Whether "high end" equipment should be a separate like product? 28/
2. Whether the subassemblies should be separate like products? 29/

25/ Report at A-4.

26/ As compared to photographic medium equipment, plain paper equipment is physically more compact, produces output of a significantly lower quality, and sells in a substantially lower price range. See Report at A-11; Petitioner's postconference brief at 4-6. According to petitioner, although some imagesetter producers sell plain-paper printers, none of those producers manufactures these printers. Id. In addition, plain paper printers are distributed through "office equipment" channels as proofing equipment, whereas imagesetters are handled separately by their producer's sales representatives. Id.; Report at A-6.

27/ Although we agree with the parties in this instance, we note that agreement among the parties to an investigation does not mean that the Commission may not determine that the like product is other than that suggested by the parties. See, e.g., Drafting Machines and Parts Thereof from Japan, Inv. No. 731-TA-432 (Preliminary), USITC Pub. 2192 (May 1989) at 6; Industrial Belts from Israel, Italy, Japan, Singapore, South Korea, Taiwan, The United Kingdom and West Germany, Invs. Nos. 731-TA-412 - 419 (Final), USITC Pub. 2194 (May 1989) at 6-7.

28/ There is no standard industry definition of "high end" equipment. The distinction between "high end" and "low end" is somewhat blurred. The Report lists some of the features that make a system "high end." Report at A-8.

29/ The parties have not addressed this issue.

For the purposes of this preliminary investigation we find one like product, consisting of all photographic medium typesetting and imagesetting machines with a resolution of 600 or more dots per inch, and the dedicated subassemblies thereof.

1. There are no clear dividing lines between "high end" machines and "low end" machines.

Hell Graphics Systems, Inc. (HGS), an importer of high-priced color output drum recorders, contends that this product differs substantially from other ("low-end") imagesetters on the basis of price, quality, capability, and technical distinctions. ^{30/} Therefore, HGS argues, its product should be excluded from the scope of this investigation, in which case there would be no corresponding domestic like product. This argument, however, is properly addressed to Commerce, not to the Commission. ^{31/} Although petitioner agrees that high-end color image composition systems such as HGS's should be excluded from the scope, ^{32/} the Commission has on several recent occasions stated that it has no statutory authority to exclude certain imports from the

^{30/} HGS' postconference brief at 3.

^{31/} See Sandvik AB v. United States, 721 F. Supp. 1322, 1329 (CIT 1989); Sony Corp. of America v. United States, 712 F. Supp. 978 (CIT 1989); Antifriction Bearings (Other than Tapered Roller Bearings) and Parts Thereof from The Federal Republic of Germany, France, Italy, Japan, Singapore, Sweden, Romania, Thailand and The United Kingdom ("Bearings"), Invs. Nos. 731-TA-391-399 (Final), USITC Pub. 2185 (May 1989) at 37-39.

^{32/} Petitioner's postconference brief at 3.

scope of the investigation, as defined by Commerce. 33/ This position has been affirmed by the Court of International Trade. 34/

The Commission's role in the statutory scheme is to define the relevant domestic industries and evaluate the impact of imports on them. 35/ Thus, we must define the domestic product that is most "like" the products under investigation, i.e., high resolution phototypesetters and imagesetters from the FRG, including HGS's machines. For the purposes of this preliminary investigation, we find that all high resolution phototypesetters and imagesetters are one like product.

As to physical characteristics and end uses, all phototypesetters and imagesetters are composed of two main assemblies-- the RIP and the recorder, and all are used to produce high resolution composition. Although a particular producer's machines may have special features that make those machines more attractive to one particular type of customer, the evidence currently available indicates that, on a broad scale, the machines are largely interchangeable. 36/ As to channels of distribution, virtually all phototypesetters and imagesetters are sold through direct sales representatives. 37/

33/ E.g., Bearings, USITC Pub. 2185 at 39; Certain All Terrain Vehicles from Japan ("ATVs"), Inv. No. 731-TA-388 (Preliminary), USITC Pub. 2071 (Mar. 1988) at 9, n.30.

34/ Sandvik, supra, 721 F. Supp. at 1329; Sony Corp., supra, 712 F. Supp. at 983.

35/ Bearings, USITC Pub. 2185 at 39.

36/ See, e.g., Tr. 115-118.

37/ Report at A-18.

E.I. Dupont de Nemours & Company, Inc. (Dupont) is the parent or major owner of three companies that produce products in the United States arguably "like" the "high-end" imagesetters included within the scope of this investigation. 38/ Dupont argues, however that these imagesetters constitute a separate like product from Varityper's machines. 39/ Dupont presents various features of each of its machines that distinguish them from Varityper's machines and, in a number of instances, distinguish the machines produced by each of Dupont's subsidiaries from one another.

The only common threads that Dupont attempts to draw among the products of all three domestic producers it represents are: the use of proprietary software rather than PostScript or 'a Postscript clone; resolution qualities in the 2000 spi range; and high prices. Dupont also urges a like product distinction based on end use, although it presents different end uses for each of its machines. We find, at least for purposes of this preliminary determination, that these distinctions are not sufficiently clear cut to warrant finding separate like products. 40/ 41/

38/ Dupont's subsidiary ImagiTex, Inc. produces a scanning recorder that produces high quality monochrome films for the graphic arts industry. Second, Dupont has a major interest in Crosfield, which makes color image processors similar to those marketed by HGS. Third, its subsidiary Camax, Inc. produces a proprietary image process system used for newspaper advertisement production.

Dupont is also an importer of Linotype recorders subject to this investigation. The application of the "related parties" provision to Dupont's companies is discussed infra.

39/ Dupont's postconference brief at 3-10.

40/ The Commission looks for clear dividing lines between like products; minor distinction are an insufficient basis for finding separate like products. See e.g., ATVs, USITC Pub. 2163 at 4-5, 9; Mechanical Transfer Presses from Japan, Inv. No. 731-TA-429 (Final), USITC Pub. 2257 (Feb. 1990) at 6-7.

(continued...)

It is not appropriate to define the like product by whether a particular machine is PostScript-compatible. Until the domestic producers introduced their PostScript-compatible machines in late 1988, their imagesetting machines were competing for sales with Linotype's PostScript-driven machines, even though they utilized different software. A software-based distinction is particularly troublesome here, given that the some non-PostScript-compatible machines, such as those produced by Dupont's affiliate companies, allegedly sell at higher prices than most PostScript compatible machines. In contrast, machines such as those sold by petitioner prior to its development of the PostScript imagesetters were significantly lower in price than PostScript-compatible machines. 42/ Drawing a like product line based on whether the machines are PostScript compatible thus would have the incongruous result of defining a separate like product consisting of low priced older machines combined with high priced, technologically advanced machines.

As to Dupont's reliance on the high speed and high resolution of the machines produced by the domestic firms it represents, several lower priced machines either operate at high speeds or have resolutions as high as 2,400

41/(...continued)

41/ Chairman Brunsdale objects to the use of subjective terms like "clear cut" as dispositive concepts in like product determinations. She concurs in the result reached by the Commission, however, because on this preliminary record, DuPont has not demonstrated that the products it describes are produced and sold in a market separate and apart from those produced by petitioner and manufacturers of similar products. For a further discussion of Chairman Brunsdale's views on like product analysis, see Generic Cephalixin Capsules from Canada, Inv. No. 731-TA-423 (Final), USITC Pub. 2211 (Aug. 1989) at 29-38 (Additional Views of Chairman Brunsdale). The different price structure for Dupont's machines suggests, however, that this issue deserves further scrutiny in any final investigation.

42/ See Report at A-21, Table 4.

dpi. 43/ Given that some of the machines in the like product group from which Camax, Imagitex, and Crosfield attempt to distinguish themselves are capable of meeting the same resolution levels, it does not seem appropriate to draw a like product line on the basis of resolution.

As to end use, while Dupont points out that its subsidiary Camax aims its sales at the newspaper industry, at least one other domestic producer of text-and-image machines, Autologic, also competes for sales to newspapers. 44/ Similarly, while Dupont's subsidiary Imagitex and affiliate Crosfield may produce exclusively for graphics use, we do not have sufficient evidence at this preliminary stage to find that other domestic producers do not compete for sales in this market. 45/

With regard to price, some imagesetting systems manufactured by other domestic producers sell in the same range as Camax machines. 46/ In fact, several producers manufacture models that list in low, middle, and high price ranges. 47/ Further, all machines within each price range do not necessarily share the same features. For instance, one producer's system in the "over \$100,000" price range may be an upgraded general purpose machine, whereas

43/ See Roth article, Petition p. 0189; Report at A-49-50; Tr. 115.

44/ Tr. 38.

45/ See, e.g., Tr. 117.

46/ See Petition, Exhibit D. 1. (Roth article), p. 0179; Report at A-75. Because neither Imagitex nor Crosfield provided price data, we do not have sufficient evidence to compare the prices of their products with the prices of other domestically produced imagesetters.

47/ See Roth article. The production by these manufacturers of models in various price ranges suggests that machines in different price ranges and of varying quality can be produced in the same manufacturing facilities, using the same production employees.

another's may fall into the low resolution/high speed category. 48/ Absent other common distinguishing features, finding separate like products based solely on differences in price is not warranted. 49/ Moreover, price is merely one of the factors considered by the Commission in making like product definitions, and the Commission has stated repeatedly that no one factor is dispositive. 50/

For the above reasons, we find, for the purposes of this preliminary investigation, that high resolution phototypesetters and imagesetters constitute one like product. We base this determination on the absence of evidence in this preliminary investigation of clear dividing lines along which to define separate like products. 51/ In any final investigation we will closely reexamine this issue.

2. Phototypesetting and imagesetting machines and their dedicated subassemblies constitute one like product.

The subassemblies and parts included within the scope of the investigation include only customized printed circuit board (PCB) configurations, raster image processor assemblies, and laser image and optical assemblies, all of which must be dedicated for use in phototypesetting and imagesetting machines. 52/

48/ Id.

49/ See ASOCOFLORES, 693 F. Supp. at 1170, n. 8; S. Rep. No. 71, 100th Cong., 1st Sess. 116 (1987) ("not all price differences can be explained by differences in the merchandise").

50/ See note 12, supra.

51/ See, e.g., ATVs, USITC Pub. 2163 at 9; Mechanical Transfer Presses, USITC Pub. 2257 at 7-13.

52/ Notice of Initiation at 6. These subassemblies are described in the Report at A-6-7.

The major domestic producers of entire systems indicated that they manufacture these subassemblies themselves, a fact that favors their inclusion in the same like product as the machines. 53/ Moreover, the scope confines subassemblies and parts to those "dedicated" to use in phototypesetting and imagesetting machines. These customized parts have no use other than in the machines for which they were manufactured. 54/

For the purpose of this preliminary investigation, we determine that these subassemblies are part of the same like product as the machines. In any final investigation, we will endeavor to gather additional information about the subassemblies. 55/

Accordingly, we define the like product in this investigation to include all high resolution (more than 600 dpi) photographic-medium typesetters and imagesetters and the dedicated subassemblies thereof. 56/ Concomitantly, we define the domestic industry to consist of the domestic producers of these machines and dedicated subassemblies.

Related Parties

The related parties provision, 19 U.S.C. § 1677(4)(B), allows for exclusion of certain domestic producers from the domestic industry if the

53/ See, e.g., Drafting Machines, USITC Pub. 2247 at 6-7.

54/ See id.

55/ One factor that might suggest a separate like product category for subassemblies is that these subassemblies require assembly and additional processing. Report at 6. We do not have data about these additional steps, so it is not possible to consider this criterion of the Commission's usual subassemblies analysis.

56/ We reiterate that the inclusion of "high end" machines and of subassemblies in the one like product definition are for the purposes of the preliminary investigation only. In any final investigation, we would request that the parties address these issues in their briefs.

requirements stated therein are met, and if the Commission, in the exercise of its discretion, determines that exclusion is appropriate. That section of the statute provides that, when a producer is related to the importer or foreign manufacturer of a product, or is itself an importer of the allegedly dumped or subsidized imports, the Commission may exclude such a producer from the domestic industry in "appropriate" circumstances. 57/ Application of the related parties provision is within the Commission's discretion based upon the facts presented in each case. 58/

The Commission generally applies a two-step analysis in determining whether to exclude a domestic producer from the domestic industry under the related parties provision. The Commission considers (1) whether the company qualifies as a related party under section 771(4)(B), and (2) whether, in view of the producer's related status, there are "appropriate circumstances" for excluding the company in question from the definition of the domestic industry. 59/

The related parties provision may be employed to avoid any distortion in the aggregate data bearing on the condition of the domestic industry that might result from including related parties whose operations are shielded from the effects of the subject imports. 60/ The primary factors the Commission has examined in deciding whether appropriate circumstances exist to exclude the related parties include:

57/ 19 U.S.C. § 1677(4)(B).

58/ Empire Plow Co. Inc. v. United States, 675 F. Supp. 1348, 1352 (CIT 1987).

59/ See, e.g., Digital Readout Systems and Subassemblies Thereof from Japan ("DROs"), Inv. No. 731-TA-390 (Final), USITC Pub. 2150 (Jan. 1989) at 15.

60/ Granular Polytetrafluoroethylene Resin from Italy and Japan, Invs. Nos. 731-TA-385 and 386 (Preliminary), USITC Pub. 2043 (Dec. 1987) at 9.

- (1) the percentage of domestic production attributable to related producers;
- (2) the reason why importing producers choose to import the articles under investigation, i.e., whether they import in order to benefit from the unfair trade practice or simply in order to be able to compete in the domestic market; and
- (3) the competitive position of the related domestic producer vis-a-vis other domestic producers, i.e., whether inclusion or exclusion of the related party will skew the data for the rest of the industry. 61/

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. 62/

Although no party in this investigation has raised a related parties question, there is a related parties issue that should be addressed. Camax is a domestic producer of imagesetter machines, and is "related" to its parent company Dupont, an importer of allegedly LTFV Linotype recorders. In fact, Camax uses these imported recorders in its systems. 63/

Camax appears to be benefiting from any LTFV imports by using the allegedly dumped recorders in its systems. Dupont openly admits that it controls Camax, and that its primary interest in this investigation is as an importer. 64/ Dupont appeared at the conference in that role in opposition

61/ See, e.g., ATVs, USITC Pub. 2163 at 17-18; Thermostatically Controlled Appliance Plugs and Internal Probe Thermostats Therefor from Canada, Japan, Malaysia and Taiwan, Invs. Nos. 701-TA-292, 731-TA-400, 402-404 (Final), USITC Pub. 2152 (Jan. 1989); Granular Polytetrafluoroethylene Resin from Italy and Japan, Invs. Nos. 731-TA-385-386 (Final), USITC Pub. 2112 (Aug. 1988); Rock Salt from Canada, Inv. No. 731-TA-239 (Final), USITC Pub. 1798 (Jan. 1986).

