Electroluminescent Flat Panel Displays From Japan

Investigation No. 731-TA-469 (Review)

Publication 3285

March 2000



Washington, DC 20436

U.S. International Trade Commission

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GLOSSARY

| AC | Alternating current |
|------------------|--|
| ATIP | Asian Technology Information Program |
| Alphasil | Alphasil, Inc. |
| CIT | U.S. Court of International Trade |
| CRT | Cathode ray tube |
| СҮ | Calendar year |
| Cherry | The Cherry Corp. |
| Commerce | U.S. Department of Commerce |
| Commission/USITC | U.S. International Trade Commission |
| Customs | U.S. Customs Service |
| Dale | Dale Electronics, Inc. |
| DC | Direct current |
| EL | Electroluminescent |
| FPDs | Flat panel displays |
| FR | Federal Register |
| FY | Fiscal year |
| Federal Circuit | U.S. Court of Appeals for the Federal Circuit |
| GE | General Electric |
| НІС | High information content |
| HTS | Harmonized Tariff Schedule of the United States |
| IBM | IBM Corp. |
| LCD | Liquid crystal display |
| LIC | Low information content |
| LTFV | Less than fair value |
| Lohja | Lohja Corp. |
| Lucitron | Lucitron, Inc. |
| Magnascreen | Magnascreen Corp. |
| OEMs | Original equipment manufacturers |
| OIS | Optical Imaging Systems, Inc. |
| PRWs | Production and related workers |
| Planar | Planar Systems, Inc. |
| Plasmaco | Plasmaco, Inc. |
| Photonics | Photonics Technology, Inc. |
| pixels | Picture elements |
| R&D | Research and development |
| Response | Response to the Commission's Notice of Institution |
| SG&A | Selling, general, and administrative |
| SRI | Stanford Resources, Inc. |
| Sharp | Sharp Corp. |

Note.—Information that would reveal confidential operations of individual concerns may not be published and therefore has been identified by the use of ***.

UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-469 (Review)

ELECTROLUMINESCENT FLAT PANEL DISPLAYS FROM JAPAN

DETERMINATION

On the basis of the record¹ developed in the subject five-year review, the United States International Trade Commission determines, pursuant to section 751(c) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)), that revocation of the antidumping duty order on electroluminescent flat panel displays from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.²

BACKGROUND

The Commission instituted this review on August 2, 1999 (64 F.R. 41951, August 2, 1999) and determined on November 4, 1999 that it would conduct an expedited review (64 F.R. 62688, November 17, 1999). The Commission transmitted its determination in this review to the Secretary of Commerce on March 27, 2000.

¹ The record is defined in sec. 207.2(f) of the Commission's Rules of Practice and Procedure (19 C.F.R. § 207.2(f)).

² Commissioners Askey and Okun dissenting. Vice Chairman Miller did not participate in this five-year review.

VIEWS OF THE COMMISSION

Based on the record in this five-year review, we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Act"), that revocation of the antidumping duty order covering electroluminescent ("EL") flat panel displays ("FPDs") from Japan would be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.¹

I. BACKGROUND

In August 1991, the Commission determined that an industry in the United States was being materially injured by reason of imports of EL FPDs from Japan that were being sold at less than fair value ("LTFV").² On September 4, 1991, the Department of Commerce ("Commerce") issued an antidumping duty order on imports of EL FPDs from Japan.³ The Commission's original final determination of August 1991 was appealed to the U.S. Court of International Trade ("CIT"). The CIT's decision remanding the determination to the Commission was subsequently reversed by the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit").⁴ Consistent with the Federal Circuit's decision, Commerce reinstated its original antidumping duty order, which it had revoked pursuant to a mandamus order entered following the CIT's affirmance of the Commission's remand determination.⁵ On August 2, 1999, the Commission instituted the instant review pursuant to section 751(c) of the Act to determine whether revocation of the antidumping duty order on EL FPDs from Japan would likely lead to continuation or recurrence of material injury.⁶

In five-year reviews, the Commission initially determines whether to conduct a full review (which would include a public hearing, the issuance of questionnaires, and other procedures) or an expedited review, as follows. First, the Commission determines whether individual responses of interested parties to the notice of institution are adequate. Second, based on those responses deemed individually adequate, the Commission determines whether the collective responses submitted by two groups of interested parties - domestic interested parties (producers, unions, trade associations, or worker groups) and respondent interested parties (importers, exporters, foreign producers, trade associations, or subject country governments) - demonstrate a sufficient willingness among each group to participate and

¹ Commissioners Askey and Okun dissenting. *See* Dissenting Views of Commissioners Thelma J. Askey and Deanna Tanner Okun.

² <u>Certain High Information Content Flat Panel Displays and Display Glass Thereof from Japan</u>, Inv. No. 731-TA-469 (Final), USITC Pub. 2413 (August 1991) ("Original Determination"). In the same investigation, the Commission also made an affirmative material injury determination with respect to LTFV imports of active matrix liquid crystal displays ("AMLCDs"), but, as discussed *infra*, subsequent to the affirmative injury determination, Commerce rescinded the antidumping duty order on those imports.

³ 56 Fed. Reg. 43741 (September 4, 1991).

⁴ See Confidential Report ("CR"), Memorandum INV-X-045 (February 29, 2000) at I-4, n.5, Public Report ("PR") at I-3, n.5, for a summary of the appeal history for the investigation.

⁵ See <u>Notice of Court Decision and Rescission of Revocation of Antidumping Order</u>, 61 Fed. Reg. 39946 (July 31, 1996), rescinding action in <u>Amendment of Notice of Court Decision and Revocation of Antidumping Order</u>, 59 Fed. Reg. 43809 (August 25, 1994).

⁶ 64 Fed. Reg. 41951 (August 2, 1999).

provide information requested in a full review.⁷ If the Commission finds the responses from either group of interested parties to be inadequate, the Commission may determine, pursuant to section 751(c)(3)(B) of the Act, to conduct an expedited review unless it finds that other circumstances warrant a full review.

In this review, the Commission received a response to the notice of institution from Planar Systems, Inc. ("Planar"), the only known current domestic producer of EL FPDs.⁸ No foreign producer, exporter, or U.S. importer of EL FPDs filed a response.⁹

On November 4, 1999, the Commission determined that the domestic interested party group response to its notice of institution was adequate but that the respondent interested party group response was inadequate.¹⁰ The Commission did not find any circumstances that would warrant conducting a full review, and pursuant to section 751(c)(3)(B) of the Act¹¹ voted to conduct an expedited review of this matter.¹²

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. Domestic Like Product

In making its determination under section 751(c), the Commission defines "the domestic like product" and the "industry."¹³ The Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."¹⁴

In its final five-year review determination, Commerce defined the subject merchandise, EL FPDs, as:

large area, matrix addressed displays, no greater than four inches in depth, with a pixel count of 120,000 or greater, whether complete or incomplete, assembled or unassembled. EL FPDs incorporate a matrix of electrodes that, when activated, apply an electrical current to a solid compound of electroluminescent material (e.g., zinc sulfide) causing it to emit light. Included are monochromatic, limited color, and full color

⁷ See 19 C.F.R. § 207.62(a); 63 Fed. Reg. 30599, 30602-05 (June 5, 1998).

⁸ Planar was one of six domestic producers of all types of high information content ("HIC") FPDs and one of two producers of EL FPDs during the original investigation. CR at I-18, PR at I-13. In its Response to the Notice of Institution ("Planar's Response") Planar indicated that it was not aware of any other current domestic producers of EL FPDs. Planar's Response at 2, 10.

⁹ Nor did any other person file a submission under Commission Rule 207.61(d).

¹⁰ See Explanation of Commission Determination on Adequacy in Electroluminescent Flat Panel Displays from Japan (November 1999).

¹¹ 19 U.S.C. § 1675(c)(3)(B).

¹² Commissioner Koplan dissented. He voted for a full review "because of significant like product issues."

¹³ 19 U.S.C. § 1677(4)(A).

¹⁴ 19 U.S.C. § 1677(10). See <u>NEC Corp. v. Department of Commerce</u>, 36 F. Supp. 2d 380, 383 (Ct. Int'l Trade 1998); <u>Nippon Steel Corp. v. United States</u>, 19 CIT 450, 455 (1995); <u>Torrington Co. v. United States</u>, 747 F. Supp. 744, 749 n.3 (Ct. Int'l Trade 1990), *aff'd*, 938 F.2d 1278 (Fed. Cir. 1991). See also S. Rep. No. 249, 96th Cong., 1st Sess. 90-91 (1979).

displays used to display text, graphics, and video. EL FPD glass, whether or not integrated with additional components, exclusively dedicated to and designed for use in EL FPDs, is defined as processed glass substrates that incorporate patterned row, column, or both types of electrodes, and also typically incorporate a material that reacts to a change in voltage (e.g., phosphor) and contact pads for interconnecting drive electronics.¹⁵

EL FPDs are a type of high information content ("HIC") FPDs. In general, HIC FPDs show text, graphics, or video when integrated into end-user systems such as laptop computers, military instrumentation, and aerospace, medical, and office equipment.¹⁶ HIC FPDs are technologically sophisticated electronic displays that convert information received as electrical signals from an end-user system into visible images. They consist of display glass assemblies containing pixels and row and column electrodes and of associated electronic systems, which drive the electrodes on the display glass and interpret the incoming information-bearing signals.¹⁷

HIC FPDs are classified by the technology which is used to produce the display glass. The most common technologies at the time of the original investigation, and the ones for which the Commission collected data at that time, were EL displays, liquid crystal displays ("LCDs"), and gas plasma displays.¹⁸ EL displays and gas plasma displays are "emissive," *i.e.*, their pixels produce and emit light when electronically activated, and therefore are visible without natural, ambient, or back-light.¹⁹

In the original final investigation, Commerce defined two separate classes or kinds of merchandise subject to its dumping findings: AMLCDs and EL FPDs.²⁰ Notwithstanding Commerce's findings, the Commission performed one like product analysis, and found one like product consisting of all HIC FPDs.²¹ The Commission based this like product finding on the similarities in basic physical characteristics and general end uses, common channels of distribution, and overlap in production technologies. The respondents appealed the Commission's determination to the CIT, which remanded the determination on the grounds that the Commission performed separate like product finding was not supported by substantial evidence.²² On remand, the Commission performed separate like product analyses for both classes or kinds of subject imports, *i.e.*, AMLCDs and EL FPDs, but found the corresponding like

¹⁸ CR at I-8, PR at I-7.

¹⁹ CR at I-8-9, PR at I-7. LCDs are non-emissive and cannot be viewed in the dark.

²⁰ 56 Fed. Reg. 32376 (July 16, 1991). Commerce defined four separate classes or kinds of HIC FPDs covered by the petition: EL FPDs, AMLCDs, passive matrix LCDs ("PMLCDs"), and gas plasma displays. Commerce rescinded its initiation of the investigation with respect to PMLCDs since there was no domestic production of PMLCDs and the petitioners therefore lacked standing. 56 Fed. Reg. at 32382. In addition, Commerce made a final negative dumping determination with respect to gas plasma displays because of *de minimis* margins. 56 Fed. Reg. 32376, 32401.

²¹ Original Determination at 7.

¹⁵ 65 Fed. Reg. 11979 (March 7, 2000). Also included in the scope is the display glass used in the FPDs. *See* 56 Fed. Reg. 32376 (July 16, 1991).

¹⁶ CR at I-7, PR at I-6.

¹⁷ CR at I-8, PR at I-7.

²² Hosiden Corp. v. United States, 810 F.Supp. 322, 334 (Ct. Int'l Trade 1992).

product for each of them to include all domestic HIC FPDs.²³ By an evenly split vote, the Commission found that an industry in the United States was injured by reason of subject imports of AMLCDs, but by a 4-2 vote, the Commission found that a domestic industry was not materially injured by reason of subject imports of EL FPDs. During a subsequent administrative review, Commerce found no margins on subject AMLCD imports and revoked the order on that product.²⁴ The Federal Circuit later reversed the remand of the original Commission determination, reinstating the Commission's original finding of one like product consisting of all HIC FPDs and of material injury to the industry producing HIC FPDs by reason of subject imports of HIC FPDs.²⁵

As described, only one of the four classes or kinds of merchandise originally defined by Commerce remains subject to an antidumping duty order. The order on that product, EL FPDs, is the subject of this five-year review investigation. The unusual facts of this case present the type of circumstances contemplated by the Notice of Final Rulemaking ("NOFR") preamble that could warrant reconsideration of the original like product.²⁶ In light of the now limited scope of any orders on HIC FPDs, we found it appropriate to consider whether the like product for this review should be limited to EL FPDs, corresponding to the only type of displays still subject to an antidumping duty order.

In the original determination, the Commission found that the domestic product, like all subject HIC FPDs, included the coextensive domestic grouping of all HIC FPDs.²⁷ However, the history of this case and the Commission's views on remand illustrate that even in the original investigation, the like product definition was not straightforward. When ordered on remand by the CIT to reexamine the like product findings in relation to each specific class or kind of merchandise, half of the Commission found that the like product corresponding to the imported EL FPDs was domestic EL FPDs, in light of differences in physical characteristics, end uses, technologies, producers, and production processes.²⁸ The other half of the Commission again defined the like product as consisting of all HIC FPDs, citing to overlaps in physical characteristic, end uses, and some production factors, as well as the "rapidly developing nature" of HIC FPD technology.²⁹ Thus, the Commission's examination of the like product question based on the same scope as the current scope of this five-year review resulted in an evenly-divided conclusion.

During the original investigation, industry experts predicted that the distinguishing characteristics among the various types of displays were likely to become more blurred with the

²³ <u>Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan</u>, Inv. No. 731-TA-469 (Views on Remand), USITC Pub. No. 2610 (March 1993) at I-3. Three Commissioners (Chairman Newquist and Commissioners Rohr and Nuzum) defined the like products on remand as described above. The other three Commissioners (Vice Chairman Watson and Commissioners Brunsdale and Crawford) found narrower like products, defining them in both cases as coextensive with the scope of the particular class or kind of merchandise.

²⁵ Hosiden Corp. v. Advanced Display Mfrs. of America, 85 F.3d 1561, 1569-70 (Fed. Cir. 1996).

²⁶ 63 Fed. Reg. at 30602 (June 5, 1998). In the NOFR preamble, the Commission stated:

[i]n appropriate circumstances, the Commission may revisit its original domestic like product and domestic industry determinations in five-year reviews. For example, the Commission may revisit its like product determination when there have been significant changes in the product at issue since the original investigation or when domestic like product definitions differed for individual orders within a group concerning similar products. *Id*.

²⁷ Original Determination at 7-12.

²⁴ 58 Fed. Reg. 34409, 34414 (June 25, 1993).

²⁸ Remand Determination at II-7-8.

²⁹ Remand Determination at I-5-13.

movement toward higher performance display technologies and consequent converging appearance and power requirements.³⁰ However, the information in this expedited review suggests that this convergence has not entirely come to pass and that distinguishing technological attributes associated with various HIC FPDs continue to some degree to distinguish the displays.³¹ Although, now as in the original investigation, all HIC FPDs have the same general end use, most EL FPDs continue to be used for applications other than computers, due to their relatively high cost compared to competing technologies.³² Whereas LCDs are the preferred displays for use in laptops and notebooks,³³ Planar identifies its primary markets for EL FPDs as medical instrumentation, industrial process control and defense equipment, and transportation and communication systems.³⁴ In light of these differences in primary end uses as well as the continuing technological distinctions among various HIC FPDs, we have determined to limit the domestic like product in this five-year review to EL FPDs, co-extensive with the current scope.³⁵

B. Domestic Industry

Section 771(4)(A) of the Act defines the relevant industry as the "domestic producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."³⁶ In accordance with our domestic like product determination, we find one domestic industry, consisting of all domestic producers of EL FPDs. Planar is the only known current domestic producer of that product.³⁷

³⁰ CR at I-9, PR at I-8, *citing* Original Confidential Report at A-30.

³¹ CR at I-15, PR at I-11.

³² CR at I-16, PR at I-12.

³³ CR at I-15, I-17, PR at I-11-13. Planar states that AMLCDs may be in color but relatively expensive in comparison to cathode ray tubes ("CRTs"), whereas EL FPDs are usually monocolor yet relatively expensive, or may be in color but relatively more expensive than AMLCDs. Planar's Response at 15.

³⁴ CR at I-16, PR at I-12.

³⁵ It appears that Planar agrees with this definition, although this is not explicitly clear from Planar's Response. Planar quotes Commerce's class or kind definition for EL FPDs, but erroneously labels Commerce's definition as the Commission's like product definition from the original determination. Planar's Response at 16-17. *See* 56 Fed. Reg. at 32376-77 (July 16, 1991). Despite this discrepancy, Planar states that it agrees with "these definitions." Planar's Response at 17; Planar's Comments at 3 n.4.

³⁶ 19 U.S.C. § 1677(4)(A).

³⁷ During the original investigation, there was one other domestic producer of EL FPDs in addition to Planar. CR at I-19, PR at I-13; Original Confidential Report at A-49-50. According to Planar, that producer, The Cherry Corp. ("Cherry") has since left the industry. CR at I-19, PR at I-14; Planar's Response at 2.

III. REVOCATION OF THE ANTIDUMPING DUTY ORDER ON ELECTROLUMINESCENT FLAT PANEL DISPLAYS FROM JAPAN WOULD LIKELY LEAD TO CONTINUATION OR RECURRENCE OF MATERIAL INJURY WITHIN A REASONABLY FORESEEABLE TIME

A. Legal Standard

In a five-year review conducted under section 751(c) of the Act, Commerce will revoke an antidumping duty order unless: (1) it makes a determination that dumping is likely to continue or recur, and (2) the Commission makes a determination that revocation of an order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."³⁸ The SAA states that "under the likelihood standard, the Commission will engage in a counter-factual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo – the revocation [of the order] . . . and the elimination of its restraining effects on volumes and prices of imports."³⁹ Thus, the likelihood standard is prospective in nature.⁴⁰ The statute states that "the Commission shall consider that the effects of revocation . . . may not be imminent, but may manifest themselves only over a longer period of time."⁴¹ According to the SAA, a "reasonably foreseeable time" will vary from case-to-case, but normally will exceed the 'imminent' time frame applicable in a threat of injury analysis [in antidumping and countervailing duty investigations]."⁴² ⁴³

Although the standard in five-year reviews is not the same as the standard applied in original antidumping or countervailing duty investigations, it contains some of the same fundamental elements.

³⁹ SAA, H.R. Rep. No. 103-316, vol. I, at 883-84 (1994). The SAA states that "[t]he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry)." SAA at 883.

⁴⁰ While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued [sic] prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

⁴¹ 19 U.S.C. § 1675a(a)(5).

⁴² SAA at 887. Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." *Id*.

⁴³ In analyzing what constitutes a reasonably foreseeable time, Commissioner Koplan examines all the current and likely conditions of competition in the relevant industry. He defines "reasonably foreseeable time" as the length of time it is likely to take for the market to adjust to a revocation. In making this assessment, he considers all factors that may accelerate or delay the market adjustment process including any lags in response by foreign producers, importers, consumers, domestic producers, or others due to: lead times; methods of contracting; the need to establish channels of distribution; product differentiation; and any other factors that may only manifest themselves in the longer term. In other words, this analysis seeks to define "reasonably foreseeable time" by reference to current and likely conditions of competition, but also seeks to avoid unwarranted speculation that may occur in predicting events into the more distant future.