62/ See, e.g., Rock Salt from Canada, USITC Pub. 1798 at 12.

63/ Dupont's postconference brief at 10; Report at A-10.

64/ Dupont's postconference brief at 2, 4.

to the petition, and filed one brief on behalf of all of its interested subsidiaries, including Camax. Although the precise effect that inclusion of Camax data would have on the condition of the domestic industry is confidential, 65/ we note that, based upon our evaluation of that data, we find it appropriate under the relevant statutory criteria to exclude Camax as a related party.

There are similar related parties questions regarding Imagitex and Crosfield. Like Camax, Imagitex is a Dupont subsidiary represented in this investigation by Dupont. Crosfield is not a Dupont subsidiary, but Dupont has a major interest in Crosfield and represented Crosfield in this investigation. However, Imagitex and Crosfield did not provide usable data. 66/

Since Imagitex and Crosfield did not provide sufficient data to determine whether they are shielded from the effects of any dumped imports by virtue of their relationship with Dupont, we do not find "appropriate circumstances" to exclude them from the domestic industry in this preliminary investigation. 67/

Condition of the Domestic Industry 68/ 69/

65/ The data for Camax are presented in Appendix C to the Report. Camax was the only U.S. producer that provided usable data on "high-end" machines.

66/ Report at A-9.

67/ We note that the inclusion of Crosfield and Imagitex has no practical effect upon our evaluation of the condition of the domestic industry. Since these firms did not provide data, the injury indicators contained in the Report do not include any data from these firms.

68/ Chairman Brunsdale joins in this discussion of the condition of the domestic industry. However, she does not reach a separate legal conclusion regarding the presence or absence of material injury based on this information. While she does not believe an independent determination is either required by the statute or useful, she finds the discussion of the condition of the domestic industry helpful in determining whether any injury
(continued...)

In assessing the condition of the domestic industry, the Commission considers, among other factors, domestic consumption, production, capacity, capacity utilization, shipments, inventories, employment, and financial performance. 70/ The statute further provides for the Commission to consider, if relevant, the effects on the existing development and production efforts of the domestic industry. 71/ The Commission has evaluated these factors within the context of the business cycle and conditions of competition that are distinctive to the affected industry. 72/ In this respect, we are particularly cognizant of the domestic industry's recent development of PostScript-compatible products (a significant technological advance), whereas respondent Linotype has been selling such products in the U.S. market since the mid 1980's. For the purposes of this preliminary

68/(...continued)

resulting from dumped or subsidized imports is material. See Certain Light-Walled Rectangular Pipes and Tubes from Taiwan, Inv. No. 731-TA-410 (Final), USITC Pub. 2169 (March 1989) at 10-15 (Views of Acting Chairman Brunsdale).

69/ Vice Chairman Cass does not believe that the statute under which the Commission conducts Title VII investigations contemplates that the Commission will make a separate legal finding respecting the condition of the industry. While he believes the condition of the domestic industry is relevant to assessing whether the effect of the LTFV imports had been "material," that information has relevance only in assessing material injury by reason of the allegedly subsidized or LTFV imports. See Digital Readout Systems and Subassemblies Thereof from Japan, Inv. No. 731-TA-390 (Final), USITC Pub. 2150 (Jan. 1989) at 95-113 (Concurring and Dissenting Views of Commissioner Cass); Generic Cephalixin Capsules, USITC Pub. 2211 at 47 (Additional Views of Vice Chairman Cass).

70/ 19 U.S.C. § 1677(7)(C)(iii).

71/ Id.

72/ See id.

investigation, the Commission collected data bearing on the condition of the domestic industry for the period 1987 through 1989. 73/

The precise figures for apparent domestic consumption are business proprietary, and therefore may only be discussed in general terms. However, we note that, in quantity terms, apparent consumption of imagesetters 74/ decreased steadily during the period of investigation. 75/ By value, apparent consumption decreased from 1987 to 1988, and then increased in 1989 to a level above the 1987 level. 76/

The capacity of U.S. producers to produce imagesetters increased by 6.2 percent from 1987 to 1988, and then decreased in 1989 by 3.9 percent. 77/ Production, however, followed the opposite trend, decreasing by 11.5 percent from 6,558 machines in 1987 to a low of 5,802 machines in 1988, and then

73/ In evaluating the production and shipments data for the purposes of this preliminary investigation, the Commission relied on the data collected for complete machines. The companies responding to the Commission questionnaires, including the parties themselves, were inconsistent in defining "subassemblies," which were defined more broadly in the Commission's questionnaire than in Commerce's subsequent scope determination. See Report at A-4; Tr. 40-41, 96, 104-107. Some firms defined them as spare parts for imagesetters, whereas other firms defined them as separate sales of recorders or RIPs. Report at A-4. See Report at A-21. However, an unknown quantity of these domestically-produced recorders counted as "subassemblies" were sold to U.S. manufacturers of complete machines, who would have included these recorders as part of their own data on complete machines. Report at A-4. Because of this potential for double-counting, the Commission has not relied on the subassemblies production and shipments data in making its preliminary determination. In any final investigation, the Commission will attempt to gather separate data on RIPs and recorders.

74/ The term "imagesetters" as used in this discussion includes phototypesetters as well.

75/ Report at A-20, Table 14.

76/ Id.

77/ Report at A-11-12, Table 3.

rebounding by 9.6 percent in 1989, to 6,356 machines. 78/ Capacity utilization fell between 1987 and 1988 by 14.5 percent, and then rose by 10.2 percent in 1989. 79/

The quantity of U.S. shipments of imagesetters decreased by 33.5 percent from 1987 to 1989, from 3,113 to 2,069. 80/ The value of these shipments decreased from \$71 million in 1987 to \$60 million in 1988, and then increased to \$87 million in 1989. 81/ The unit value of U.S. shipments increased by 11.6 percent from 1987 to 1988, and again by 65.1 percent from 1988 to 1989. 82/ The increases in unit values and shipment values are due to the introduction of a new and more expensive product line incorporating PostScript software. 83/

Employment indicators for the domestic industry were generally unfavorable. 84/ The financial information for domestic producers' operations producing imagesetters and subassemblies was also unfavorable. 85/ Furthermore, in this rapidly changing high-tech industry, we find the overall trend in research and development expenditures consistent with the domestic industry's claim of injury. 86/

78/ Id.

79/ Id.

80/ Report at A-12-13, Table 4.

81/ Id.

82/ Id.

83/ Id.

84/ Report at A-13-14, Table 6.

85/ Report at A-14-16, Table 8.

86/ See Report at 17.

Generally, the relevant indicators for the domestic industry producing imagesetters were unfavorable during the period of investigation. Although the industry experienced some improvement in 1989, these improvements did not allow the industry to recover from its downturn in 1988. Based upon the record in this preliminary investigation, we find there is a reasonable indication that the domestic industry producing imagesetters and subassemblies thereof is materially injured.

Reasonable indication of material injury by reason of subject imports 87/

In this preliminary investigation, the Commission must determine whether there is a reasonable indication of material injury or the threat thereof to the domestic industry "by reason of" the imports under investigation. 88/ The Commission considers the volume of imports, their effect on prices for the like product, and their impact on domestic producers. 89/ In doing so, the Commission examines whether import volumes or increases in volume are significant, whether there has been significant underselling by imports, whether imports significantly depress or suppress prices for the like product, and such factors as domestic production, sales, capacity utilization, inventories, employment, and profits. 90/

87/ Vice Chairman Cass does not join in the Commission's discussion of whether there is a reasonable indication of material injury by reason of the allegedly LTFV imports. His analysis of this issue is set forth separately in his Additional Views.

88/ 19 U.S.C. § 1673b(a).

89/ 19 U.S.C. § 1677(7)(B)(i).

90/ 19 U.S.C. § 1677(7)(C).

The Commission may consider alternative causes of injury, but it is not to weigh causes. 91/ The Commission need not determine that imports are the principal or a substantial cause of material injury. 92/ Rather, the Commission is to determine whether imports are a cause of material injury. 93/ 94/

Although specific data on imports are business proprietary, we note that imported imagesetters from FRG have accounted for a large and significantly

91/ Citrosuco Paulista S.A. v. United States, 704 F. Supp. 1075, 1101 (CIT 1988). Alternative causes may include:

the volume and prices of imports sold at fair value, contraction in demand or changes in patterns of consumption, trade, restrictive practices of and competition between the foreign and domestic producers, developments in technology, and the export performance and productivity of the domestic industry.

S. Rep. No. 249, 96th Cong., 1st Sess. 74 (1979). Similar language is contained in the House Report. H.R. Rep. 317, 96th Cong., 1st Sess. 47 (1979)

92/ "Any such requirement has the undesirable result of making relief more difficult to obtain for industries facing difficulties from a variety of sources; industries that are often the most vulnerable to less-than-fair-value imports." S. Rep. No. 249, at 74-75.

93/ LMI-La Metalli Industriale. S.p.A. v. United States, 712 F. Supp. 959, 971 (CIT 1989), citing, British Steel Corp. v. United States, 8 CIT 86, 593 F. Supp. 405, 413 (1984); Hercules, Inc. v. United States, 673 F. Supp. 454, 481 (CIT 1987). See also, Maine Potato Council v. United States, 613 F. Supp. 1237, 1244 (CIT 1985) (The Commission must reach an affirmative determination if it finds that imports are more than a "de minimis" cause of injury.)

94/ Chairman Brunsdale notes that while the Commission is not to weigh causes, it must nonetheless determine that the injury "by reason of" the subject imports is material in order to reach an affirmative determination. While the a-cause-of-material-injury formulation used in the text has received some favorable commentary in judicial dicta, it finds no support in the language of the statute or in the legislative history. For a full treatment of this issue, see Certain Telephone Systems and Subassemblies, USITC Pub. 2237 at 146-248 and particularly 228-48.

increasing share of apparent U.S. consumption throughout the period of investigation. 95/ This is so in both terms of value and quantity.

In absolute terms, the shipments of FRG imagesetters increased even as apparent U.S. consumption dropped. 96/ This increase was particularly notable with respect to value. 97/

The trend in import penetration is the exact opposite of what we would expect in relationship to developments in the domestic industry. After the domestic producers introduced their PostScript machines in late 1988, 98/ the FRG imports continued to increase their market penetration, mostly at the expense of domestically produced machines. 99/ At the same time, after introduction of domestic PostScript machines, when one would expect an increase in the number of domestic machines sold, the quantity of domestic shipments instead dropped. 100/ 101/ 102/

95/ Report at A-20, Table 14.

96/ Report at A-20, Tables 12 and 14.

97/ Report at A-20, Table 13.

98/ Report at A-21, 24, Tr. 15.

99/ See Report at A-20, Table 14.

100/ Report at A-14, Table 4.

101/ Chairman Brunsdale wishes to emphasize the importance of economic evidence to her determination. The adoption of the superior PostScript software by the domestic producers should have made their products more competitive with the imports and therefore increased the sales of the domestic machines. That their market share has continued to decline is sufficient to establish a reasonable indication of material injury, though a thorough assessment of the impact of the dumped imports must await the fuller record of any final investigation.

The Chairman also notes that the continuing loss of market share is consistent with the predictions of a more rigorous economic analysis. As the domestic producers adopted the PostScript software that was used by the imported machines, the elasticity of substitution between the domestic and

(continued...)

As to the effect of the imports on prices, the Commission requested price information from the domestic producers and importers of FRG machines on their sales of imagesetters sold separately and for those sold as part of a package. 103/ An analysis of price trends is problematic, however, because some models are not on the market long enough to permit trend evaluation, and because some products retain old model numbers even though features may have been changed or added. 104/ Nor are price comparisons between domestic machines and the subject imports particularly probative, because the various machines have differences in features such as imaging speed, resolution, and certain hardware (e.g. a page buffer) 105/ Moreover, direct price comparisons between sales of systems packages are not possible because each

101/(...continued)

imported products rose. As dumped imports and domestic products become more substitutable, the loss of sales resulting from any dumping will become greater, because consumer decisions become more sensitive to price.

102/ Commissioner Lodwick considers that although there is some question on the record so far as to how substitutable the domestic product is for the subject imports, and in the context of a lack of available substitutes for the like product, the significant level of LTFV imports in this market appear to have a sufficient impact on the performance of the domestic industry to warrant an affirmative finding under the preliminary standard. Although the domestic industry did have a feature-competitive product in 1989, it is not clear as to whether buyers consider the domestic offering to be truly competitive in all aspects other than price. It is also important to consider whether the domestic industry's tardiness in offering a PostScript product created a barrier to entry, as buyers began supporting the competing product as a de facto standard for the market.

103/ Report at A-20-21.

104/ Report at A-20. One witness testified that the business cycle for imagesetters is approximately two years. Tr. 133.

105/ Report at A-23.

package contains different front-end devices, software, options, and accessories. 106/ 107/

Where point-to-point price comparisons are problematic, the Commission has evaluated other information gathered in the investigation to assess whether there is evidence of underselling. 108/ Our review of the available price data (particularly that pertaining to sales of systems packages) and of the lost revenue allegations, suggests underselling by the imports. Underselling was indicated by the practice of including extras, such as a Macintosh computer, at one low all-inclusive cost. 109/

Finally, the Commission investigated several of petitioners' lost sales and lost revenues allegations. 110/ Some purchasers confirmed the allegations, whereas others commented that the prices and quality of the competing import and domestic imagesetters were comparable. 111/

Conclusion

For the above reasons, we find that there is a reasonable indication that the domestic industry is materially injured by reason of LTFV imports of phototypesetters and imagesetters and subassemblies thereof from the FRG.

106/ Report at A-23.

107/ Chairman Brunsdale notes that these problems are raised to a greater or lesser degree in any investigation that does not involve a commodity product of which the importers' and domestic producers' terms of sale are identical.

108/ E.g., Telephones, supra, at 51-52 and n. 139. See Copperweld Corp. v. United States, 682 F. Supp. 552, 565 (CIT 1988) (Commission has "broad discretion in analyzing and assessing the significance of the evidence on price undercutting.")

109/ See, e.g., Petition at 7; Report at Table 18.

110/ See Report at A-25.

111/ Id.

ADDITIONAL VIEWS OF VICE CHAIRMAN RONALD A. CASS

Phototypesetting and Imagesetting Machines
and Subassemblies Thereof
from the Federal Republic of Germany
Inv. No. 731-TA-456
(Preliminary)

I concur with the Commission's unanimous affirmative determination in this preliminary investigation, finding that there is a reasonable indication that a domestic industry has been materially injured by reason of the less-than-fair value ("LTFV") sales of the subject imports that have been alleged by Petitioner. I join in the Commission's discussion of the domestic like product and domestic industry issues and the Commission's discussion of the condition of the domestic industry insofar as it accurately characterizes information relevant to my analysis of the record before us.

I offer these Additional Views for two reasons. First, certain issues raised by Respondents respecting the appropriate like product definition have been discussed at length in the majority opinion. Although I subscribe fully to the views expressed by the Commission in that context, I believe that the parties may find it useful, both for the purposes of the preliminary investigation now being carried out by the Department of Commerce and for the purposes of any further proceedings before the Commission, to have a fuller understanding of the extent of my own reservations about the like product definition proposed by Petitioner and adopted by the Commission for the

purposes of this preliminary investigation.

Second, the analytical and legal approach that I have used in determining whether there is a reasonable indication of material injury to a domestic industry by reason of the subject, allegedly dumped imports is, as in other Title VII cases, different from that employed by certain of my colleagues. Although I do not believe it would be useful to elaborate here on the nature and extent of those differences -- a subject that I have already discussed in great detail and on many occasions during my tenure at the Commission ¹ -- it is necessary to explain how I have applied in this investigation the approach that I believe to be appropriate in analyzing the critical question of injury causation.

I. DOMESTIC LIKE PRODUCT AND DOMESTIC INDUSTRY

In the Views of the Commission, we have stated that we have determined in this preliminary investigation that there is a single like product consisting of all imagesetters. We have reached this conclusion because, on the basis of the record now before us, we are unable to discern clear dividing lines between the "high-end" imagesetters produced by Respondent Du Pont, among

¹ See, e.g., 3.5" Microdisks and Media Therefor from Japan, USITC Pub. 2076, Inv. No. 731-TA-389 (Preliminary) (April 1988) (Views of Commissioner Cass); Certain Telephone Systems and Subassemblies Thereof from Japan and Taiwan, USITC Pub. 2237, Invs. Nos. 731-TA-426 and 428 (Final) (Nov. 1989) (Dissenting Views of Vice Chairman Cass); New Steel Rails from Canada, USITC Pub. 2217, Invs. Nos. 701-TA-297 and 731-TA-422 (Final) (Sept. 1988) (Dissenting Views of Vice Chairman Cass).

others, and the "low-end" imagesetters imported by Respondent Linotype and made domestically by Petitioner, Compugraphic and certain other firms.² Given the relative paucity of data now available to us respecting the producers of high-end machines and the markets in which they are sold, I concur with this conclusion. I note, however, that the Commission has also emphasized that it will closely reexamine this issue in any final investigation.³ I believe that this statement bears special emphasis. Were this not a preliminary investigation -- a proceeding in which we are required by law to read the record in the light most favorable to Petitioner and with regard to the likelihood that new evidence might be developed in a final investigation -- I would not be inclined, on the basis of the evidence thus far presented to us, to treat "high end" imagesetters as part of the same like product as "low end" imagesetters.

**II. REASONABLE INDICATION OF MATERIAL INJURY BY REASON
OF LESS-THAN-FAIR-VALUE IMPORTS: PHOTOTYPESETTING AND
IMAGESETTING MACHINES AND SUBASSEMBLIES THEREOF
FROM THE FEDERAL REPUBLIC OF GERMANY**

In assessing the effects of LTFV imports on a domestic industry under Title VII of the Tariff Act of 1930, as amended, two basic, cognate inquiries must be performed. First, it is

² Views of the Commission at 13-14.

³ Id. at 14.

necessary to ascertain how the condition of the domestic industry differs from the condition that would have existed had there not been dumping.⁴ Second, it is necessary to determine whether the change in the circumstances of the industry that resulted from dumping, if any, constitutes material injury.⁵ Title VII directs the Commission, in assessing the causation of injury by LTFV imports, to consider, among other factors:

- (i) the volume of imports of the merchandise which is the subject of the investigation,
- (ii) the effect of imports of that merchandise on prices in the United States for like products, and
- (iii) the impact of imports of such merchandise on domestic producers of like products"⁶

Subsequent portions of the statute describe these three factors with greater particularity.

The text of the statute does not purport to identify every factor relevant in analyzing whether LTFV imports have materially injured a domestic industry; indeed, the statute explicitly contemplates that the Commission will consider economic factors in addition to those mentioned in the statute.⁷ The factors that

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

⁵ Id.

⁶ See 19 U.S.C. § 1677(7)(B).

⁷ See 19 U.S.C. § 1677(7)(C).

Under Title VII, as amended by the Omnibus Trade and
(continued...)

are listed in the statute and the order in which they are listed nevertheless provide us with basic guidance respecting the fundamental inquiry to be carried out. Three related questions are identified as critical to an assessment of the possible existence of material injury by reason of LTFV sales of imports.

First, the Commission must examine the volumes of imports of the merchandise under investigation. The absolute volumes of imports and their magnitude relative to domestic sales of the competing like product are both relevant to this question. So, too, is the effect of dumping on the prices of the imports, as the change in import volumes brought about by dumping will be closely related to changes in the prices of the imports that occurred as a result of sales of these products at LTFV prices.

Second, we must attempt to determine how dumping of the subject imports affected prices, and concomitantly sales, of the

⁷(...continued)

Competitiveness Act of 1988, we are required to explain how these factors affect the outcome reached in any particular investigation. The statute also requires Commissioners to describe the relevance of other economic factors that we consider in addition to those specifically identified in the statute. See Pub. L. No. 100-418, § 1328(1), 102 Stat. 1107, 1205 (to be codified as 19 U.S.C. § 1677(7)(B)(ii)). I have explained in detail in other opinions how the three-part inquiry that I employ considers certain other economic factors relevant to an assessment of the impact of unfairly traded imports on the domestic industry producing the like product -- e.g., dumping margins -- in addition to the specific factors listed in the statute. See, e.g. New Steel Rails from Canada, USITC Pub. 2135, Invs. Nos. 701-TA-297 and 731-TA-422 (Preliminary) 35-37 (Nov. 1988) Additional Views of Commissioner Cass) ("New Steel Rails I"); Generic Cephalixin Capsules from Canada, USITC Pub. 2143, Inv. No. 731-TA-433 (Preliminary) 56-58 (Dec. 1988) (Dissenting Views of Commissioner Cass).

domestic like product. In addition to evidence relating to the prices at which imports and domestic like products are sold, evidence bearing on three issues is central to an analysis of this question: the share of the domestic market held by the subject imports; the degree to which consumers see the imported and domestic like products as similar (the substitutability of the subject imports and the domestic like product); and the degree to which domestic consumers change their purchasing decisions for these products based on variations in the prices of those products.

Finally, we must evaluate the extent to which these changes in demand for the domestic like product caused by LTFV sales of imports affected the financial and employment performance of the domestic industry, and determine whether these effects are material.⁸ A variety of factors must be examined in considering that issue; important examples include the industry's level of profitability and return on investment, and its employment levels and levels of employment compensation.⁹

⁸ The judgment as to whether these effects are "material" within the meaning of the statute may be subsumed within the third inquiry or may be seen as a fourth part of the inquiry. See Digital Readout Systems and Subassemblies Thereof from Japan, USITC Pub. 2150, Inv. No. 731-TA-390 (Final) 117-19 (Jan. 1989) (Concurring and Dissenting Views of Commissioner Cass).

⁹ In making each of these inquiries under the statute, we are to consider the particular dynamics of the industries and markets at issue. See new Section 771(7)(C)(iii) of the statute (to be codified at 19 U.S.C. § 1677(7)(C)(iii)). See also S. Rep. No. 71, 100th Cong., 1st Sess. 117 (1987).

A. Volumes and Prices of the Subject Imports

In 1989, the period covered by our investigation that most closely corresponds to the period during which dumping is alleged to have occurred, approximately [*] imagesetters were imported from the Federal Republic of Germany.¹⁰ During that year, the value of these machines, and imagesetter subassemblies imported separately from West Germany, amounted to roughly \$[* *].¹¹ In contrast, import levels in 1987 and 1988 were lower in both quantity and value terms.¹² In 1987, for example, [*] imagesetters were imported from West Germany, and the total value of these imports (and separate imports of imagesetter subassemblies) was approximately \$[* *].¹³ In 1988, the volume of imports [* * *] from 1987 levels, with [*] imagesetter imports from West Germany reported; these machines, taken together with subassembly imports, were valued at about \$[* *].¹⁴ As discussed in more detail below, during the period covered by our investigation, these imports accounted for [* * *]

¹⁰ See Report at A-19, Table 12; A-40, Table 12a.

¹¹ See id.

¹² Respondent has authorized the Commission to discuss trends in import volumes in its public opinion even though this is not publicly available information.

¹³ See id.

¹⁴ See id.

* *] of total domestic consumption of imagesetters.

The record evidence provides [* * *] indication that these import volumes were [* * *] by LTFV sales of the subject imports. Petitioner has alleged that the subject imports were sold at prices reflecting margins of dumping that are significant in absolute terms (although the alleged margins are notably smaller than those typically alleged by petitioners in preliminary investigations). The dumping margins alleged by Petitioner range from 6.3% to 17%.¹⁵

In general, dumping margins (as alleged or as determined by Commerce) measure the difference between prices in two markets, but they do not constitute a precise measure of the extent to which the prices of subject imports declined as the result of charging different prices in the two markets (that is, as a result of dumping). In most cases, the actual price decrease in sales to the United States will be less than the full amount of the dumping margin.¹⁶ In cases where, as here, the alleged dumping margins at issue reflect an assertion that the subject foreign producers/exporters have charged a lower price for their product in the United States than the price that they have charged in their home market (or another foreign market used as

¹⁵ Id. at A-2.

¹⁶ The reason for this is explained in 3.5" Microdisks and Media Therefor from Japan, USITC Pub. 2170, Inv. No. 731-TA-389 (Final) 82-89 (Mar. 1989) (Dissenting Views of Vice Chairman Cass).

the surrogate for the home market), the actual decrease in the U.S. price of the subject imports that occurred consequent to dumping will be only a fractional percentage of the dumping margin. This percentage, in turn, will be in large measure a function of the proportion of the total sales of the subject foreign producer(s) in the U.S. and the exporter's home market (or other surrogate foreign market) that is accounted for by sales in the home market.¹⁷

¹⁷ See, e.g., Certain All-Terrain Vehicles from Japan, USITC Pub. 2163, Inv. No. 731-TA-388 (Final) 58-60 (March 1989) (Additional Views of Commissioner Cass); Granular Polytetrafluoroethylene Resin from Japan and the Netherlands, USITC Pub. 2112, Invs. Nos. 731-TA-385 and 386 (Final) 74 (Aug. 1988) (Additional Views ¹⁷ of Commissioner Cass); Certain Bimetallic Cylinders from Japan, USITC Pub. 2080, Inv. No. 731-TA-383 (Final) 44 (May 1988) (Additional Views of Commissioner Cass). The price decline in the United States will be a function both of the difference in competitive conditions faced by the dumping firm in the United States and in its home market and of the value to the firm of sales in each of those markets. The dumping margin, if properly calculated, reflects the first of these considerations, and the relative shares of sales by the firm in the two markets reflects the second (at least over the time frame relevant to our dumping investigations). For that reason, a proportional fraction of the dumping margin equal to the portion of the firm's combined U.S.-home market sales accounted for by sales to the home market will, by combining these two considerations, approximate the price change consequent to dumping.

In reality, an estimate of the decrease in the price of the dumped product that is derived in this fashion will be somewhat overstated as it represents an approximate upper bound of that decrease. For a thorough explication of this subject, see Office of Economics, Assessing the Effects on the Domestic Industry of Price Dumping, USITC Memorandum EC-L-149 at 1, n. 1, 13, 19-21 (May 10, 1988). A more accurate statement of the effects of dumping on import prices also may require some adjustment to reflect the fact that dumping margins are calculated on an ex-factory, rather than final sales price, basis. However, the evidence that would be necessary to make such an adjustment is not contained in the record here.

During the period covered by our investigation, the Respondent German producers of the subject products [* * * * *] imagesetters in the U.S. market than they did in their German home market.¹⁸ Accordingly, in this investigation, the extent to which the alleged dumping of the subject imports affected the prices of those imports would have been [* *] than the gross amount of the alleged dumping margins. For this reason, if the Commerce Department finds a margin of dumping significantly less than that alleged by Petitioner, the effects of LTFV sales on prices of the subject imports may not have risen above the level of de minimis.

However, in Title VII preliminary investigations such as these, we must accept the margins alleged by Petitioner (as modified by Commerce) as the best evidence available to us.¹⁹ The legislative history of the Trade Agreements Act of 1979 makes clear that, in preliminary investigations in antidumping cases, the Commission "will be guided by the description of the allegation of the margin of dumping contained in the petition or as modified by . . . [Commerce]".²⁰ Accordingly, for the purposes of this investigation, the record contains sufficient

¹⁸ See Report at A-19, Table 11.

¹⁹ See New Steel Rails I, supra, at 39-40.

²⁰ Statements of Administrative Action, Trade Agreements Act of 1979, at 415.

evidence to support the conclusion that LTFV sales of the subject imports caused decreases in the prices of the subject imports that were [* *].