³⁸ 19 U.S.C. § 1675a(a).

The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked."⁴⁴ It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order under review, and whether the industry is vulnerable to material injury if the order is revoked.^{45 46}

Section 751(c)(3) of the Act and the Commission's regulations provide that in an expedited fiveyear review the Commission may issue a final determination "based on the facts available, in accordance with section 776."⁴⁷ We note that the statute authorizes the Commission to take adverse inferences in five-year reviews, but such authorization does not relieve the Commission of its obligation to consider the record evidence as a whole in making its determination. We generally give credence to the facts supplied by the participating parties and certified by them as true, but base our decision on the evidence as a whole, and do not automatically accept the participating parties' suggested interpretation of the record evidence. Regardless of the level of participation and the interpretations urged by participating parties, the Commission is obligated to consider all evidence relating to each of the statutory factors and may not draw adverse inferences that render such analysis superfluous. "In general, the Commission makes determinations by weighing all of the available evidence regarding a multiplicity of factors relating to the domestic industry as a whole and by drawing reasonable inferences from the evidence it finds most persuasive."48 As noted above, no respondent interested party responded to the Commission's notice of institution. Accordingly, we have relied on the facts available in this review, which consist primarily of the records in the Commission's original investigation as well as the remand investigation. limited information collected by the Commission since the institution of these reviews, and information submitted by Planar.

For the reasons stated below, we determine that revocation of the antidumping duty order on EL FPDs from Japan would be likely to lead to continuation or recurrence of material injury to the domestic industry within a reasonably foreseeable time.

 45 19 U.S.C. § 1675a(a)(1). The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination. 19 U.S.C. § 1675a(a)(5). While the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

⁴⁶ Section 752(a)(1)(D) of the Act directs the Commission to take into account in five-year reviews involving antidumping proceedings "the findings of the administrative authority regarding duty absorption." 19 U.S.C. § 1675a(a)(1)(D). Commerce has not issued a duty absorption finding with respect to the order under review. See 65 Fed. Reg. 11979 (March 7, 2000).

⁴⁷ 19 U.S.C. § 1675(c)(3)(B); 19 C.F.R. § 207.62(e). Section 776 of the Act, in turn, authorizes the Commission to "use the facts otherwise available" in reaching a determination when: (1) necessary information is not available on the record or (2) an interested party or any other person withholds information requested by the agency, fails to provide such information in the time or in the form or manner requested, significantly impedes a proceeding, or provides information that cannot be verified pursuant to section 782(i) of the Act. 19 U.S.C. § 1677e(a). The statute permits the Commission to use adverse inferences in selecting from among the facts otherwise available when an interested party has failed to cooperate by acting to the best of its ability to comply with a request for information. 19 U.S.C. § 1677e(b). Such adverse inferences may include selecting from information from the record of our original determination and any other information placed on the record. *Id*.

⁴⁸ SAA at 869.

⁴⁴ 19 U.S.C. § 1675a(a)(1).

B. Conditions of Competition

In evaluating the likely impact of the subject imports on the domestic industry, the statute directs the Commission to consider all relevant economic factors "within the context of the business cycle and conditions of competition that are distinctive to the affected industry."⁴⁹

The demand for EL FPDs is derived from the demand for the products in which they are used, such as medical instrumentation, industrial process control and defense equipment, transportation and communication systems, and to a lesser but increasing degree, laptop computers.⁵⁰ As the demand for products that use EL FPDs has grown, so have the sales of EL FPDs. Even as unit values have declined by ***, the value of U.S. apparent consumption of EL FPDs has almost *** since 1990, the last year of the original determination.⁵¹

In the original determination, the Commission described the HIC FPD industry in general as an emerging industry for which growth and investment are especially important.⁵² The domestic EL FPD industry today, consisting of only one firm that has been producing EL FPDs for more than 10 years, is more mature by comparison to the original period of investigation. However, the market for the product continues to expand, as the industry continues to be on the cutting edge of technological advances, such as the development of improved color EL FPDs. Today, as during the original period of investigation, growth and investment are especially important in this industry. The ability to obtain or generate significant financing for increased capital investment and research and development is still an important condition of competition.

During the original investigation, the Commission found that price, while not the most important factor in most sales, was a significant factor.⁵³ There is no information in the record of this five-year review to suggest that this is not still true. Now, as during the original investigation, sales of EL FPDs are made pursuant to contracts.⁵⁴ Loss of a contract and the stream of future cash flow it provides is likely to hamper a company's ability to make the investments in the capital expenditures and the research and development necessary to remain competitive. In turn, without these expenditures and corresponding technological advances, an EL FPD producer's ability to secure future contracts will likely be diminished.

Based on the record evidence, we find that these conditions of competition in the domestic EL FPD market are not likely to change significantly in the reasonably foreseeable future. Accordingly, we have taken these conditions of competition into account in assessing the likely effects of revocation of the antidumping duty order within the reasonably foreseeable future.

C. Likely Volume of Subject Imports

In evaluating the likely volume of imports of subject merchandise if the order under review is revoked, the Commission is directed to consider whether the likely volume of subject imports would be

⁵¹ CR and PR at Tables I-2 and I-6.

⁴⁹ 19 U.S.C. § 1675a(a)(4).

⁵⁰ CR at I-16, I-29, PR at I-12, I-19.

⁵² Original Determination at 21.

⁵³ Original Determination at 23.

⁵⁴ CR at I-14, PR at I-11; Planar's Response at 8.

significant either in absolute terms or relative to the production or consumption in the United States.⁵⁵ In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product-shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.⁵⁶

During the original investigation, imports of subject EL FPDs rose from *** units valued at \$*** in 1988 to *** units valued at \$*** in 1989, and then returned in 1990 to *** units valued at \$***.⁵⁷ Although there are no import data available for the period immediately following the issuance of the Commission's original determination in 1991, the record in this investigation does contain such data for the period from 1994 through 1998.⁵⁸ In 1994, total imports of EL FPDs from Japan were valued at below \$6.0 million.⁵⁹ In April of that year, the CIT issued its affirmance of the Commission's negative remand determination on EL FPDs.⁶⁰ Consequently, Commerce revoked the antidumping duty order on those imports, effective February 21, 1991.⁶¹ During the two years following Commerce's revocation of the antidumping duty order, imports from Japan of EL FPDs increased rapidly and significantly, first rising to a value of approximately \$7.0 million in 1995 and then jumping to a value of more than \$11.0 million in 1996.⁶²

In May 1996, the Federal Circuit issued its order vacating the CIT's remand order, resulting in the reinstatement of the Commission's original affirmative determination on all subject HIC FPD imports from Japan.⁶³ Commerce then rescinded its revocation of the antidumping duty order on EL FPDs from Japan, reinstated liquidation of entries of those imports, and resumed the cash collection of deposits on EL FPDs from Japan as of July 31, 1996.⁶⁴ Following these actions, imports of EL FPDs from Japan dropped even further and faster than they had risen since 1994. From the high of more than \$11.0 million worth of subject imports in 1996, subject imports dropped to slightly above \$4.0 million in 1997, and then dropped further in 1998 to \$2.4 million.⁶⁵

This pattern demonstrates that there is a direct correlation between the existence of an antidumping duty order on EL FPDs from Japan and the level of those imports into the United States. It

⁵⁷ CR and PR at Table I-3; Original Confidential Report at Table 35.

⁵⁸ CR and PR at Figure I-1.

⁵⁹ CR and PR at Figure I-1.

⁶⁰ <u>Hosiden Corp. v. United States</u>, 852 F. Supp. 1050 (Ct. Int'l Trade 1994), *vacated sub. nom*. <u>Hosiden Corp. v.</u> <u>Advanced Display Mfrs. of America</u>, 85 F.3d 1561 (Fed. Cir. 1996).

⁶¹ <u>Amendment of Notice of Court Decision and Revocation of Antidumping Duty Order</u>, 59 Fed. Reg. 43809 (August 1994).

⁶² CR and PR at Figure I-1.

⁶³ Hosiden Corp. v. Advanced Display Mfrs. of America, 85 F.3d 1561 (Fed. Cir. 1996).

⁶⁴ <u>Notice of Court Decision and Recission of Revocation of Antidumping Duty Order</u>, 61 Fed. Reg. 39946 (July 31, 1996).

⁶⁵ CR and PR at Figure I-1 and Table I-3.

^{55 19} U.S.C. §1675a(a)(2).

^{56 19} U.S.C. § 1675(a)(2)(A)-(D).

further strongly suggests that, as in 1994, producers and importers of EL FPDs from Japan would likely respond to revocation of the antidumping duty order with a significant increase in the volume of subject imports.

There is also evidence in the record of this review indicating that the Japanese producer, Sharp Corporation ("Sharp") has the production capacity available to produce EL FPDs for export to the United States. Sharp's capacity to produce EL FPDs increased in each year of the original investigation, expanding its overall capacity by *** percent from *** units in 1988 to *** units in 1990.⁶⁶ Although the record contains limited information about Sharp's current EL FPD production capacity and capacity utilization, the evidence indicates that Sharp continued to expand its capacity to produce EL FPDs after 1990. ***.⁶⁷

The record indicates that Sharp's worldwide sales of EL FPDs were valued at \$*** in 1998 and were projected to *** to \$*** in 1999.⁶⁸ Moreover, there is evidence in the record that Sharp was projected to export EL FPDs valued at \$*** to the United States in 1999, which would account for approximately *** percent of the U.S. EL FPD market in 1999.⁶⁹ In addition, Sharp already has in place a distribution system in the United States.⁷⁰ Thus, it appears that Sharp is well-positioned to increase its exports of EL FPDs to the United States.⁷¹

Based on the foregoing, we find it likely that the subject producer in Japan would, upon revocation of the order, increase exports to the U.S. market, and that the subject import volume would rise significantly if the discipline of the order was removed.⁷² Therefore, based on the record in this review, we conclude that, absent the restraining effect of the order, subject imports would likely increase to a significant level.

D. Likely Price Effects

In evaluating the likely price effects of subject imports if the order is revoked, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared with domestic like products and whether the subject imports are likely to enter the United States at prices that would have a significant depressing or suppressing effect on the price of domestic like products.⁷³

⁶⁹ Planar's Response at 5-6 and Attachment 1. Planar relies on data obtained from the "Stanford Resources, Inc. {'SRI'} EL Market Reports." These data were reported for the entire North America market, but, according to Planar, there are only "negligible" sales of EL FPDS in Mexico or Canada, and the data reported for the North American market therefore essentially reflect sales in the United States market. Planar's Response at Attachment 1.

⁷⁰ See Planar's Response at 6. Planar attached a copy of a page from Sharp's website, indicating that Sharp has facilities in Washington (state), California, Illinois, Tennessee, Florida, Georgia, and New Jersey. See Planar's Response at Attachment 2.

⁷¹ Planar's Response at 7.

⁷² See SAA at 890.

⁷³ 19 U.S.C. § 1675a(a)(3). The SAA states that "[c]onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on

(continued...)

⁶⁶ CR and PR at Table 1-7.

⁶⁷ CR at I-35, PR at I-22.

⁶⁸ Planar's Response at Attachment 1.

In the original determination, the Commission found that subject imports, which included EL and other types of HIC FPDs, had an adverse effect on the prices of the products sold by the domestic HIC FPD producers.⁷⁴ In reaching this conclusion, the Commission relied, *inter alia*, on evidence of underselling by EL FPDs from Japan and of downward trends or flat trends of the prices for both LTFV and domestic products, including EL FPDs.⁷⁵ The Commission found that the record thus indicated that subject imports depressed and suppressed domestic prices.⁷⁶

The Commission also noted that it would not expect to find many examples of lost sales and revenue because much of the competition in the HIC FPD market takes the form of negotiations for the development of specialized products.⁷⁷ Nevertheless, staff confirmed an instance during the original investigation in which *** reduced its sale price for an EL FPD to compete with Japanese producers.⁷⁸

The record in this expedited review contains limited recent price information and no recent data comparing prices of the domestic like product with those of the subject imports. Unit values for domestic EL FPDs have declined since the original investigation, reflecting increases in economies of scale and technological and production advances.⁷⁹ In fiscal 1999, the domestic EL FPD unit value was \$*** the 1990 domestic unit value of \$***.⁸⁰ However, even the 1999 average unit value for domestic EL FPDs was still *** than the 1990 unit value for EL FPDs from Japan.⁸¹ Given the advances in product development, we infer that, in the absence of the antidumping duty order, EL FPDs from Japan would enter the United States at unit values well below those at which they entered nine years ago, and therefore, well below domestic unit values.

Moreover, the evidence in the record indicates that the conditions of competition with respect to pricing for EL FPDs are substantially the same as they were at the time of the original investigation.⁸² Price remains a significant factor in purchasing decisions, and sales of EL FPDs continue to be made pursuant to contracts.⁸³ As discussed in the original determination, contract negotiations include an evaluation at an early stage at which a "target" price is discussed.⁸⁴ Absent the discipline of an antidumping duty order, Sharp is likely to increase its exports of EL FPDs into the U.S. market and

 73 (...continued)

⁷⁴ Original Determination at 24.

⁷⁵ Original Determination at 24; Original Confidential Report at Tables 39 and 44.

⁷⁶ Original Determination at 24.

⁷⁷ Original Determination at 25. As the Commission explained, domestic firms were often disqualified from these negotiations at an early stage, with the price of dumped imports often a factor leading to disqualification. Producers disqualified at this stage may therefore have had difficulty pointing to their disqualification as a "lost sale." However, in each such instance, domestic producers lose not only a sale or revenue but also an opportunity to enhance their ability to win future contracts, by for example, developing productive capacity. *Id*.

⁷⁸ Original Confidential Report at A-194.

⁷⁹ CR at I-23, PR at I-16; CR and PR at Table I-2.

⁸⁰ CR and PR at Table I-2.

⁸¹ CR at I-35, PR at I-23; CR and PR at Table I-3.

⁸² Planar's Response at 8.

⁸³ Planar's Response at 8.

⁸⁴ Original Determination at 25.

circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

attempt to regain its customer base by competing for contracts through low pricing. The reliance on target prices during contract negotiations increases the likelihood that the offer of low-priced LTFV product may have a depressing effect on domestic prices.

Based on the record in this review, we find that revocation of the antidumping duty order on EL FPDs from Japan would be likely to lead to significant underselling by the subject imports of the domestic like product, as well as significant price depression and suppression, within a reasonably foreseeable time.

E. Likely Impact

In evaluating the likely impact of imports of subject merchandise if the order is revoked, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.⁸⁵ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry.⁸⁶ As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the antidumping duty order at issue and whether the industry is vulnerable to material injury if the order is revoked.⁸⁷

In the original investigation, the Commission found that, in light of the business cycle and all pertinent conditions of competition, the domestic HIC FPD industry was experiencing material injury by reason of imports of LTFV HIC FPDs from Japan.⁸⁸ The Commission found that, notwithstanding increases in sales, production, and shipments, the industry's financial condition significantly worsened during the period of investigation.⁸⁹ Due to the presence of subject imports from Japan, the domestic industry was unable to raise capital and therefore lost investment opportunities.⁹⁰ As a result, the industry lacked the funding for capital investments and research and development that is essential for an

⁸⁷ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

⁸⁵ 19 U.S.C. § 1675a(a)(4).

⁸⁶ 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Act states that "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review investigation. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year review investigations as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887. In its expedited five-year review of EL FPDs from Japan, Commerce found that revocation of the antidumping order would likely lead to continuation or recurrence of dumping at margins of 7.02 for Sharp Corporation and for all others. 65 Fed. Reg. 11979 (March 7, 2000).

⁸⁸ Original Determination at 22-23, 27.

⁸⁹ Original Determination at 20.

⁹⁰ Original Determination at 26.

emerging high technology product.⁹¹ Without substantial funding from internal or external sources, domestic producers lacked the capacity to achieve initial design wins and in some instances could not qualify as vendors for large customers who required large commercial quantities of displays.⁹² Consequently, domestic producers were caught in a cycle that denied them the opportunity to increase their production to a level that would result in economies of scale and increased expertise that would support development of an advanced version of the like product.⁹³

Although the original determination discussed the entire HIC FPD industry, the key competition factors which the Commission found critical to its material industry determination applied then and still apply today to the EL FPD industry.⁹⁴ As in the original investigation, the industry's success lies in its ability to raise capital for investment and research and development. For example, as in the original investigation, the domestic EL FPD industry continues to actively pursue advanced versions of full color EL FPDs.⁹⁵

Based on the most recent data available, we also find that the domestic EL FPD industry is currently vulnerable to material injury if the antidumping duty order on EL FPDs from Japan is revoked. With respect to trade data, the industry's production of EL FPDs declined between fiscal 1998 and fiscal 1999, resulting in a reduction in capacity utilization from *** percent to *** percent, respectively. Consistent with the decreased production, domestic shipments declined from *** units to *** units.⁹⁶

The data for the past two years likewise show downward trends for employment and financial performance indicators. In fiscal 1998, Planar employed *** production related workers for *** hours, but employed only *** production related workers for *** hours in fiscal 1999.⁹⁷ Net sales value declined in the course of one year, from \$*** in fiscal 1998 to \$*** in fiscal 1999, as gross profits dropped from \$*** to \$***.⁹⁸ The industry's *** operating income of \$*** in fiscal 1998 *** in fiscal 1999.

Although the industry was able to maintain research and development funding at \$*** in fiscal 1998 and \$*** in fiscal 1999, the capital expenditures that are so critical to this industry declined by ***, from \$*** in fiscal 1998 to \$*** in fiscal 1999.⁹⁹ The record indicates that these downward trends in the industry's performance coincide with the 1999 entry of \$*** of EL FPDs from Japan reported by Planar.¹⁰⁰ As the Commission found in the original investigation, the EL FPD industry's survival requires substantial capital for investment and research and development. Any lost sales and market share can have significant adverse effects for the industry not just with respect to present sales, but also

⁹¹ Original Determination at 22-23, 26.

⁹² Original Determination at 26.

⁹³ Original Determination at 26.

⁹⁴ For example, during the original investigation, Planar provided evidence of ******* in its attempts to raise capital. CR at I-14, PR at I-10, *citing* Original Confidential Report at A-112.

⁹⁵ Original Determination at 22; CR at I-16, PR at I-12.

⁹⁶ Inventories *** between 1998 and 1999, but only by *** units. Export shipments *** from *** units to *** units. CR and PR at Table I-2.

⁹⁷ CR and PR at Table I-2.

⁹⁸ CR and PR at Table I-2.

⁹⁹ CR and PR at Table I-2.

¹⁰⁰ CR at I-26, PR at I-19.

for the future viability of the industry. Thus, even small increases in the volume of subject imports (or offers for sale) can have a significant impact on the domestic industry's profitability.