For the purposes of this preliminary investigation, there is also sufficient evidence that dumping caused significant increases in import volumes. The extent to which decreases in subject import prices cause increases in subject import sales is, in large measure, a function of the degree to which the imported goods are substitutable for the domestically produced product. For reasons explained in more detail in the succeeding section of these Views, the record evidence developed on this issue in this preliminary investigation is somewhat thin and less than conclusive. Nevertheless, the record contains evidence to support an inference that the substitutability of the subject imports for the domestic like product was sufficiently high to produce increased import volumes through the effects of dumping.

B. Effects on Domestic Prices and Sales

In determining how dumping of the subject imports affected prices, and concomitantly sales, of the domestic like product, it is necessary to take into account certain evidence in addition to the record evidence relating to import volumes and direct observation of market prices.²¹ Information relating to three

²¹ Congress explicitly has asked us to look for the existence both of significant price depression or suppression, which is discussed at length in this section of my Views, and of

(continued...)

issues is critical to such an analysis: the share of the domestic market held by the subject imports; the substitutability of the subject imports and the domestic like product; and the degree to which domestic consumers change their purchasing decisions for these products based on variations in the prices of those products. As discussed in more detail below, viewed in the context of the other record evidence, the information presented on these issues in this investigation provides a reasonable indication that dumping of the subject imports had a significant adverse effect on prices and sales of the domestic like product.

During all relevant periods and by all relevant measures, the subject imports accounted for [* *] of domestic consumption of imagesetters. Given that a significant amount of imagesetter subassemblies are imported sold separately from imagesetting machines, the data that the Commission has compiled on the total quantity of machine sales does not capture

²¹ (...continued)

significant price underselling. 19 U.S.C. § 1677(7)(C)(ii). The occurrence of price differences between imports and domestic products, however, cannot provide a basis for inference of effects of dumping or subsidization (or of dumped or subsidized imports) on domestic products' prices without analysis of various product features and sales terms that may differ across products and sales. See Pressure-Sensitive PVC Battery Covers from West Germany, USITC Pub. 2265, Inv. No. 731-TA-452 (Preliminary) (Mar. 1990) (Additional Views of Vice Chairman Cass) at note 58 and text associated therewith. See also Certain Granite from Italy and Spain, USITC Pub. 2110, Invs. Nos. 701-TA-289 and 731-TA-381 (Final) (Aug. 1988). In this investigation, for example, it is abundantly clear that the imported and domestic products differ so much in respect to imaging speed, resolution and the particular hardware incorporated in the products that simple price comparisons would be meaningless. See Report at A-23.

adequately the relative importance of the subject German imports in the domestic market. For this purpose, the data that the Commission has collected on the value of the subject imports and of total domestic consumption of imagesetters and subassemblies thereof provide a far better measure. Unfortunately, even these data must be pieced together from a variety of independent sources of information relating to the value of imported and domestically produced imagesetters and imported and domestic imagesetter subassemblies. Taken together, these data sources indicate that during 1989 -- the period covered by our investigation that corresponds most closely to the time when dumping is alleged to have occurred -- the subject imports accounted for approximately [*]% of total domestic consumption.²² Import market penetration during earlier periods was somewhat lower,²³ but was still [* * * * *].

The second important factor that must be considered concerns the extent to which domestically produced imagesetters are substitutable for the imagesetters imported from Germany. Regrettably, neither the Petitioner nor Respondent Linotype paid

²² Data derived from Report at A-19, Table 13; A-19, Table 14; A-19, Table 15; A-40, Table 14a; A-40, Table 15a.

²³ See id.

significant attention to this issue.²⁴ Consequently, the record evidence on this issue is not as fully developed as one might like. However, the Commission has independently developed certain evidence respecting this issue that is useful, although it permits only the most tentative judgments as to the degree to which the domestic and imported products are substitutable one for the other.

Clearly, there are notable differences between the domestic like product and the imported German product in terms of their resolution capabilities, speed and hardware offered as features.²⁵ These differences appear to be of a magnitude sufficient to have had some impact on the substitutability of the products. Further, it appears that [* * *
* * * * *
* * *].²⁶ However, this evidence is

fragmentary and, to some extent, in conflict. Accordingly, in this preliminary investigation, the record does not permit any firm judgments on the important substitutability issue. As the record now stands, however, the Commission is not in a position to conclude that there is no reasonable likelihood that a final

²⁴ As previously suggested, various other Respondents argued at length that imported "high-end" imagesetters are not substitutable for domestically produced "low end" imagesetters and vice versa.

²⁵ Report at A-22.

²⁶ Id. at A-24.

investigation will produce additional information on this issue that will be more favorable to Petitioner. Further, the presently available evidence must be read in the light most favorable to Petitioner. Accordingly, given the legal standard applicable in preliminary investigations, in assessing the impact of the subject imports on prices and sales of the domestic like product, I have concluded, as I believe we must, that the substitutability of the domestic product for the subject imports is not so limited as to preclude the possibility that LTFV sales of the subject imports significantly affected prices or sales of the domestic like product.

For the reasons previously suggested, however, I would not necessarily reach the same conclusion on the basis of the evidence now before us if this were a final, rather than a preliminary, investigation. Put another way, resolution of this issue should be extremely important in any final investigation, and I would hope that all parties would give careful consideration to this issue at that time in presenting their cases to the Commission accordingly.

The remaining issue that requires consideration in assessing the impact of the alleged unfairly traded imports on prices and sales of the domestic like product concerns the extent to which domestic demand for imagesetters is responsive to imagesetter prices. Evidence concerning this issue is significant because, when consumer demand for the product group in which the imports under investigation are a part is highly responsive to changes in

price, the effects of dumping on prices and sales of the domestic like product are attenuated, for in that case the lower prices accompanying dumping of the subject imports will stimulate significantly increased domestic demand for the lower-priced product. Conversely, much greater effects will be felt by U.S. producers when consumers perceive no difference between the imported and domestic product other than price but their overall purchases of these products are relatively unresponsive to price changes. In the latter case, consumers will simply switch their purchases from U.S.-made to lower-priced imported products, with resulting adverse effects on both prices and sales of the domestic product.

In this investigation, the record evidence concerning the price responsiveness of domestic demand for imagesetters weighs in favor of Petitioner. Domestic users of imagesetters appear to have little, if any, meaningful recourse to alternative products. Plain paper printers -- the most plausible substitute for imagesetters -- are used only to a very limited extent as a substitute for imagesetters (although they are apparently used to a significant extent in conjunction with imagesetters). Thus, for most users, there simply are no good substitutes for imagesetters.²⁷ Accordingly, there is no evidence in the record indicating that the lower prices accompanying the alleged dumping produced significantly increased demand for imagesetters. Thus,

²⁷ Id. at A-6.

the record as a whole contains a reasonable indication that the alleged LTFV sales under investigation had a significant adverse impact on prices and sales of the domestic like product.

C. Investment and Employment

As in other Title VII investigations, it is difficult to divine the impact of the subject, allegedly LTFV imports on the domestic industry based only on an analysis of the financial and employment data compiled by the Commission. Many factors entirely unrelated to dumping of these imports have inevitably influenced the performance of the industry during the period covered by our investigation. In this investigation, for example, as all parties agree, the fortunes of the major producers have been heavily affected by the introduction of a new page description language, PostScript, which was developed by Adobe, Inc. and first used by Respondent Linotype.²⁸ Domestic producers, such as Varityper and Compugraphic, adopted PostScript much later, in the late 1980s.²⁹ Accordingly, it is clear that, until recently, Respondent Linotype enjoyed a market edge over the domestic producers; this, in turn, is presumably reflected in the various indicators of the performance of the domestic industry that the Commission has collected for the period covered by our investigation, which extends back to 1987. Accordingly,

²⁸ Report at A-3.

²⁹ Id.

for this industry, the various measures of industry performance and any trends evident therein, if viewed in isolation, are unlikely to provide any meaningful indication of the extent to which dumping of the subject imports has affected the domestic industry.

That said, I note that the domestic industry has [*
* *] during the last two years.³⁰ However, [*
* * * * *] in 1989, the
period covered by our investigation that corresponds most closely
to the time when dumping is alleged to have occurred.³¹
Moreover, the financial data collected by the Commission appear
to have been skewed significantly by the data reported
[* * * * *
* * * * *
* * *]..³² In addition, there is reason to
believe that [* * * * *]
by the industry as a whole contributed substantially to [*
* * * * *]
by the industry.³³ In short, although the financial data
collected by the Commission are not inconsistent with the claim
that LTFV imports materially injured the domestic industry, they

³⁰ See Report at A-15, Table 7; A-42.

³¹ Id.

³² Id. at A-15.

³³ Id. at A-16.

provide little, if any, independent support for such an allegation.

Certain of the employment data collected by the Commission are also less than positive. For example, overall employment levels in the industry dropped significantly over the period covered by our investigation,³⁴ However, it appears that this downturn may be attributable in substantial measure to productivity gains registered by the industry.³⁵ Moreover, other key employment measures -- such as the average hourly compensation paid to production workers -- suggest that the terms of employment in the industry are improving, not declining.³⁶ Accordingly, the employment data, like the financial data, are quite ambiguous if viewed in isolation. On balance, these data neither negate nor confirm the inference, otherwise suggested by the record evidence, that there is a reasonable indication that the alleged dumping had a material adverse effect on the performance of the domestic industry.

³⁴ Id. at A-14, Table 6; A-40, Table 6a.

³⁵ See id.

³⁶ Id.

CONCLUSION

For the foregoing reasons, I determine that a reasonable indication exists that an industry in the United States has been materially injured by reason of LTFV sales of imagesetters imported from the Federal Republic of Germany.

INFORMATION OBTAINED IN THE INVESTIGATION

Introduction

On March 20, 1990, a petition was filed with the U.S. International Trade Commission (Commission) and the U.S. Department of Commerce (Commerce) by Varityper, Inc., East Hanover, NJ, and Tegra, Inc., Billerica, MA. The petitioners allege that an industry in the United States is materially injured, or threatened with material injury, by reason of imports from the Federal Republic of Germany (FRG) of phototypesetting and imagesetting machines and subassemblies thereof (imagesetters) that are being sold at less than fair value (LTFV).¹ Accordingly, effective March 20, 1990, the Commission instituted investigation No. 731-TA-456 (Preliminary) under section 735(b) of the Tariff Act of 1930 (19 U.S.C. § 1673d(b)) to determine whether there is a reasonable indication that an industry in the United States is materially injured or threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports of such merchandise.

The statute directs the Commission to make its preliminary determination within 45 days after receipt of the petition or, in this case, by May 4, 1990. Notice of the institution of the Commission's preliminary investigation, and of the 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

¹ For purposes of this investigation, the term "phototypesetting and imagesetting machines and subassemblies thereof" refers to phototypesetting and imagesetting machines and certain subassemblies, consisting of hardware and dedicated software capable of producing high-resolution (600 or more dots per inch) type and/or images on a photographic medium, either film or paper. The photographic medium permits a high quality of final printed output. This output serves the needs of various users for high-resolution printing and publishing. Included in the hardware are image controllers/processors, image recorders, imagesetters, and phototypesetters.

Image controllers/processors are sophisticated computers that are capable of manipulating text and graphics in a manner that allows them to be output on a page of photographic medium. Computer codes are received from a front-end device (computer workstation) and are rasterized (i.e., converted into a pattern of on and off pulses that create images or characters). These rasterized patterns/codes can be received by various output devices for transfer to the photographic media. Phototypesetters and imagesetters create graphic and text output on photosensitive media (paper or film) by scanning a laser beam across the media. As each scans, it turns the laser on and off to create tiny light spots. When these spots hit the photosensitive media, the exposure creates tiny black dots called pixels.

The subassemblies included in the scope of the investigation are limited to customized printed circuit board assemblies for the equipment operating system and for compressing data, raster image processor assemblies, and laser image and optical assemblies. Some subassemblies may be classified as parts. Furthermore, the subassemblies included are not capable of being used for products other than phototypesetting and imagesetting machines.

Register on March 28, 1990 (55 F.R. 11448).² Commerce published its notice of initiation in the Federal Register of April 16, 1990 (55 F.R. 14099). The Commission held a public conference on April 11, 1990, at which time all interested parties were allowed to present information and data for consideration by the Commission.³ The Commission voted on this investigation on April 30, 1990.

The Nature and Extent of Alleged Sales at LTFV

In comparing U.S. prices with foreign market values, the petitioners allege that imagesetters from the FRG are being sold in the United States at LTFV margins ranging from 6.3 percent to 17 percent. These margins were calculated by comparing the U.S. purchase price or the exporters' sales price (based on price lists), less adjustments, with the foreign market value, derived from the price in the FRG (based on price lists), less adjustments.

The Product

Description and uses

Typesetting and imagesetting are two composition functions that are essential to the printing and publishing industries. The difference between the two functions is that typesetting involves composing only text (or "type") onto a page, whereas imagesetting involves composing both images (photographs, drawings, etc.) and type onto the same page. Both functions are utilized by commercial printing establishments, service bureaus, newspapers, magazines, corporation and university in-house publishing, and government agencies. These functions fall within the category of "pre-press" printing, meaning that pages must be composed or "set" before duplication by a printing press.

Over time, there have been four basic methods of typesetting: cast metal or hot-type composition, typewriter or strike-on composition (sometimes called "cold type"), photographic typesetting, and electronic printing. These methods all produced output that is used to manufacture a printing "plate" for duplication (i.e., in a printing press). The first two methods are now obsolete. The last two methods are currently combined in machines that translate electronic text composition signals to a laser printer ("recorder" or "engine"), which outputs the text onto photographic medium (either film, paper, or plate).

Today, these same machines combine the phototypesetting and imagesetting functions and are called "imagesetters." Generic imagesetters are not restricted to output solely onto photographic medium; they are also capable of output onto plain paper by utilizing laser printers. However, Commerce's scope of investigation is limited to only those imagesetters that output onto photographic medium.

² Copies of cited Federal Register notices are presented in app. A.

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

Each imagesetter must have an electronic "language" that describes the page to be composed by the machine. Until 1984, a different page description language (PDL) was offered by each company manufacturing imagesetters. These PDLs were company proprietary, and were incorporated into the imagesetting machines. In 1984, Adobe, Inc., a software company, invented PostScript, a PDL whose superiority in page composition technology made PostScript the first industry standard PDL for imagesetters.