As discussed above, revocation of the antidumping duty order would be likely to lead to significant increases in the volume of subject imports at prices that likely would cause lost sales and would therefore result in both market share declines and further erosion of the domestic industry's profitability. In turn, these declines would result in critical lost investment and the inability to make capital expenditures and fund research and development essential to product development and sales.

Accordingly, based on the limited record in this review, we conclude that, if the antidumping duty order was revoked, subject imports from Japan would be likely to have a significant adverse impact on the domestic industry within a reasonably foreseeable time.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty order on imports of EL FPDs from Japan would be likely to lead to continuation or recurrence of material injury to the domestic EL FPD industry within a reasonably foreseeable time.

DISSENTING VIEWS OF COMMISSIONERS THELMA J. ASKEY AND DEANNA TANNER OKUN

Based on the record in these five-year reviews,¹ we determine under section 751(c) of the Tariff Act of 1930, as amended ("the Act"), that revocation of the antidumping duty order on certain high-information content ("HIC") flat panel displays ("FPDs") from Japan would not be likely to lead to continuation or recurrence of material injury to an industry in the United States within a reasonably foreseeable time.

I. BACKGROUND

In August 1991, the Commission determined that an industry in the United States was being materially injured by reason of imports of HIC FPDs from Japan that were being sold at less than fair value ("LTFV").² As a result, the Department of Commerce ("Commerce") issued an antidumping duty order on the subject imports from Japan.³ Following an appeal to and remand from the Court of International Trade ("CIT") and a subsequent reversal by the U.S. Court of Appeals for the Federal Circuit ("Federal Circuit") of the CIT's remand order, the Commission's original final determination of August 1991 was upheld.⁴ Consistent with the Federal Circuit's decision, Commerce reinstated its original antidumping duty order, which it had revoked pursuant to a mandamus order issued by the CIT following the CIT's affirmance of the Commission's remand determination.⁵

On August 2, 1999, the Commission instituted a review pursuant to section 751(c) of the Act to determine whether revocation of the antidumping duty order on certain HIC FPDs from Japan would likely lead to continuation or recurrence of material injury.⁶ Planar Systems, Inc. ("Planar"), a domestic manufacturer of HIC FPDs, filed a Response to the Notice of Institution as well as comments on adequacy. Planar was one of six domestic producers of all types of high information content FPDs and

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

² <u>Certain High Information Content Flat Panel Displays and Display Glass Thereof from Japan</u>, Inv. No. 731-TA-469 (Final), USITC Pub. 2413 (August 1991) ("Original Determination"). Prior to the determination in the original investigation, Commerce determined that there were four separate classes or kinds of products, corresponding to electroluminescent ("EL") FPDs, active matrix liquid crystal displays ("LCDs"), passive matrix LCDs, and gas plasma displays. In addition, Commerce eliminated passive matrix LCDs from the scope because there was no domestic production of passive matrix LCDs, and therefore, the petitioners lacked standing. At the same time, Commerce eliminated plasma displays because of *de minimis* antidumping margins. 56 FR 32376 (July 16, 1991).

³ 56 Fed. Reg. 43741 (September 4, 1991). However, in a subsequent administrative review, Commerce found no margins on subject active matrix LCDs and revoked the order on these imports. 58 FR 34409 (June 25, 1993).

⁴ See Confidential Report ("CR") and Public Report ("PR") at I-4, n.5, for a summary of the appeal history of this investigation.

⁵ See Notice of Court Decision and Rescission of Revocation of Antidumping Order, 61 Fed. Reg. 39946 (July 31, 1996), rescinding action in <u>Amendment of Notice of Court Decision and Revocation of Antidumping Order</u>, 59 Fed. Reg. 43809 (August 25, 1994).

⁶ 64 Fed. Reg. 41951 (August 2, 1999).

one of two producers of electroluminescent FPDs during the original investigation.⁷ No respondent interested party filed a response.⁸

On November 4, 1999, the Commission determined that the domestic interested party group response to its notice of institution was adequate but that the respondent interested party group response was inadequate.⁹ Pursuant to section 751(c)(3)(B) of the Act,¹⁰ the Commission voted to expedite review of this matter.

II. DOMESTIC LIKE PRODUCT AND INDUSTRY

A. Domestic Like Product

The starting point for a five-year review investigation is similar to that for an original antidumping investigation: the Commission must define "the domestic like product" and the "industry." Section 771(4)(A) of the Act defines the relevant industry as the "producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the product."¹¹ In turn, the Act defines "domestic like product" as "a product which is like, or in the absence of like, most similar in characteristics and uses with, the article subject to an investigation under this subtitle."¹² In its final five-year review determination, Commerce defined the scope of the subject merchandise as:

large area, matrix addressed displays, no greater than four inches in depth, with a pixel count of 120,000 or greater, whether complete or incomplete, assembled or unassembled. EL FPDs incorporate a matrix of electrodes that, when activated, apply an electrical current to a solid compound of electroluminescent material (e.g., zinc sulfide) causing it to emit light. Included are monochromatic, limited color, and full color displays used to display text, graphics, and video. EL FPD glass, whether or not integrated with additional components, exclusively dedicated to and designed for use in EL FPDs, is defined as processed glass substrates that incorporate patterned row, column, or both types of electrodes, and also typically incorporate a material that reacts to a change in voltage (e.g., phosphor) and contact pads for interconnecting drive electronics.¹³

⁹ See <u>Explanation of Commission Determination on Adequacy in Electroluminescent Flat Panel Displays from</u> Japan (November 1999).

¹⁰ 19 U.S.C. § 1675(c)(3)(B).

¹¹ 19 U.S.C. § 1677(4)(A). The definitions in 19 U.S.C. § 1677 are applicable to the entire subtitle containing the antidumping and countervailing duty laws, including 19 U.S.C. §§ 1675 and 1675a. *See* 19 U.S.C. § 1677.

¹² 19 U.S.C. § 1677(10).

¹³ 65 Fed. Reg. 11979 (March 7, 2000). Also included in the scope is the display glass used in the FPDs.

(continued...)

⁷ CR at I-18; PR at I-13. In its Response to the Notice of Institution ("Planar's Response"), Planar indicated that it is not aware of any other current manufacturers of EL FPDs. Planar's Response at 2, 10.

⁸ Nor did any other person file a submission under Commission Rule 207.61(d).

High-information content FPDs (including EL FPDs, active matrix LCDs, passive matrix LCDs, and gas plasma displays), display text, graphics, or video when integrated into such end-user systems as laptop and portable computers; aerospace, medical, and office equipment; and instrumentation for the military.¹⁴ All HIC FPDs are large-area, matrix-addressed displays no greater than 4 inches in depth, with a pixel count of 120,000 or greater.¹⁵ The displays are technologically sophisticated electronic displays that convert information received as electrical signals from an end-user system into visible images.¹⁶ Broadly speaking, they consist of display glass (i.e., the display glass assembly which contains the pixels and row and column electrodes) and associated electronic systems (the drive and control electronics) which drive the electrodes on the display glass and interpret the incoming information-bearing signals.¹⁷ Although "display glass" is the primary and distinguishing component of HIC FPDs, the electronics comprise a significant portion of the cost of a display and determine some of its performance characteristics, including monochromatic color and extent of illumination.¹⁸

HIC FPDs are classified by the technology which is used to produce the display glass.¹⁹ The most common technologies at the time of the original investigation were EL displays, as well as LCDs and gas plasma displays.²⁰ Also, flat panel display technology can be more broadly categorized as emissive or non-emissive.²¹ EL displays and gas plasma displays use emissive technologies, while LCDs are non-emissive.²²

As noted earlier, Commerce defined four separate classes or kinds of merchandise subject to its LTFV findings. Notwithstanding Commerce's findings, the Commission, in its original investigation, performed one like product analysis, and found one like product consisting of all HIC FPDs. The Commission based this like product finding on the similarities in basic physical characteristics and general end uses, common channels of distribution, and overlap in production methodologies.²³ Specifically, the original determination indicated the distinguishing characteristics among the various

 13 (...continued)

Commerce found that the continued inclusion of display glass in the scope of the investigation was warranted, given the apparent exclusive dedication of that subassembly and the fact that it represents the essential character of an FPD. *See* 56 FR 32376 (July 16, 1991). Commerce also made a series of scope rulings, some of which involved certain models of EL FPDs. *See* 57 FR 19602 (May 7, 1992), and 59 FR 8910 (February 24, 1994).

¹⁴ CR at I-7; PR at I-6.

¹⁵ CR at I-7; PR at I-6-I-7.

¹⁶ CR at I-7-I-8; PR at I-7.

¹⁷ CR at I-7-I-8; PR at I-7. The displays may be sold by display glass manufacturers without key components, generally the control electronics, or, less frequently, without the mechanical package. At the time of the original investigation, relatively small amounts of display glass without any electronics were sold separately by U.S. producers.

¹⁸ Id.

¹⁹ CR at I-8; PR at I-7.

²⁰ Id.

²¹ Non-emissive displays are those which do not emit light and cannot be viewed in the dark. In emissive displays, each pixel produces and emits light when electrically activated and is therefore visible without natural or ambient light or a backlight. Because emissive displays generate light, they typically consume more electricity than do non-emissive displays and thus require more power and are heavier. CR at I-8-I-9; PR at I-7.

²² CR at I-9; PR at I-7.