Imagesetter producers world-wide licensed the PostScript technology during the latter half of the 1980s, with some firms recognizing Postscript's importance in the imagesetter market more quickly than others. In 1985, Linotype, a German producer, was the first to use PostScript, thereby gaining a market edge over the others. U.S. firms such as Varityper and Compugraphic were slower to license PostScript, adopting it in the late 1980s. Today, PostScript (and its copy or "clone" PDLs--Hyphen and Rips, which are manufactured by other software firms) is the predominant PDL used by imagesetters.

The imagesetting process consists of four basic stages and requires the use of at least three and sometimes four modular components of machine hardware. The merchandise covered in Commerce's scope of investigation consists of stages two and three only.

The first stage in the imagesetting process involves creating a page. A page composition input device or "front end" (a Macintosh, IBM PC or PC compatible computer, or a similar type of keyboard or scanning computer workstation) is used to create the type and image layout. The front-end systems are not included in Commerce's scope of investigation.

The second stage translates that page into instructions that drive the printer. The machine that handles this process is called a "raster image processor" (RIP). The RIP composes an electronic page using a page bit map--a spot-for-spot representation of a page with each spot assigned to a specific location; instructions for which it receives through the image controller (or PostScript interpreter) incorporated in the machine itself. Within the RIP hardware are various printed circuit boards (PCBs) that accomplish these electronic tasks.

The important characteristic of each producers' RIP is the speed with which it composes a page. Firms such as Monotype in the United Kingdom offer extremely fast composition, whereas firms such as Varityper offer a RIP that operates at slower speeds.

The third stage in the process is to transmit the electronic page to a laser image recorder or engine (recorder), which creates an image with a laser exposure process onto a photographic medium (either film, paper, or plate) or onto plain paper itself. The image varies in intensity or resolution, from 300 spots per inch (spi) to 3,000 spi. This measure of resolution is sometimes expressed in terms of density per inch (dpi). The important distinguishing characteristics of each producers' recorder include page size, image accuracy, size, speed, and the type of film mechanism.

The second and third stages of the process, the "back end," can be contained in either one or two units. Either the RIP and recorder are packaged together in "one box" or are separately packaged in "two boxes." The trend is toward separate component units that allow for easier addition of new electronic technology.

In most cases, an imagesetting system consists of one RIP and one recorder, with a RIP sometimes linked to an additional output device so it can drive a plain paper recorder or "proofer." The proofers are not part of Commerce's scope of investigation. An imagesetting system that uses only a proofer completes its task at this stage.

The final stage in the imagesetting process for systems using photographic recorders consists of collecting a cassette of exposed film from the recorder and processing it in a chemical developer. Developed film is used to make a plate for a printing press. Some recorders are capable of output directly onto photographic plate, thereby eliminating one step in the publishing process. This final stage is not included within Commerce's scope of investigation.

End users of imagesetters buy either the entire system, including front end, back end, and developer, from a single manufacturer, or separately from various firms. However, customers do not buy a RIP from one producer and a recorder from another producer; they buy an entire back end from one vender. Separate sales of recorders or RIPs are strictly on an OEM basis.

The product covered in this investigation also includes the following subassemblies: customized printed circuit board (PCB) assemblies for the equipment operating system and for compressing data, RIP assemblies, and laser image and optical assemblies. These subassemblies are only manufactured by the producers of imagesetters.

Customized PCBs for the central processing unit (or equipment operating system) and for compressing data are subassemblies of the RIP. As part of the central processing unit, certain PCBs store the RIP's operating system and direct all the RIP's operations. Certain other PCBs also contain circuitries that compress data streams to reduce the amount of storage space required to hold the data. In addition to these PCBs, a decompressor PCB receives the compressed data released from the page buffer (necessary in some recorder models) and decompresses it prior to sending it to the recorder.

A RIP assembly is also a customized PCB incorporated within the RIP, which composes the bit map.

The laser image assembly is a laser box that is incorporated within the recorder, that contains a laser, associated circuitry, lenses, and mounts. This box generates, shapes, and turns the laser beam on and off, thus creating the light spots.

The optical assembly is also incorporated within the recorder and consists of a polygon assembly and scan lens, and an air-sealed optical cartridge.

In their responses to Commission questionnaires, companies made divergent assumptions about the definition of subassemblies. Some firms defined them as spare parts for imagesetters; other firms defined them as separate sales of recorders or RIPs. Some firms' separate sales of RIPs and recorders are also accounted for in other firms' sales of imagesetters. Because of the confusion, data for separate sales of recorders are included in the subassembly data in the body of the report, although there is some double-counting of subassembly and imagesetter shipments.

Witnesses at the Commission's conference expressed opposing views as to whether there are commercially-significant differences between domestically-produced and imported imagesetting machines. Counsel for the German producer, Linotype AG, stated that its "helium-neon" technology (in its recorder) allows it to offer imagesetters that are superior at producing color separation film. Counsel for the petitioner, Varityper, stated that its "laser diode" technology (in its recorder) is equally as competitive when applied to color separation work.⁴ U.S. producers, as reported in the Commission's questionnaire, believe that there are only minor differences between these products offered in the U.S. market, and that all manufacturers attempt to position their products to maximize certain customer niche applications.

Witnesses at the conference expressed the unanimous view that certain "high-end" imagesetters manufactured by Dupont (Crosfield, Imagitex, and Camex), and certain color output recorders or color composition systems imported from the FRG (Hell Graphics), Israel (Scitex), Japan (Dai Nippon Screen), and Denmark (Purup), are not like the product manufactured by the petitioner (Varityper) or the respondent (Linotype).⁵ For purposes of this investigation, high-end imagesetters are defined as those machines which are distinguished from low-end imagesetters by their higher price (at least double the prices of low-end imagesetters) and at least one of the following features: faster speed, higher image accuracy and resolution, use of the "drum recorder" technology, and advanced color composition capabilities. Only Camex furnished U.S. producers' data for high-end imagesetters. Its data are presented in appendix C.

According to counsel for Dupont,⁶ its products manufactured by Imagitex and Crosfield (high-end monochrome and color composition systems) differ from the petitioner's product because of the following characteristics: they do not use PostScript or its clones, they output only images and are not capable of outputting text, they have a much higher quality of resolution (2,309 dpi) than Varityper's products, and they rely on scanners rather than computer keyboard instructions to input data.⁷ According to Dupont, the products manufactured by Camex differ from the subject product because they do not use PostScript or its clones, and because of their very high speeds of operation. The Camex system can produce a newspaper advertisement in 40 seconds, whereas a PostScript-based imagesetter would require more than an hour to do the job. In addition, all of Dupont's products are priced at much higher price levels

⁴ See transcript of conference, p. 149.

⁵ See transcript of conference, pp. 35-36, 132-151.

⁶ See postconference brief, pp. 4-9.

⁷ * * *.

(from \$100,000 to over \$1 million) than the subject products (which generally fall into the \$30,000-\$40,000 range according to Dupont).⁸

According to Dupont, its imports of recorders from Linotype AG should be considered unlike the product made by the petitioner, for the same reasons stated above.⁹ However, the characteristics mentioned above apply to RIPs, not to the recorder portions of its system. In fact, imports of recorders from Linotype are part of the focus of this investigation and are thus included in the data on imports of low-end subassemblies in this report.

According to counsel for Hell Graphics, its imports of color output recorders are not like the product manufactured by the petitioner for a number of reasons, including their speed, large format, color exposure capabilities, high resolution, technology characteristics, end users, and price.¹⁰ The color output recorders imported by Hell Graphics operate at high speeds and high resolutions and are capable of exposing four colors simultaneously. They are used by color trade shops and color separators, which perform jobs for magazines, high-quality color books, holiday brochures, posters, and advertisements. They employ a technology that uses lasers to expose a large film segment, which is locked in place on a large drum (the "drum scanner" technology). This technology allows the color output recorder to achieve great speed and accuracy in reproducing color images. The Varityper recorder exposes one line of film at a time, using the "capstan" technology. Finally, the Hell Graphics recorder is about 5 to 10 times more expensive than the Varityper product.

Manufacturing process

The manufacturing process for imagesetters consists of six basic steps: machining steel cabinets and small metal parts, painting the machined cabinets and parts, assembling the PCBs, assembling the RIPs and recorders, testing, and packaging/shipping.

Most U.S. producers and their German counterparts perform only the final four stages of manufacturing, after purchasing the metal cabinets and parts from firms specializing in metalworking. At the conference, Varityper officials stated that the decrease in the volume of its orders (resulting from import competition) has made it uneconomical to remain vertically integrated, and it will be outsourcing the first three steps in the manufacturing process this summer.¹¹

Substitute products

For printing at relatively low levels of resolution (600 dpi and below), plain paper recorders are sometimes substitutes for photographic recorders to

⁸ See postconference brief, p. 9.

⁹ See postconference brief, p. 2.

¹⁰ See postconference brief, pp. 2-12.

¹¹ See transcript of conference, p. 25.

some degree. They are used as proofers before outputting to photographic recorders. They are also used (rarely) for desktop publishing. However, according to counsel for the petitioner, the plain paper machines are not like the product within the scope of Commerce's investigation for many reasons.¹²

Plain paper recorders occupy less floor space for operation. They are used as proofers in conjunction with photographic recorders but would rarely be bought alone because they would not be cost efficient. Plain paper recorders are in the "office equipment" channel of distribution, whereas photographic recorders are sold mainly by producers' own employee sales representatives. No industry participants currently manufacture plain paper recorders. The trade press does not view plain paper devices as alternatives for photographic recorders. Finally, plain paper printers sell for \$300-\$1,000, whereas photographic recorders are at least twice that price.

U.S. tariff treatment

Phototypesetting and imagesetting systems and machines are provided for in subheading 8442.10.00 of the Harmonized Tariff Schedule of the United States (HTS). Parts of such machinery are provided for in subheading 8442.40.00. The applicable column 1-general (most-favored-nation) rate of duty is free for both subheadings.

The U.S. Industry

U.S. producers

There are six known producers of low-end imagesetters, four known producers of low-end subassemblies (including three producers of recorders only), and two known producers of high-end imagesetters located in the United States. Their names, the location of their facilities, their market shares, and positions on the petition are presented in table 1.¹³ The major imagesetter producers and subassembly producers are located in the Northeast. A general description of their operations is presented below.

Varityper, Inc., is a wholly owned subsidiary of Tegra, Inc. Tegra is a small firm with no outside corporate affiliations. Tegra produced a limited imagesetter product line before acquiring Varityper through a leveraged buyout in mid-1988 from AM International, a large and diversified conglomerate. According to U.S. embassy sources, AM International is also a producer of

¹² See postconference brief, pp. 1-6.

¹³ There is some indication from questionnaire responses of recorder producers that there may be other producers of low-end imagesetters located in the United States, although their market shares are likely to be negligible. These companies include Script/Hyphen (Wilmington, MA), Systems Integrators Inc. (Sacramento, CA), Ideographix (Sunnyvale, CA), Ricoh (San Jose, CA), and Slidetek (Sausalito, CA). There is some indication that Optronics may be an additional producer of high-end machines.

imagesetters in the FRG¹⁴ although there is no indication that it is exporting imagesetters to the United States. Varityper is currently undergoing a radical restructuring of its production process to include more outsourcing of major components to produce imagesetters.¹⁵

Table 1

Imagesetters and subassemblies: U.S. producers, plant locations, estimated shares of U.S. shipments, and position on petition, by firms, 1989

Item	Plant location	Share of shipments ¹ percent	Position on petition
Low-end machines:			
AGFA Compugraphic Div.	Wilmington, MA	***	***
Autologic, Inc.	Newbury Park, CA	***	***
Birmy Graphics	Miami, FL	***	***
High Technology Solutions	Poughkeepsie, NY	***	***
Itek Graphix Corp.	Shelton, CT	***	***
Varityper, Inc.	East Hanover, NJ	***	***
Total		100.0	
Low-end subassemblies:			
Autologic, Inc.	Newbury Park, CA	***	***
Bidco Manufacturing Corp.	Hicksville, NY	***	***
ECRM Trust	Tewksbury, MA	***	***
Hell Graphics, Ultre Div.	Melville, NY	***	***
Total		100.0	
High-end machines:			
Dupont			
Camex, Inc.	Boston, MA	***	***
Imagitex, Inc.	Nashua, NH	***	***
Crosfield	Glen Rock, NJ	***	***

¹ Share of total reported 1989 U.S. shipments in terms of value.

* * *

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.

¹⁴ Telegram from American embassy in Bonn, Apr. 12, 1990.

¹⁵ Staff plant tour, Apr. 2, 1990, and transcript of conference, p. 25.

AGFA Compugraphic Division (Compugraphic) is the major producer of low-end imagesetters in the United States. In 1988, it was acquired by AGFA Corp., which is a wholly owned subsidiary of AGFA Gavaert N.V. (a Belgian firm), which is owned by Bayer AG, a German firm. According to U.S. embassy sources, Compugraphic is also a producer of imagesetters in the FRG¹⁶ although there is no indication that it is exporting imagesetters to the United States. Compugraphic and Varityper produce similar low-end imagesetter product lines. Their chief competition along similar product lines is from imports by Linotype Co. from the FRG.

Autologic, a subsidiary of Volt Information Sciences (New York, NY), is a growing producer of low-end imagesetters and subassemblies (graphic integrators, CRT equipment, and scanning equipment), whose main competition in the U.S. market according to company officials is from imports from the United Kingdom. It claims that its faster speed and larger page size place it in a market niche outside of competition with Varityper, Compugraphic, and Linotype. It utilizes recorders from ECRM and Hell Graphics.

Itek Graphix, a wholly owned subsidiary of A.B. Dick Co., which is a subsidiary of General Electric in the United Kingdom, is closing its operations in June 1990 due to product line deficiencies. Its low-end product line competed with imagesetters produced by Compugraphic and Varityper. High Technology Solutions is a small company producing imagesetters and front-end devices * * *. Birmy Graphics is a small firm in Florida that is involved in producing low-end imagesetters with Hell Graphics or ECRM recorders. * * *.