²³ Original Determination at 3-14.

types of displays were likely to become more blurred with the movement toward higher performance display technologies and consequent converging appearance and power requirements.²⁴ In addition, the Commission noted in its original determination that all HIC FPDs have the same general end use, *i.e.*, providing to an electronic end user system a continuous, visible display of text, images, and graphics.²⁵

The respondents in the original investigation appealed the Commission's determination to the CIT, which remanded the Commission's like product determination.²⁶ On remand, three Commissioners found the same like product (all HIC FPDs) and three Commission found active-matrix LCDs and EL displays to be separate like products.²⁷ The Commission further found that the domestic industry was materially injured by reason of subject imports of active-matrix LCDs, but that it was not materially injured by reason of subject imports of EL displays.²⁸ The Federal Circuit later reversed the remand of the original Commission determination, reinstating the Commission's original finding of one like product consisting of all HIC FPDs and of material injury to the industry producing HIC FPDs by reason of subject imports of HIC FPDs.²⁹

No information gathered in this review indicates that we should depart from the Commission's previous like product definition of all HIC FPDs, especially in light of the fact the Federal Circuit ultimately endorsed this finding. Accordingly, we find, as in the original investigation, a single like product consisting of all high-information content flat panel displays.

B. Domestic Industry

Section 771(4)(A) of the Act defines the relevant industry as the "domestic producers as a [w]hole of a domestic like product, or those producers whose collective output of a domestic like product constitutes a major proportion of the total domestic production of the product."³⁰ In these five-year reviews, as in the original determinations, we determine the domestic industry consists of all producers of high-information content flat panel displays.

III. LEGAL STANDARD AND CONDITIONS OF COMPETITION

A. Legal Standard

In a five-year review conducted under section 751(c) of the Act, Commerce will revoke an antidumping order unless: (1) it makes a determination that dumping is likely to continue or recur, and (2) the Commission makes a determination that revocation of the order "would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time."³¹ The Uruguay Round Agreements Act ("URAA") Statement of Administrative Action ("SAA") states that "under the

²⁵ Id.

²⁶ Hosiden Corp. v. United States, 810 F.Supp. 322, 334 (Ct. Int'l Trade 1992).

²⁷ <u>Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan</u>, Inv. No. 731-TA-469 (Views on Remand), USITC Pub. No. 2610 (March 1993) at II-4-II-8.

²⁸ *Id.* at II-15.

²⁹ Hosiden Corp. v. Advanced Display Mfrs. of America, 85 F.3d 1561, 1569-70 (Fed. Cir. 1996).

³⁰ 19 U.S.C. § 1677(4)(A).

³¹ 19 U.S.C. § 1675a(a).

²⁴ Id.

likelihood standard, the Commission will engage in a counterfactual analysis; it must decide the likely impact in the reasonably foreseeable future of an important change in the status quo -- the revocation [of the finding] ... and the elimination of its restraining effects on volumes and prices of imports."³² Thus, the likelihood standard is prospective in nature.³³ The statute states that "the Commission shall consider that the effects of revocation ... may not be imminent, but may manifest themselves only over a longer period of time."³⁴ According to the SAA, a "'reasonably foreseeable time' will vary from case-to-case, but normally will exceed the 'imminent' time frame applicable in a threat of injury analysis in antidumping and countervailing duty investigations."³⁵

Although the standard in five-year reviews is not the same as the standard applied in original antidumping or countervailing duty investigations, it contains some of the same elements. The statute provides that the Commission is to "consider the likely volume, price effect, and impact of imports of the subject merchandise on the industry if the order is revoked."³⁶ It directs the Commission to take into account its prior injury determination, whether any improvement in the state of the industry is related to the order review, and whether the industry is vulnerable to material injury if the order is revoked.^{37 38}

B. Conditions of Competition

In evaluating the likely impact of the subject imports on the domestic industry if an order is revoked, the statute directs the Commission to evaluate all relevant economic factors "within the context

³³ While the SAA states that "a separate determination regarding current material injury is not necessary," it indicates that "the Commission may consider relevant factors such as current and likely continued depressed shipment levels and current and likely continued prices for the domestic like product in the U.S. market in making its determination of the likelihood of continuation or recurrence of material injury if the order is revoked." SAA at 884.

³⁴ 19 U.S.C. § 1675a(a)(5).

³⁵ Among the factors that the Commission should consider in this regard are "the fungibility or differentiation within the product in question, the level of substitutability between the imported and domestic products, the channels of distribution used, the methods of contracting (such as spot sales or long-term contracts), and lead times for delivery of goods, as well as other factors that may only manifest themselves in the longer term, such as planned investment and the shifting of production facilities." SAA at 887.

³⁶ 19 U.S.C. § 1675a(a)(1).

 37 19 U.S.C. § 1675a(a)(1). The statute further provides that the presence or absence of any factor that the Commission is required to consider shall not necessarily give decisive guidance with respect to the Commission's determination. 19 U.S.C. § 1675a(a)(5). While the Commission must consider all factors, no one factor is necessarily dispositive. SAA at 886.

³⁸ Section 752(a)(1)(D) of the Act directs the Commission to take into account in five-year reviews involving antidumping proceedings "the findings of the administrative authority regarding duty absorption." 19 U.S.C. § 1675a(a)(1)(D). Commerce has not issued a duty absorption finding with respect to the order under review. See 65 Fed. Reg. 11979 (March 7, 2000).

³² SAA, H.R. Rep. No. 103-316, Vol. I, at 883-84 (1994). The SAA states that "[t]he likelihood of injury standard applies regardless of the nature of the Commission's original determination (material injury, threat of material injury, or material retardation of an industry)." SAA at 883.

of the business cycle and conditions of competition that are distinctive to the affected industry."³⁹ In performing our analysis under the statute, we have taken into account the following conditions of competition in the U.S. market for high-information content flat panel displays.

In 1991, there were six firms producing HIC FPDs in the United States.⁴⁰ Two firms (Cherry and Planar⁴¹) produced EL FPDs, three firms (Electro Plasma, Photonics, and Plasmaco) produced plasma displays, and Optical Imaging Systems manufactured active-matrix LCDs.⁴² There was no U.S. production of passive-matrix LCDs.⁴³ Planar was the U.S. industry leader in the development of EL technology (using thin-film AC) and had introduced its first multi-color display.⁴⁴ Cherry also manufactured EL displays, but by using DC powder technology rather than AC thin-film technology.⁴⁵

Planar accounted for *** percent of 1990 production of HIC FPDs and for *** production of EL displays in that year.⁴⁶ It is believed to have accounted for *** of 1998 production of HIC FPDs.⁴⁷ Planar indicated in its Response that it is not aware of any other current U.S. manufacturers of EL displays.⁴⁸ The other U.S. EL producer at the time of the original investigation, Cherry, has since left the industry.⁴⁹ However, there reportedly are about a dozen firms that now produce other types of FPD technologies in the United States.⁵⁰ Also, Planar continues to operate its Finnish subsidiary.⁵¹

HIC FPDs are an important component in numerous types of electronic equipment including aircraft instrumentation, electronic publishing and composing equipment, laptop computers, machine-tool controllers, and medical-monitoring instruments.⁵² Thus, the demand for HIC FPDs is derived from the demand for a wide variety of products.⁵³ During the period reviewed in the original investigation,

⁴¹ In 1991, Planar acquired Lohja's EL FPD manufacturing operations in Finland. The new firm, Planar International, Olarinluoma, Finland, at that time was ******* percent owned by Planar. *Id.*

⁴² Id.

⁴³ Id.

⁴⁴ Id.

⁴⁵ Id.

46 CR at I-19; PR at I-14.

⁴⁷ Id.

⁴⁸ Planar's Response at 2. At the time of the original investigation, EL displays were the only type of HIC FPDs manufactured by Planar. Today, the firm has diversified its operations and also develops and markets passive matrix and active matrix LCDs (as well as producing CRTs for the military). CR at I-20; PR at I-14.

⁴⁹ CR at I-19; PR at I-14.

⁵⁰ These other technologies do not, however, include active matrix. Active-matrix LCDs continue to be manufactured in Japan, which currently holds 85 percent of the world market share of active-matrix LCDs. The remaining 15 percent are produced in Korea. However, IBM continues to manufacture LCDs in Japan through a joint venture with Toshiba Corp. Optical Imaging Systems, the one U.S. producer of active-matrix LCDs listed in the original investigation, closed in 1998 after "years of losses." CR at I-20, n. 62; PR at I-14, n.62.

⁵¹ CR at I-20; PR at I-14. Information on the exact nature of Planar's current operations in Finland is not available.

⁵² CR at I-29; PR at I-19.

⁵³ Id.

³⁹ 19 U.S.C. § 1675a(a)(4).

⁴⁰ CR at I-18; PR at I-13.

two striking technological trends increased demand for certain HIC FPDs.⁵⁴ First, the trend toward smaller-sized portable computers resulted in a search for the smallest and lightest components and, second, color technology was of increasing importance.⁵⁵ At that time, these trends resulted in increased purchases of LCD displays since LCDs tended to be lighter in weight then other HIC FPD technologies, consumed less power, and were more likely to be available in color.⁵⁶

According to DisplaySearch,⁵⁷ the demand for FPDs will continue to grow.⁵⁸ They project that due to the increasing requirement for "more content" (i.e., text, graphics, and video) in products, FPDs will surpass cathode ray tubes (CRTs)⁵⁹ by 2004 and that FPDs will account for 54 percent of the \$130 billion display market in 2005.⁶⁰ Reportedly, "FPDs will gain market share at the expense of CRTs due to a number of key advantages including improved portability, lighter weight, lower power requirement, high pixel densities, improved front of screen performance and narrowing cost difference. As FPD costs fall, new and larger markets will become available such as TVS and other consumer products. In addition, new ... display-based products will also boost demand."⁶¹ Flat panel display producers hope to replace CRTs in computers, televisions, and other products such as portable medical monitors, gas pumps, and copy machine readers.⁶² However, the CRT is still the most common display type.⁶³ The record suggests that there will be an eventual decline in the use of CRTs because of the clearer pictures of HIC FPDs.⁶⁴ Although falling, the prices of HIC FPDs are still three times the cost of an equivalent CRT.⁶⁵

⁵⁴ Id.

⁵⁵ Id.

⁵⁶ Id.

⁵⁷ DisplaySearch is a leading display market research firm.

⁵⁸ CR at I-32; PR at I-20.

⁵⁹ CRTs are devices where an electron beam is directed onto a phosphorescent coating on a glass screen, causing the surface to phosphoresce or give off light. They are each composed of a thick-glass envelope, electron gun, and phosphor screen. Invented in 1897, the CRT is a mature device with low production costs. The specific end-use application dictates whether a CRT or flat panel technology is selected. At the time of the original investigation, industry observers were predicting that flat panel displays would replace the CRTs currently used in televisions and desktop computers. CR at I-7; PR at I-6.

⁶⁰ CR at I-33-I-34; PR at I-20.

⁶¹ CR at I-34; PR at I-20, quoting DisplaySearch.

⁶² CR at I-17; PR at I-12.

⁶³ Id.

⁶⁴ CR at I-17; PR at I-13. In addition, HIC FPDs are thinner, lighter, and consume less power than standard CRTs.

⁶⁵ Id.

IV. REVOCATION OF THE ANTIDUMPING DUTY ORDER ON CERTAIN HIGH-INFORMATION CONTENT FLAT PANEL DISPLAYS FROM JAPAN ARE NOT LIKELY TO LEAD TO CONTINUATION OR RECURRENCE OF MATERIAL INJURY WITHIN A REASONABLY FORESEEABLE TIME

A. Likely Volume of Subject Imports

In evaluating the likely volume of imports of subject merchandise if the finding or order under review is revoked, the statute directs the Commission to consider whether the likely volume of imports would be significant either in absolute terms or relative to production or consumption in the United States.⁶⁶ In doing so, the Commission must consider "all relevant economic factors," including four enumerated factors: (1) any likely increase in production capacity or existing unused production capacity in the exporting country; (2) existing inventories of the subject merchandise, or likely increases in inventories; (3) the existence of barriers to the importation of the subject merchandise into countries other than the United States; and (4) the potential for product shifting if production facilities in the foreign country, which can be used to produce the subject merchandise, are currently being used to produce other products.⁶⁷

In performing our analysis, we have taken into account the Commission's previous volume findings with respect to the subject imports from Japan. In the original determination, the Commission found that subject imports from Japan had increased *** from 1988 to 1990, from *** units in 1988 to *** units in 1990.⁶⁸ It further found that the U.S. market share held by subject imports from Japan rose from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by value.⁶⁹ In addition, we note that subject EL displays from Japan comprised a small and declining share of the U.S. market for HIC displays in the original investigation, falling from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by quantity, and from *** percent in 1988 to *** percent in 1990, by value.⁷⁰

The record in this review indicates that in 1998, subject imports from Japan held, by value, approximately *** percent of the U.S. market for EL displays with the domestic industry capturing the remaining *** percent.⁷¹ There is nothing in the record to suggest that the EL FPDs portion of the domestic HIC FPDs market is any larger today than it was during the original investigation. Consequently, we find that the likely volume of subject imports from Japan would again comprise less than one percent of the domestic HIC display market. We also note that there was one producer of the subject merchandise in Japan during the original investigation and that the record indicates that there continues to be the same producer today. While we acknowledge that the available data on capacity of this Japanese producer increased during the original period of investigation, the reported level of exports of the subject product to the United States was relatively stable during that time.⁷² With regard to

⁶⁸ Original Determination at 23, citing the original staff report at table 37.

⁶⁹ Id.

⁷⁰ Compare original staff report at table 37 with original staff report at table 38.

⁷¹ CR and PR at table I-6.

⁷² Original staff report at table 38.

^{66 19} U.S.C. § 1675a(a)(2).

^{67 19} U.S.C. § 1675a(a)(2)(A)-(D).

product shifting, we note that HIC FPDs are generally made to order,⁷³ and thus, the ability for a supplier to sell product either from inventory or to divert shipments of product that is already produced from one market to another is likely to be limited. Finally, we note that there are no known existing antidumping or countervailing duty orders in place for the subject merchandise from Japan in export markets other than the United States. The lack of existing orders indicates that there are not impediments to importation in third country markets that would give Japanese suppliers an incentive to shift sales to the United States.

Accordingly, based on the record of this review, we conclude that the volume of subject imports from Japan are not likely to reach significant levels within a reasonably foreseeable time if the antidumping duty order is revoked.

B. Likely Price Effects of Subject Imports

In evaluating the likely price effects of subject imports if the antidumping duty finding and order are revoked, the Commission is directed to consider whether there is likely to be significant underselling by the subject imports as compared with the domestic like product, and whether the subject imports are likely to enter the United States at prices that would have a significant depressing or suppressing effect on the prices of the domestic like product.⁷⁴

In performing our analysis, we have taken into account the Commission's previous price findings. In the original determination, the Commission found price, while not the most important factor, to be a significant factor.⁷⁵ The Commission indicated that the record showed instances of underselling and that prices of both domestic products and subject imports exhibited downward and flat trends.⁷⁶ Consequently, the Commission found that imports depressed and suppressed domestic prices.⁷⁷ Moreover, the Commission indicated that the presence of subject imports from Japan stifled the domestic industry's ability to raise capital with which to further invest in developing existing and new technologies.⁷⁸ The Commission found that "the inability to attract capital is particularly damaging to a producer of HIC flat panel displays ... [and that the] lack of funds severely constrains research and development efforts, which are critical to the domestic industry."⁷⁹

We note that sales of HIC FPDs are generally done on a contract basis.⁸⁰ In addition, non-price factors, such as the financial strength of the supplier, the past production experience of the supplier, the quality control and capacity of the firm, and the overall reliability of the firm were important

⁷⁵ Original Determination at 23.

⁷⁶ Original Determination at 24.

⁷⁷ *Id.* The Commission noted that price trends and comparison were difficult to make in this market. *******. Original staff report at table 39.

⁷⁸ Original Determination at 26.

⁷⁹ Id.

⁸⁰ CR at I-14; PR at I-11.

⁷³ CR at I-9; PR at I-8.

⁷⁴ 19 U.S.C. § 1675a(a)(3). The SAA states that "[c]onsistent with its practice in investigations, in considering the likely price effects of imports in the event of revocation and termination, the Commission may rely on circumstantial, as well as direct, evidence of the adverse effects of unfairly traded imports on domestic prices." SAA at 886.

considerations in the sales of HIC FPDs.⁸¹ We conclude that the existence and importance of these nonprice factors make it unlikely that subject imports from Japan would have more than a minimal effect on the prices of the domestic like product.

Moreover, although there are no current pricing data for HIC FPDs, we note that the record indicates the domestic industry in fiscal year 1998, had net sales totaling \$***, resulting in a gross profit of \$***, and operating income of \$***.⁸² Similarly, in fiscal year 1999, the domestic industry had net sales totaling \$***, resulting in a gross profit of \$***, *** of \$***.⁸³ More telling, however, is that the domestic industry made \$*** and \$*** in capital expenditures in 1998 and 1999, respectively, and had R&D expenses that totaled over \$*** in both years, approximately *** times the level made during the original period of investigation.⁸⁴ This suggests that the domestic industry is able to price at such levels to generate sufficient revenue to fund capital development and R&D efforts, which were deemed critical to the domestic industry in the original determination.

Consequently, we find that it is unlikely that the subject imports from Japan will have significant adverse effects on domestic prices within the reasonably foreseeable future.⁸⁵ As we stated earlier, it is unlikely that the subject imports from Japan will increase their volume levels in a more than minimal fashion in the reasonably foreseeable future. Accordingly, we find that it is unlikely that these minimal import volumes will have a significant adverse impact on domestic prices if the antidumping order is revoked.

C. Likely Impact of Subject Imports

In evaluating the likely impact of imports of subject merchandise if the antidumping duty order is revoked, the Commission is directed to consider all relevant economic factors that are likely to have a bearing on the state of the industry in the United States, including but not limited to: (1) likely declines in output, sales, market share, profits, productivity, return on investments, and utilization of capacity; (2) likely negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment; and (3) likely negative effects on the existing development and production efforts of the industry, including efforts to develop a derivative or more advanced version of the domestic like product.⁸⁶ All relevant economic factors are to be considered within the context of the business cycle and the conditions of competition that are distinctive to the industry.⁸⁷

⁸¹ Economics Memo (INV-O-161, August 9, 1991) at 14-15.

⁸² CR and PR at Table I-2.

⁸³ Id. We note, however, that SG&A expenses increased by \$*** in 1999.

⁸⁴ Id.

⁸⁵ The record in this expedited review does not contain current pricing data for the domestic like product or subject imports from Japan. CR at I-23; PR at I-16.

86 19 U.S.C. § 1675a(a)(4).

⁸⁷ 19 U.S.C. § 1675a(a)(4). Section 752(a)(6) of the Act states that "the Commission may consider the magnitude of the margin of dumping" in making its determination in a five-year review. 19 U.S.C. § 1675a(a)(6). The statute defines the "magnitude of the margin of dumping" to be used by the Commission in five-year reviews as "the dumping margin or margins determined by the administering authority under section 1675a(c)(3) of this title." 19 U.S.C. § 1677(35)(C)(iv). See also SAA at 887. Commerce found that revocation of the antidumping order on the subject merchandise from Japan would likely lead to continuation or recurrence of dumping at margins of 7.02

(continued...)