In terms of domestic production, Dupont is involved solely in the high-end imagesetter market and alleges that it competes with imports from Hell Graphics, Scitex, Crosfield, and D.S. America only. Its subsidiary, Imagitex, Inc., manufactures a scanning recorder that produces high-quality monochrome films for the graphic arts industry. Dupont also has a majority interest in Crosfield, which manufactures high-end color composition systems. Finally, it produces a proprietary high-end image process system for newspaper advertising production at its Camex subsidiary.¹⁷ Only Camex supplied usable data in response to Commission questionnaires. Data on high-end imagesetters produced by Camex are presented in appendix C.

Hell Graphics Systems (Ultre Division) produces low-end recorders at its Melville, NY, manufacturing facility and imports high-end color output recorders from the FRG by another division of the same firm, located at the same address. Personnel and office space for these two divisions are separately maintained.¹⁸ Because there is some question about related-party status, U.S. industry data on low-end imagesetters and subassemblies excluding Hell Graphics are presented in appendix D.

ECRM and Bidco are producers of low-end recorders only. There are no U.S. producers of high-end color output recorders or subassemblies. Data on

¹⁶ Telegram, Apr. 12, 1990.

¹⁷ See postconference brief, p. 4.

¹⁸ See postconference brief, p. 12.

all recorders are included in the data presented on subassemblies in this report.

U.S. importers

There are three importers of low-end imagesetters and subassemblies from the FRG and the United Kingdom, and four importers of high-end imagesetters and subassemblies from the FRG, Japan, Israel, and Denmark. Their names, the location of their facilities, the country of origin of their imports, and their market shares are presented in table 2.

Linotype Co. is the primary importer of German imagesetters and RIPs, and is a wholly owned subsidiary of Linotype AG, a major producer of imagesetters in the FRG. Until 1983, Linotype AG maintained a production facility in Wellsboro, PA, after which time it consolidated its imagesetter production operations in the FRG, and began importing imagesetters into the United States.

Dupont's Imaging Systems Division and its subsidiary, Camex, Inc., import * * *. Monotype, Inc., is an importer of low-end imagesetters and subassemblies (spare parts) from the United Kingdom. Its imagesetters are distinguished by their very fast speeds.

Table 2

Imagesetters and subassemblies: U.S. importers, location of operations, country of origin of imports, and share of U.S. shipments of imports, by firms, 1989

Item	Location of operations	Country of origin of imports	Share of import shipments ¹ percent
Low-end machines:			
Linotype Co.	Hauppauge, NY	FRG	***
Monotype, Inc.	Elk Grove Village, IL	UK	***
Total			100.0
Low-end subassemblies:			
Dupont			
Camex, Inc.	Boston, MA	FRG	***
Imaging Systems Div.	Wilmington, DE	FRG	***
Linotype Co.	Hauppauge, NY	FRG	***
Monotype, Inc.	Elk Grove Village, IL	UK	***
Total			100.0
High-end machines:			
D.S. America, Inc.	Rolling Meadows, IL	Japan	***
Purup North America	St. Paul, MN	Denmark	***
Scitex America Corp.	Bedford, MA	Israel	***
Total			100.0
High-end subassemblies:			
D.S. America, Inc.	Rolling Meadows, IL	Japan	***
Hell Graphics Systems	Melville, NY ²	FRG	***
Scitex America Corp.	Bedford, MA	Israel	***
Total			100.0

¹ Share of 1989 total reported U.S. shipments of imports in terms of value.
* * *

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.

Two former importers of low-end imagesetters from the FRG, Scangraphics and Berthold AG, closed their U.S. operations completely during the investigation period.

There are three importers of high-end color composition imagesetters: D.S. America, Purup, and Scitex.¹⁹ Scitex and D.S. America also import high-end subassemblies, and Hell Graphics Systems imports high-end color output recorders only.

Channels of Distribution

The majority of imagesetters are sold directly to end users that regularly do their own in-house typesetting and printing. The five main groups of purchasers of imagesetters include newspapers, commercial (i.e., professional print shops and service bureaus), corporations, government accounts, and educational institutions. Both producers and importers sell their products using direct sales representatives. Two U.S. producers, Ultron and ECRM, manufacture and sell only the recorders to OEMs. These OEMs then sell the RIPs and recorders, sometimes together with front-end devices and software, directly to the end user.

U.S. producers and importers were requested to report the number of imagesetters and subassemblies that were shipped to distributors and directly to end users. In 1989, approximately 75 percent of the imagesetters sold by U.S. producers went directly to end users. Questionnaire responses from importers of imagesetters from the FRG indicate that the channels of distribution * * *.

Consideration of Alleged Material Injury to an Industry in the United States²⁰

U.S. production, capacity, and capacity utilization

Capacity increased by 6.2 percent from 1987 to 1988, and then decreased in 1989 by 3.9 percent, as shown in table 3. * * *.

²⁰ The data presented in this section account for somewhat less than 100 percent of U.S. industry shipments. As mentioned in the section of this report on U.S. producers, there may be a few small producers of low-end imagesetters not covered in the data, and Optronics may be an additional producer of high-end machines. The data presented on production, capacity, shipments, inventories, employment and financial trends account for 100 percent of 1989 reported U.S. shipments of imagesetters and subassemblies.

Table 3

Low-end imagesetters: U.S. average-of-period capacity,¹ production, and capacity utilization, 1987-89

Item	1987	1988	1989
Capacity (number of machines).....	7,585	8,053	7,737
Production (number of machines)...	6,558	5,802	6,356
Capacity utilization (percent)....	86.5	72.0	82.2

¹ Based on 40-50 hours per week, 48-52 weeks per year.

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

Production decreased by 11.5 percent between 1987 and 1988 and then increased by 9.6 percent in 1989. * * *.

Capacity utilization fell between 1987 and 1988 by 14.5 percentage points and rose by 10.2 percentage points in 1989.

U.S. producers' shipments

The quantity of U.S. shipments of imagesetters between 1987 and 1989 decreased by 33.5 percent, whereas the value of U.S. shipments decreased by 15.3 percent between 1987 and 1988, and then increased in 1989 by 44.5 percent, as shown in table 4. The unit value of U.S. shipments of imagesetters increased by 11.6 percent between 1987 and 1988, and again increased, by 65.1 percent, from 1988 to 1989. The trends in unit values and shipment values are due to the introduction of a new and much more expensive product line incorporating PostScript software.²¹ * * *.

The quantity of export shipments increased by 30.3 percent during 1987-89, and the value of export shipments increased by 99.8 percent. Export unit values decreased from 1987 to 1988 by 0.6 percent, then increased by 54.3 percent in 1989.

U.S. shipments of subassemblies * * *.

Inventories

U.S. producers' inventories of imagesetters * * * (table 5).

Subassembly inventories and shipments-to-inventories ratios * * *.

²¹ See transcript of conference, pp. 11-12.

Table 4

Low-end imagesetters and subassemblies: Shipments of U.S. producers, by types and by products, 1987-89

Item	1987	1988	1989
<hr/>			
	Quantity (number of machines)		
<hr/>			
Imagesetters:			
Company transfers.....	***	***	***
Domestic shipments.....	***	***	***
U.S. shipments.....	3,113	2,364	2,069
Export shipments.....	2,938	3,432	3,828
<hr/>			
	Value (1,000 dollars)		
<hr/>			
Imagesetters:			
Company transfers.....	***	***	***
Domestic shipments.....	***	***	***
U.S. shipments.....	71,029	60,195	86,982
Export shipments.....	48,287	56,048	96,467
Subassemblies:			
Company transfers.....	***	***	***
Domestic shipments.....	***	***	***
U.S. shipments.....	***	***	***
Export shipments.....	***	***	***
<hr/>			
	Unit value (per machine)		
<hr/>			
Imagesetters:			
Company transfers.....	\$***	\$***	\$***
Domestic shipments.....	***	***	***
Average, U.S. shipments....	22,817	25,438	42,041
Export shipments.....	16,435	16,331	25,200

* * *

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

Table 5

Low-end imagesetters and subassemblies: U.S. producers' inventories, by products, as of December 31 of 1987-89

* * * * *

Employment and productivity

The number of production and related workers producing low-end imagesetters and subassemblies and their total hours worked declined during 1987-89 by 15.1 percent and 13.2 percent, respectively, as shown in table 6. Wages paid and total compensation paid declined irregularly by about 3 percent during the same period. Hourly compensation rose by 11.5 percent from 1987 to

1989. Unit labor costs increased by 14.3 percent from 1987 to 1988, then declined by 12.6 percent in 1989. Productivity decreased by 7.1 percent between 1987 and 1988 and then rose by 26.9 percent in 1989.

* * * * *

Table 6

Low-end imagesetters and subassemblies: Total establishment employment and average number of production and related workers producing imagesetters and subassemblies, hours worked,¹ wages and total compensation² paid to such employees, hourly compensation, labor productivity, and unit labor costs, 1987-89

Item	1987	1988	1989
Total number of establishment employees.....	6,368	5,925	5,594
Number of production and related workers (PRWs)...	1,145	1,073	972
Hours worked by PRWs (thousands).....	2,447	2,356	2,124
Wages paid to PRWs (1,000 dollars).....	25,081	25,423	24,284
Total compensation paid to PRWs (1,000 dollars)...	32,533	32,908	31,508
Hourly total compensation paid to PRWs	\$13.30	\$13.97	\$14.83
Productivity (machines per hour).....	.0028	.0026	.0033
Unit labor costs (per machine) ³	\$4,961	\$5,672	\$4,957

¹ Includes hours worked plus hours of paid leave time.

² Includes wages and contributions to Social Security and other employee benefits.

³ Calculated on the basis of total compensation paid.

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

Financial experience of U.S. producers

Four producers provided usable income-and-loss data on the overall operations of their establishments within which low-end imagesetter machines and subassemblies are produced and separate income-and-loss data on their imagesetter machines and subassembly operations. These four producers accounted for * * *.

Overall establishment operations.--On the basis of sales value in 1989, imagesetter machines and subassemblies accounted * * *. Products produced in the establishments in addition to the products under investigation are devices, supplies, and alternative equipment that complement the imagesetter products. Some items are simply purchased intact and resold as a service to customers.

Sales by the establishment operations were * * * (table 7).

The combination of * * *.

Table 7

Income-and-loss experience of U.S. producers¹ on their overall establishment operations within which low-end imagesetter machines and subassemblies are produced, accounting years 1987-89

* * * * *

Imagesetter machines and subassembly operations.--This industry can be characterized as one that is in the early stages of its product life. There was constant upgrading of existing machines and introduction of new equipment. * * *

* * * * *

Aggregate * * * (table 8).

Table 8

Income-and-loss experience of U.S. producers¹ on their operations producing low-end imagesetter machines and subassemblies, accounting years 1987-89

* * * * *

Unlike traditional electronics-related industries that experience significant cost reductions over time, this industry did not have that advantage during the period of investigation since there were constant changes in product mix; in fact, the products sold in 1987 are not the same as those sold in 1989.²² * * *

* * * * *

One producer * * *.

Value of plant, property, and equipment.--The data provided by the U.S. producers on their end-of-period investment in productive facilities in which imagesetter machines and subassemblies are produced are shown in the following tabulation (in thousands of dollars):

* * * * *

Capital expenditures.--The data provided by U.S. producers relative to their capital expenditures for land, buildings, and machinery and equipment used in the manufacture of imagesetter machines and subassemblies are shown in table 9.

²² See transcript of conference, p. 52.

Table 9

Low-end imagesetting machines and subassemblies: Capital expenditures by U.S. producers, accounting years 1987-89

* * * * *

Research and development expenses.--This industry has a relatively high rate of R&D expenditures. The data are presented with rates as a percent of net sales in the tabulation below (in thousands of dollars except where noted):

* * * * *

The respondent from FRG has indicated that its R&D expenditures are approximately 10 percent of net sales.²³

Rate of return on total assets.--The aggregate rate of return on total assets * * *.

* * * * *

Capital and investment.--The Commission requested U.S. producers to describe any actual or potential negative effects of imports of imagesetter machines and subassemblies from the FRG on their growth, investment, development and production efforts, and ability to raise capital. Their responses are shown in appendix E.

Consideration of the Question of Threat of Material Injury

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 factors²⁴--

²³ See transcript of conference, p. 123.

²⁴ 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."

(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,

(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,

(IX) in any investigation under this title which involves imports of both a raw agricultural product (within the meaning of paragraph (4)(E)(iv)) and any product processed from such raw agricultural product, the likelihood that there will be increased imports, by reason of product shifting, if there is an affirmative determination by the Commission under section 705(b)(1) or 735(b)(1) with respect to either the raw agricultural product or the processed agricultural product (but not both), and

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.²⁵

The available information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV)) is presented in the section of this report entitled "Consideration of the causal relationship between imports of the subject merchandise and the alleged material injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in appendix E. Available information on U.S. inventories of the subject products (item (V)); foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), and (VIII)); any other threat indicators, if applicable (item (VII)); and any dumping in third-country markets, follows.

U.S. inventories of imagesetters from the FRG

Importers' inventories of imagesetters * * * (table 10).

* * * * *

Table 10

Low-end imagesetters and subassemblies: Importers' U.S. inventories of products imported from the FRG, by products, as of December 31 of 1987-89

* * * * *

Ability of foreign producers to generate exports and the availability of export markets other than the United States

According to U.S. embassy sources, there are 10 German producers of imagesetters, including Linotype AG, H. Berthold AG, Scangraphic Dr. Boger GMBH, Dr. Rudolf Hell GMBH, AM International, BFT GMBH, Compugraphic Deutschland GMBH, Degra-International, IRT - Erich Kipper, and Letterphot Geraetebau GMBH. Data regarding entire industry production, capacity, shipments, and inventories were unavailable at the time of this report. FRG production, capacity, shipments, and inventories for Linotype AG, furnished by counsel, are presented in table 11.

²⁵ Section 771(7)(F)(iii) of the act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

Table 11

Low-end imagesetters: Linotype AG's capacity,¹ production, capacity utilization, domestic shipments, exports, and inventories, 1987-89 and projected 1990

* * * * *

Linotype's capacity and production * * *.

Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury

U.S. imports and shipments of imports

The value of imports of imagesetters from the FRG * * * (table 12).

Table 12

Low-end imagesetters and subassemblies: U.S. imports, by selected sources, 1987-89

* * * * *

The value of U.S. importers' shipments of imports of imagesetters from the FRG * * * (table 13).

Shipments of imported subassemblies from the FRG * * *.

Table 13

Low-end imagesetters and subassemblies: U.S. shipments of imports, by selected sources, 1987-89

* * * * *

Apparent U.S. consumption and market penetration by imports

Apparent consumption of imagesetters during the investigation period * * * (table 14).

Table 14

Low-end imagesetters: Apparent U.S. consumption and ratios of shipments of imports to consumption, 1987-89

* * * * *

Apparent consumption of subassemblies * * * (table 15).

Table 15

Low-end subassemblies: Apparent U.S. consumption and ratios of shipments of imports to consumption, 1987-89

* * * * *

Prices and marketing considerations

Imagesetters are used to create high-resolution printing and graphics reproductions and are a necessary part of almost all publication processes.²⁶ Thus, the demand for imagesetters depends on the demand for high-resolution, high quality reproduction capability for both text and graphics. U.S. producers and importers agree that the introduction of PostScript created a demand for higher quality output devices (i.e., imagesetters).

Since the introduction of PostScript, numerous "clones" have entered the market. It is unclear at this stage whether purchasers perceive these clones as comparable to PostScript. * * *. Varityper stated that it has examined some of these clones but, at the present time will continue to use PostScript because of its acceptability in the marketplace.²⁷ One other U.S. producer, * * *, sells an imagesetter that uses one of the clones. * * *.

Imagesetters are sold both as individual units or as a package that includes an imagesetter, a computer, software, and other options. The petitioner, Varityper, reported that * * * of its sales of imagesetters in 1989 were made as individual units. Linotype, the largest importer, reported that approximately * * * of its imagesetters were sold as individual units in 1989.²⁸

When imagesetters are sold as a package, the package may include either a proprietary or nonproprietary front-end device.²⁹ Before PostScript was introduced, each company had its own proprietary hardware and software design and offered its own proprietary family of type faces.³⁰ Linotype began working with Adobe Systems on the development of PostScript in 1984, and in 1985 it became the first company to sell imagesetters with nonproprietary devices. Although the licensing of PostScript was available to all companies, neither Compugraphic nor Varityper adopted PostScript until late 1988.³¹ Therefore, from 1985 to late 1988, Linotype was the only company selling imagesetters that could be used with standard personal computers. Within the past year, the vast majority of sales of imagesetters with proprietary front-

²⁶ Petition, p. 3.

²⁷ See transcript of conference, p. 67.

²⁸ * * *.

²⁹ Proprietary front-end devices are those produced by the phototypesetter manufacturer and are designed specifically for use with the phototypesetter. Nonproprietary front-end devices are standard personal computers, such as Apple Macintosh, IBM PC, etc.

³⁰ See transcript of conference, p. 15.

³¹ * * *.

end devices have been replaced by sales of imagesetters with nonproprietary front-end devices.³²

The product life cycle for imagesetters is relatively short because newer, more advanced models are constantly being introduced into the marketplace. Because of this, most producers and importers have some sort of trade-in policy for purchasers who want to upgrade to a newer model. Varityper stated that it offers trade-in allowances on certain models for which a resale market exists. These machines are reconditioned and then sold through a used equipment distributor.³³ * * *.

U.S. producers and importers reported using promotions to encourage sales of their imagesetters. When imagesetters are sold as a system, promotions range from free software to substantial discounts on computers. Free service contracts are another promotional tool used by producers and importers; savings to purchasers can be substantial since service contracts are relatively expensive.³⁴ Examples of promotional programs used in the imagesetter market include * * *.

* * * reported that they are authorized service centers for Apple computers; thus, in the event of a problem with an Apple product purchased from * * * these companies can service them.³⁵ Installation services are also provided by producers and importers and are included in the purchase price of the imagesetter. Installation of imagesetters can be difficult; thus, it is often performed by the supplier.

* * *. Discounts are offered from list prices, depending on the type of customer and the quantity of imagesetters purchased. U.S. producers and importers provide standard discounts (i.e., generally around * * *) to government agencies.³⁶ * * * have national account customers that receive discounts similar to government agencies. National account customers tend to be large corporations that have agreements with the supplier; these agreements generally contain volume commitments that, when met, allow the customer to receive price discounts.³⁷

Imagesetters are generally sold on an f.o.b. basis by both U.S. producers and importers of FRG products. Sales terms vary slightly from supplier to supplier. * * *.

³² Varityper stated that it no longer sells phototypesetters with proprietary front-end devices (Transcript of conference, p. 59). Linotype has not sold proprietary devices * * *.

³³ See transcript of conference, p. 57.

³⁴ * * *.

³⁵ * * *.

³⁶ Sales of phototypesetters to government agencies are done on a contract basis in which bids are submitted to the agency. Sales to government agencies account for a relatively small share of overall sales of U.S. producers and importers (i.e., less than * * *).

³⁷ * * *.

The Commission requested U.S. producers and importers to report prices for their sales of imagesetters sold separately and for those sold as part of a package that included an imagesetter, a front-end device (i.e., personal computer), software, and any additional subassemblies. Producers and importers were requested to provide information for their lowest and highest price sale in each quarter for their two largest selling imagesetters during the period of January 1987-December 1989 (tables 16-17).

Table 16

Low-end imagesetters: Lowest-price, highest-price, and average-price sale of U.S.-produced and of imported FRG products sold to end users, by companies and by quarters, October 1988-December 1989

* * * * * * *

Table 17

Low-end imagesetters: Lowest-price, highest-price, and average-price sale of U.S.-produced and of imported FRG products sold to end users, by companies and by quarters, July 1988-December 1989

* * * * * * *

An analysis of price trends and comparisons for end-user sales is difficult for several reasons. First, because of technological changes, new models are frequently introduced as older models are discontinued; thus, continuous price series for a single model are often not possible. Some of the new models are considered to be replacements for the old models but they may have added or changed features without changing the model number. However, because of these changes, a single price series may not be representative. For example, * * *.

Two producers, Varityper and Compugraphic, and one importer, Linotype, provided pricing information for sales of imagesetters sold separately.

Although there is general agreement that the Varityper model 4200B-P, the Linotype L-200, and the Compugraphic 9400 compete against one another, they are not completely comparable.³⁸ All three of these models use the laser diode technology and PostScript software. Compugraphic's 9400 has the highest resolution, 2,400 dpi, compared with 1,800 dpi for the Varityper 4200B-P and 1,693 dpi for the Linotype L-200.³⁹ Another difference between these products is that the 4200B-P has a page buffer, whereas the 9400 and the L-200 do not; page buffers are additional hardware and as such may increase the price of the

³⁸ These three models are compared in the petition and in the article "Going Beyond Lino: The Imagesetter Explosion," MacWorld, February 1990.

³⁹ These numbers refer to the maximum dpi, which is a measure equivalent to spots per inch (spi), mentioned in the product section of this report.

imagesetter.⁴⁰ These models also vary in the imaging speed (i.e., the time it takes for the image to be output), with Varityper's 4200B-P being the fastest of the three.

Varityper, Compugraphic, and Linotype all reported price information for a second best-selling imagesetter. These models include the Varityper 4300P, Compugraphic 9600, and Linotype L-300R.⁴¹ These products are all similar in that they use the PostScript technology; however, there are also differences among them. Linotype's L-300 and Compugraphic's 9600 both use the helium neon-based technology, whereas Varityper's 4300 uses the laser diode technology; the helium neon technology is more expensive to manufacture than the laser diode.⁴² In terms of resolution, the Linotype L-300 has a higher maximum dpi (i.e., 2,540) than the 4300P (2,400 dpi) and the 9600 (2,400 dpi). Varityper's 4300P, on the other hand, has a faster imaging speed.

Price trends.--Data reported by Varityper, Compugraphic, and Linotype are only for the period July 1988-December 1989. Varityper and Compugraphic did not begin selling these particular models until 1988 when they became licensed to use the PostScript technology.⁴³ Linotype introduced its L-200 in October 1988; therefore, there are no prices prior to that time.

During * * *.

* * *.

Price comparisons.--Direct comparisons between domestic and imported imagesetters (sold separately) were not possible for the period January 1987-September 1988. During that time, neither Varityper nor Compugraphic manufactured a product comparable to those of Linotype because they did not use the PostScript technology with their products. Products can be compared to some degree in late 1988 and 1989; however, direct price comparisons and margins of underselling are not presented due to the differences in imaging speed, resolution, and certain hardware (i.e., page buffer).

* * *.

⁴⁰ A page buffer is a hard disk drive that acts as a buffer storage for compressed information generated by the RIP (Petition, p. 16). Therefore, with a page buffer, the information is saved and then outputted continuously. Without a page buffer, the image recorder must stop and start as it waits for more information (Transcript of conference, p. 116).

⁴¹ These three models are compared in the petition and in the article "Going Beyond Lino: The Imagesetter Explosion," MacWorld, February 1990.

* * *.

⁴² Respondents allege that imagesetters that use the helium neon technology are higher in quality. According to Linotype, laser diodes tend to have larger spot sizes which tend to produce lower quality images (Transcript of conference, p. 86).

⁴³ Prior to this time, all imagesetters sold by Compugraphic and Varityper included proprietary front-end devices; therefore, sales of the imagesetter by itself were uncommon.

* * *.

Sales of imagesetter systems.--The Commission requested producers and importers to provide information on their lowest and highest priced sales of imagesetter systems during 1989; information was requested for both sales of systems with proprietary and with nonproprietary front ends (tables 18-19). Varityper, Compugraphic, and Linotype all reported prices for sales of their imagesetters sold as part of a package.⁴⁴ Price comparisons between systems packages are not possible because each package contains different front-end devices, software, options, and accessories. Because of the number of options and accessories included in a package, the range of prices for systems can vary greatly. The data show that the cost of the imagesetter is generally the same whether it is being sold separately or with a system. However, producers and importers often discount the front-end devices and options to make the whole package more attractive.

Table 18

Low-end imagesetters: Sales prices of imagesetting systems with nonproprietary front-end devices sold to end users in 1989

* * * * *

Table 19

Low-end imagesetters: Sales prices of imagesetting systems with proprietary front-end devices sold to end users in 1989

* * * * *

* * *.

Varityper and Compugraphic reported data for their sales of imagesetter packages sold with proprietary front-end systems in 1989. * * *.

Lost sales and lost revenues

* * * * *

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that during January 1987-December 1989, the nominal value of the German mark fluctuated, appreciating less than 2 percent overall relative to the U.S. dollar (table 20).⁴⁵ Adjusted for movements in producer price indexes in the United States and the FRG, the real value of the German currency showed an

⁴⁴ * * *.

⁴⁵ International Financial Statistics, April 1990.

overall depreciation of 4.3 percent relative to the dollar for the period January 1987 through December 1989.

Table 20

Exchange rates:¹ Nominal and real exchange rates of the German mark, and producer price indexes in the United States and the Federal Republic of Germany,² by quarters, January 1987-December 1989

Period	U.S. producer price index	FRG producer price index	Nominal exchange- rate index	Real exchange- rate index ³
1987:				
Jan.-Mar.....	100.0	100.0	100.0	100.0
Apr.-June.....	101.6	99.7	101.9	99.9
July-Sept.....	102.8	100.1	100.0	97.4
Oct.-Dec.....	103.2	100.4	107.9	105.0
1988:				
Jan.-Mar.....	103.8	100.4	109.8	106.2
Apr.-June.....	105.6	101.1	107.7	103.1
July-Sept.....	107.1	101.6	98.6	93.5
Oct.-Dec.....	107.6	102.1	103.6	98.3
1989:				
Jan.-Mar.....	109.9	103.6	99.5	93.7
Apr.-June.....	111.8	104.4	95.1	88.9
July-Sept.....	111.3	104.6	95.6	89.8
Oct.-Dec.....	111.8	105.4	101.5	95.7

¹ Exchange rates expressed in U.S. dollars per German mark.

² Producer price indexes--intended to measure final product prices--are based on average quarterly indexes presented in line 63 of the International Financial Statistics.

³ The real exchange rate is derived from the nominal rate adjusted for relative movements in producer prices in the United States and the FRG. Producer prices in the United States increased 11.8 percent between January 1987 and December 1989 compared with a 5.4-percent increase in German prices during the same period.

Note.--January-March 1987=100.

Source: International Monetary Fund, International Financial Statistics, April 1990.

APPENDIX A
FEDERAL REGISTER NOTICES

**INTERNATIONAL TRADE
COMMISSION**

**[Investigation No. 731-TA-456
(Preliminary)]**

**Phototypesetting and Imagesetting
Machines and Subassemblies Thereof
From Federal Republic of Germany**

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-

456 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(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 the Federal Republic of Germany of phototypesetting and imagesetting machines and subassemblies thereof,¹ provided for in subheadings 8442.10.00 and 8442.40.00 of the Harmonized Tariff Schedule of the United States (previously reported under items 668.2520 and 668.2540 of the former 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 May 4, 1990.

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 201).

EFFECTIVE DATE: March 20, 1990.

FOR FURTHER INFORMATION CONTACT:

Olympia DeRosa Hand (202-252-1182), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION:

Background. This investigation is being instituted in response to a petition filed on March 20, 1990 by Verityper, Inc., East Hanover, NJ, and Tegra, Inc., Billerica, MA.

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.

Public service list. Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a public 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 public document filed by a party to the investigation must be served on all other parties to the investigation (as identified by the public 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.

Limited disclosure of business proprietary information under a protective order and business proprietary information service list.

Pursuant to § 207.7(a) of the Commission's rules (19 CFR 207.7(a)), the Secretary will make available business proprietary information gathered in this preliminary investigation to authorized applicants under a protective order, provided that the application be made not later than seven (7) days after the publication of this notice in the Federal Register. A separate service list will be maintained by the Secretary for those parties authorized to receive business proprietary information under a protective order. The Secretary will not accept any submission by parties containing business proprietary information without a certificate of service indicating that it has been served on all the parties that are authorized to receive such information under a protective order.

Conference. The Director of Operations of the Commission has scheduled a conference in connection with this investigation for 9:30 a.m. on April 10, 1990, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Olympia DeRosa Hand (202-252-1182) not later than April 4, 1990, 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 April 12, 1990, a written brief containing information and arguments pertinent to the subject matter 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 section 201.8 of the rules (19 CFR 201.8). All written submissions except for business proprietary data will be available for public inspection during regular business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary to the Commission.

Any information for which business proprietary treatment is desired must be submitted separately. The envelope and all pages of such submissions must be clearly labeled "Business Proprietary Information." Business proprietary submissions and requests for business proprietary treatment must conform with the requirements of §§ 201.6 and 207.7 of the Commission's rules (19 CFR 201.6 and 207.7).

Parties which obtain disclosure of business proprietary information pursuant to § 207.7(a) of the Commission's rules (19 CFR 207.7(a)) may comment on such information in their written brief, and may also file additional written comments on such information no later than April 16, 1990. Such additional comments must be limited to comments on business proprietary information received in or after the written briefs.

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).

Issued: March 23, 1990.

By order of the Commission.

Kenneth R. Mason,
Secretary.

[FR Doc. 90-7139 Filed 3-27-90; 8:45 am]

BILLING CODE 7020-02-M

¹ For purposes of this investigation, the term "phototypesetting and imagesetting machines" refers to phototypesetting and imagesetting equipment, consisting of hardware and dedicated software designed to output high-resolution (600 or more dots per inch) type and/or images on a photographic medium, either film or paper, and subassemblies thereof. Included in the hardware are image controllers, image recorders, imagesetters and phototypesetters. Sub-assemblies include dedicated general and specialized circuit board configurations, raster image processor assemblies, and laser image and optical assemblies.

[Investigation No. 731-TA-456
(Preliminary)]

**Phototypesetting and Imagesetting
Machines and Subassemblies Thereof
From the Federal Republic of Germany**

AGENCY: United States International
Trade Commission.

ACTION: Revised schedule for the subject
investigation.

EFFECTIVE DATE: April 3, 1990.

FOR FURTHER INFORMATION CONTACT:
Olympia DeRosa Hand (202-252-1182),
Office of Investigations, U.S.
International Trade Commission, 500 E
Street SW., Washington, DC 20436.
Hearing-impaired individuals are
advised that information on this matter
can be obtained by contacting the
Commission's TDD terminal on 202-252-
1810. Persons with mobility impairments
who will need special assistance in
gaining access to the Commission
should contact the Office of the
Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION: On
March 20, 1990, the Commission
instituted the subject investigation and
established a schedule for its conduct
(55 FR 1148, March 28, 1990).
Subsequently, counsel for the
respondent requested a postponement of
the date of the conference. The
Commission, therefore, is revising its
schedule in the investigation to conform
with the respondent's request.

The Commission's new schedule for
the investigation is as follows: parties

wishing to participate in the conference must contact Olympia DeRosa Hand by April 5, 1990; the conference will be held at the U.S. International Trade Commission Building on April 11, 1990; the deadline for filing postconference briefs is April 13, 1990; and the deadline for parties to file additional written comments on business proprietary information is April 16, 1990.

For further information concerning this investigation see the Commission's notice of investigation cited above and the Commission's Rules of Practice and Procedure, part 207, subparts A and C (19 CFR part 207), and part 201, subparts A through E (19 CFR Part 201).

Authority: This investigation is being conducted under authority of the Tariff Act of 1930, title VTI. This notice is published pursuant to section 207.20 of the Commission's rules (19 CFR 207.20)

By order of the Commission.

Issued: April 4, 1990.

Kenneth R. Mason,

Secretary.

[FR Doc. 90-8369 Filed 4-10-90; 8:45 am]

BILLING CODE 7030-02-M

DEPARTMENT OF COMMERCE
International Trade Administration**[A-429-806]**
Initiation of Antidumping Duty Investigation: Phototypesetting and Imagesetting Machines, and Subassemblies Thereof From the Federal Republic of Germany

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 (the Department), we are initiating an antidumping duty investigation to determine whether imports of phototypesetting and imagesetting machines and subassemblies thereof (PTMs), from the Federal Republic of Germany (FRG) 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 PTMs from the FRG are materially injuring, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 4, 1990. If that determination is affirmative, we will make our preliminary determination on or before August 27, 1990.

EFFECTIVE DATE: April 16, 1990.

FOR FURTHER INFORMATION CONTACT: James P. Maeder, Jr., or Mary S. Clapp, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230; telephone (202) 377-4829 or (202) 377-3965, respectively.

SUPPLEMENTARY INFORMATION:**The Petition**

On March 20, 1990, we received a petition filed in proper form by Varityper, Inc. In compliance with the filing requirements of the Department's regulations (19 CFR, 353.12 (1989)), petitioner alleges that imports of PTMs from the FRG 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 are materially injuring, or threaten material injury to, a U.S. industry.

Petitioner has stated that it has standing to file the petition because it is an interested party, as defined under section 771(9)(C) of the Act, and because it has filed the petition on behalf of the U.S. industry producing the product that is subject to this investigation. If any interested party, as described under paragraphs (C), (D), (E), or (F) of section 771(9) of the Act, wishes to register support for, or opposition to, this petition, please file written notification with the Assistant Secretary for Import Administration.

Under the Department's regulations, any producer or reseller seeking exclusion from a potential antidumping duty order must submit its request for exclusion within 30 days of the date of the publication of this notice. The procedures and requirements regarding the filing of such requests are contained in § 353.14 of the Department's regulations.

United States Price and Foreign Market Value

Petitioner's estimates of United States Price (USP) are based on (1) Linotype's (the FRG producer of PTMs) April 15, 1989 U.S. price list; (2) 1989 contracts to state governments and to the General Services Administration (GSA) offered by Linotype; and (3) advertised "special" packages offered by Linotype to its U.S. customers. Petitioner did not make any further adjustments to USP under the first two methodologies. USP under the third methodology was treated as exporter's sales price and was adjusted for general, selling and administrative (GS&A) expenses.

Petitioner's estimate of foreign market value (FMV) for PTMs is based on sales prices of Linotype's products in the FRG obtained by one of Varityper's customers in the FRG. Pricing information was obtained through market contacts as well as through the company's own sales experience. Petitioner provided list and discount prices for sales of Linotype models for fourth quarter 1988 through fourth

quarter 1989. The petitioner made its LTFV comparisons based on essentially identical merchandise.

We have accepted as the basis for the LTFV allegation petitioner's comparison of USP under the first two methodologies. However, we revised petitioner's second methodology by using an FMV from the third quarter of 1988 since it more closely matched the probable date of the United States sale.

We have not accepted as a basis for the LTFV allegation petitioner's comparison involving the "special" package sale prices because inadequate support for USP was provided.

On April 8, 1990, petitioner submitted information concerning a 1990 contract price with GSA. This submission was received too late to be analyzed for purposes of this initiation.

On the basis on the first and second methodologies, the estimated dumping margins range from 6.3 to 17 percent.

Initiation of Investigation

Under section 732(c) of the Act, the Department must determine, within 20 days after a petition is filed, whether the petition sets forth the allegations necessary for the initiation of an antidumping duty investigation, and whether the petition contains information reasonably available to the petitioner supporting the allegations.

We have examined the petition on PMTs from the FRG and found that the petition 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 PTMs from the FRG 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 27, 1990.

Scope of Investigation

The United States has developed a system of tariff classification based on the international harmonized system of customs nomenclature. On January 1, 1989, the U.S. tariff schedules were fully converted to the Harmonized Tariff Schedule (HTS), as provided for in section 1201 *et seq.* of the Omnibus Trade and Competitiveness Act of 1988. All merchandise entered or withdrawn from warehouse for consumption on or after this date will be classified solely according to the appropriate HTS subheadings. The HTS subheadings are provided for convenience and U.S. Customs Service purposes. The written description remains dispositive as to the scope of the product coverage.

Imports covered by this investigation are shipments of phototypesetting and imagesetting machines and certain subassemblies thereof, consisting of hardware and dedicated software capable of producing high resolution (600 or more dots per inch) type and/or images on a photographic medium, either film or paper. The photographic medium output permits a high quality of final printed output. This output serves the needs of various users for high-resolution printing and publishing. Included in the hardware are image controller/processors, image recorders, imagesetters and phototypesetters. Image controller/processors are sophisticated computers that are capable of manipulating text and graphics in a manner that allow them to be output on a page of photographic medium. Computer codes are received from a front-end device (computer workstation) and are rasterized (*i.e.*, converted into a pattern of on and off that create images or characters). These rasterized patterns/codes can be received by various output devices for transfer to the photographic media. Phototypesetters and imagesetters create graphic and text output on photosensitive media (paper or film) by scanning a laser beam across the media. As each scans, it turns the laser on and off to create tiny light spots. When these spots hit the photosensitive media, the exposure creates tiny black dots called pixels.

The subassemblies included in the scope of the investigation are limited to customized printed circuit board assemblies for the equipment operating system and for compressing data, raster image processor assemblies, and laser image and optical assemblies. Some subassemblies may be classified as parts. Furthermore, the subassemblies included are not capable of being used for products other than phototypesetting and imagesetting machines.

Phototypesetting and imagesetting machines are provided for in HTS subheading 8442.10.00. Phototypesetting and imagesetting machine parts are provided for in HTS subheading 8442.40.00.

ITC Notification

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 the Department's files, provided the ITC confirms in writing that it will not disclose such information either publicly

or under administrative protective order without the written consent of the Deputy Assistant Secretary for Investigations.

Preliminary Determination by ITC

The ITC will determine by May 4, 1990, whether there is a reasonable indication that imports of PTMs from the FRG are materially injuring, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will be terminated; otherwise the investigation will proceed according to statutory and regulatory time limits.

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

Dated: April 9, 1990.

Lisa B. Barry,

Acting Assistant Secretary for Import Administration.

[FR Doc. 90-8700 Filed 4-13-90; 8:45 am]

STILLING CODE 3510-03-M

APPENDIX B

LIST OF WITNESSES

LIST OF WITNESSES

Investigation No. 731-TA-456 (Preliminary)

PHOTOTYPESETTING AND IMAGESETTING MACHINES AND SUBASSEMBLIES THEREOF
FROM THE FEDERAL REPUBLIC OF GERMANY

Those listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigation on April 11, 1990, in courtroom A of the USITC Building, 500 E Street, SW, Washington, DC

In support of the imposition of antidumping duties:

Donovan Leisure Newton & Irvine
New York, NY
on behalf of

Varityper, Inc., East Hanover, NJ

Edward E. Hale, President

James Marlow, Vice President, Finance

Keith Carlson, General Counsel

Peter Gartland)
John D. Worland, Jr.)--OF COUNSEL

In opposition to the imposition of antidumping duties:

Sherman & Sterling
Washington DC
on behalf of

Linotype Company, Hauppauge, NY

Allan Keysor, General Counsel

David Dinnin, President

Dan Mills, Manager of Strategic Planning
and Technology Acquisition

Thomas Wilner)
Grant Findlayson)--OF COUNSEL

Howrey & Simon
Washington, DC
on behalf of

Hell Graphic Systems, Inc., Melville, NY

Samuel E. Darby, Research and Development
Department Manager

Joel D. Kaufman)--OF COUNSEL

Wilmer, Cutler & Pickering
Washington, DC
on behalf of

E. I. Du Pont de Nemours & Co., Inc.

Phillip Tonge, Product Manager

Carlos Cabral, Manufacturing Resource Manager

Robert Monzack, General Counsel

John Greenwald)--OF COUNSEL

APPENDIX C

DATA ON U.S. PRODUCERS' AND IMPORTERS' HIGH-END IMAGESETTERS AND SUBASSEMBLIES

Table 3a

High-end imagesetters: U.S. producers' average-of-period capacity, production, and capacity utilization, 1987-89

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Table 4a

High-end imagesetters: Shipments of U.S. producers, by types and by products, 1987-89

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Table 5a

High-end imagesetters: U.S. producers' inventories, by products, as of December 31 of 1987-89

* * * * *

Table 6a

High-end imagesetters: Total establishment employment and average number of production and related workers producing imagesetters and subassemblies, hours worked,¹ wages and total compensation² paid to such employees, and hourly compensation, labor productivity, and unit labor costs, 1987-89

* * * * *

Table 10a

High-end subassemblies: Importers' U.S. inventories, by products, as of December 31 of 1987-89

* * * * *

Table 12a

High-end imagesetters and subassemblies: U.S. imports, by selected sources, 1987-89

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Table 13a

High-end imagesetters and subassemblies: U.S. shipments of imports, by selected sources, 1987-89

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Table 14a

High-end imagesetters: Apparent U.S. consumption and ratios of shipments of imports to consumption, 1987-89

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Table 15a

High-end subassemblies: Apparent U.S. consumption and ratios of shipments of imports to consumption, 1987-89

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APPENDIX D

DATA ON U.S. PRODUCERS' IMAGESETTERS AND SUBASSEMBLIES
EXCLUDING HELL GRAPHICS

Table 4b

Low-end imagesetters and subassemblies: Shipments of U.S. producers, by types and by products, 1987-89¹

* * * * *

Table 5b

Low-end imagesetters and subassemblies: U.S. producers' inventories, by products, as of December 31 of 1987-89¹

* * * * *

Table 6b

Low-end imagesetters and subassemblies: Total establishment employment and average number of production and related workers producing imagesetters and subassemblies, hours worked,¹ wages and total compensation² paid to such employees, hourly compensation, labor productivity, and unit labor costs,³ 1987-89

* * * * *

Selected financial data for low-end imagesetters and subassemblies are presented below showing Hell Graphics and other U.S. producers' results as a group (in thousands of dollars, except where noted).

* * * * *

APPENDIX E

IMPACT OF IMPORTS ON U.S. PRODUCERS' EXISTING DEVELOPMENT AND
PRODUCTION EFFORTS, GROWTH, INVESTMENTS, AND ABILITY TO RAISE CAPITAL

Responses of firms to the following questions:

1. Since January 1, 1987, has your firm experienced any actual negative effects on its growth, investment, ability to raise capital, or existing development and production efforts as a result of imports of imagesetters and subassemblies from FRG?

* * * * *

2. Does your firm anticipate any negative impact of imports of imagesetters and subassemblies from the FRG?

* * * * *

3. Has the scale of capital investments undertaken been influenced by the presence of imports of the subject merchandise from the FRG?

* * * * *