As instructed by the statute, we have considered the extent to which any improvement in the state of the domestic industry is related to the antidumping duty order at issue and whether the industry is vulnerable to material injury if the order is revoked.⁸⁸ The record indicates that the domestic industry is in much better condition today than it was during the original investigation. The record evidence in this review suggests that the performance of the domestic industry is strong. At the time of the original investigation, the domestic HIC FPD industry was characterized as a relatively new and emerging industry, which had low levels of sales and was experiencing financial losses.⁸⁹ Today, however, the domestic industry is reportedly considered more mature.⁹⁰

In particular, the record indicates that domestic producer Planar has *** expanded its capacity, and its production levels are over *** times what they were in 1990.⁹¹ In addition, the value of Planar's net sales has increased *** resulting in a *** gross profit and *** in fiscal year 1998 as compared to *** during 1988-90.⁹² ***.⁹³ Moreover, Planar's R&D expenditures have increased *** to \$*** in fiscal year 1999.⁹⁴ Finally, we note that in early 1991, Planar, acquired EL FPD manufacturing operations in Finland, suggesting that it is now a successful domestic producer. Accordingly, we do not find that the domestic industry is vulnerable to the likely future effects of the subject imports from Japan as contemplated by the Act.⁹⁵

As we determined above, we find that revocation of the antidumping duty order is not likely to result in significant volume or price effects by the subject imports from Japan. These findings, in turn, indicate that the subject imports from Japan are not likely to have a significant adverse impact on the domestic industry within the reasonably foreseeable future if the order is revoked. Accordingly, we conclude that revocation of the antidumping duty order on subject imports from Japan would not be likely to lead to significant declines in output, sales, market share, profits, productivity, or return on investments. Therefore, we find that revocation of the antidumping duty order on Japan is not likely to have a negative impact on the domestic industry in the reasonably foreseeable future.

⁸⁷ (...continued)

- ⁹¹ CR and PR at Table I-2.
- ⁹² Id.
- ⁹³ Id.
- ⁹⁴ Id.

percent for Sharp Corporation and for all others. 65 Fed. Reg. 11979 (March 7, 2000).

⁸⁸ The SAA states that in assessing whether the domestic industry is vulnerable to injury if the order is revoked, the Commission "considers, in addition to imports, other factors that may be contributing to overall injury. While these factors, in some cases, may account for the injury to the domestic industry, they may also demonstrate that an industry is facing difficulties from a variety of sources and is vulnerable to dumped or subsidized imports." SAA at 885.

⁸⁹ Original staff report at table 17; and CR at I-17; PR at I-15.

⁹⁰ CR at I-17; PR at I-12.

CONCLUSION

For the foregoing reasons, we determine that revocation of the antidumping duty order on certain high-information content flat panel displays from Japan would not be likely to lead to continuation or recurrence of material injury to the U.S. high-information content flat panel display industry within a reasonably foreseeable time.

INFORMATION OBTAINED IN THE REVIEW

INTRODUCTION

On August 2, 1999, the Commission gave notice that it had instituted a review to determine whether revocation of the antidumping duty order on EL FPDs from Japan would be likely to lead to a continuation or recurrence of material injury within a reasonably foreseeable time.¹ On November 4, 1999, the Commission determined that the domestic interested party response to its notice of institution was adequate;² the Commission also determined that the respondent interested party response was inadequate. The Commission found no other circumstances that would warrant conducting a full review. Accordingly, the Commission determined that it would conduct an expedited review pursuant to section 751(c)(3) of the Tariff Act of 1930 (19 U.S.C. § 1675(c)(3)).³ The Commission voted on this review on March 15, 2000, and notified Commerce of its determination on March 27, 2000.

The Original Investigation

The Commission completed the original investigation⁴ in August 1991, determining that an industry in the United States was materially injured by reason of imports of EL FPDs from Japan that Commerce determined to be sold at LTFV. The Commission defined the like product as HIC FPDs and display glass therefor.⁵ It also found the relevant domestic industry to consist of producers of the

³ 64 FR 62688, November 17, 1999. The Commission's notice of its expedited review appears in app. A. See the Commission's web site (*http://www.usitc.gov*) for Commissioner votes on whether to conduct an expedited or full review. The Commission's statement on adequacy is presented in app. B.

⁴ The investigation resulted from a petition filed on July 18, 1990, by counsel on behalf of the following eight entities: The Advanced Display Manufacturers of America and its individual member companies, consisting of Planar, Plasmaco, OIS, Cherry, Electro Plasma, Photonics, and Magnascreen.

⁵ In its original preliminary determination, the Commission found one like product consisting of all HIC FPDs. Several technologies were included in that like product, including EL FPDs, active matrix LCDs, passive matrix LCDs, and plasma displays. *Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan* (Preliminary), USITC Pub. 2311, September 1990, pp. 5 and 13. However, before the Commission made its determination in the final phase of the original investigation, Commerce determined that there were four separate classes or kinds of products, corresponding to the technologies described above. Further, Commerce eliminated passive matrix LCDs from the scope since there was no domestic production of passive matrix LCDs and the petitioners therefore lacked standing. It also eliminated plasma displays because of extremely low antidumping margins. 56 FR 32376, July 16, 1991.

Notwithstanding Commerce's finding of separate classes or kinds, the Commission found one like product in its original final determination consisting of all HIC FPDs. *Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan* (Final), USITC Pub. 2413, August 1991, p. 7. In addition, the Commission found that display glass and finished displays are part of the same like product, noting that "{t}his is (continued...)

¹ 64 FR 41951, August 2, 1999. All interested parties were requested to respond to this notice by submitting the information requested by the Commission.

² The Commission received one submission in response to its notice of institution for the subject review. It was filed on behalf of Planar. Planar indicated in its response that it was the only U.S. manufacturer of EL FPDs. *Response* of Planar, p. 2. However, it did not indicate its share of total domestic HIC FPD production. (As will be discussed, in the original investigation the Commission defined the domestic like product as all HIC FPDs.) Commission staff estimates that Planar accounts for more than ******* percent of total HIC FPD production in the United States.

domestic like product. However, it excluded integrators, assemblers, and the company In Focus from its definition of the domestic industry.⁶ It also determined that the domestic industry was established and that a material retardation analysis was not appropriate.⁷ In its *Response*, Planar states that it agrees with

⁵ (...continued)

principally because it is difficult to draw a distinction between the subassembly and the finished product." However, it did not include within the like product other subassemblies, i.e., the drive electronics, control electronics, mechanical package, and power supply. The Commission indicated that "{t}he record indicates that those subassemblies variously are not dedicated to HIC flat panel displays or do not impart an essential characteristic to the completed displays." *Id.*, pp. 13-14.

The Commission's determination was apealed to the CIT on the grounds that the Commission's like product finding was not supported by substantial evidence. <u>Hosiden Corp. v. United States</u>, 810 F.Supp. 322, 334 (CIT 1992) ("Hosiden I"). On December 29, 1992, the CIT issued a decision and order remanding the Commission's determination. The CIT held that the Commission failed to make a separate material injury determination for each class or kind of imported merchandise found by Commerce to be dumped (i.e., active matrix LCDs and EL displays).

On remand, the Commission found active matrix LCDs and EL displays to be separate like products, stating that "the essential characteristics of a display depend largely on the type of technology involved." Further, "{s}pecific end uses require different technologies, and even within broad categories, such as avionics, the screens have different applications and are not substitutable." With respect to customer and producer perceptions, the Commission indicated that "almost all original equipment manufacturers consider different technologies as having totally distinct applications. Most customers will choose only one technology based on their particular technical needs." *Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan* (Views on Remand), USITC Pub. 2610, March 1993, pp. II-4 through II-8. The Commission further found that the domestic industry was not materially injured by subject imports of EL displays. *Id.*, p. II-15.

In a subsequent administrative review, Commerce found no margins on subject active matrix LCDs and revoked the order on active matrix LCD imports. 58 FR 34409, June 25, 1993.

On April 14, 1994, the CIT issued a decision affirming the Commission's negative determination on remand for EL displays. The decision also ordered Commerce to revoke its antidumping duty order for EL displays. <u>Hosiden Corp. v. United States</u>, 18 CIT ____, Slip Op. 94-60 (April 14, 1994) ("Hosiden II"). The Federal Circuit then reversed the remand of the original determination, reinstating the Commission's original determination of one like product consisting of all HIC FPDs and the Commission's original determination of material injury to that industry by reason of the subject imports. <u>Hosiden Corp. v. Advanced Display Mfrs. of America</u>, 85 F.3d 1561, 1569-70 (Fed. Cir. 1996) ("Hosiden III").

⁶ Certain High-Information Content Flat Panel Displays and Display Glass Therefore from Japan (Final), p. 7. Integrators and assemblers, including In Focus, were defined as firms that purchased the display glass from petitioners or the Japanese respondents and added electronics and other components that they variously produced or purchased. The Commission stated that "{w}e believe that the contrast between the operations of petitioners and those of the firms in question, as well as the lack of a clear dividing line between a display's electronics and the endusers system's electronics, and between the display operations of In Focus and the integrators and their end-user system operations, indicate that In Focus and the integrators should not be included within the domestic industry. Moreover, these firms often add relatively little value." *Id.*, pp. 15-18.

⁷ The Commission stated that "{a}t least some producers began producing HIC flat panel displays before the period of investigation. Production by those firms has arguably been steady rather than start-stop. Domestic production has accounted for at least some share, albeit small, of the total market during the period of investigation. Most of the domestic producers were principally devoted from the start to the production of HIC flat panel displays." *Id.*, pp. 18-19.

the Commission's definition of domestic like product and domestic industry.⁸ After receipt of the Commission's determination, Commerce issued an antidumping duty order on imports of EL FPDs from Japan.⁹

Commerce's Final Results of Expedited Sunset Review

Commerce extended the time limit for the final results of its expedited sunset review for EL FPDs from Japan to not later than February 28, 2000.¹⁰ Its determinations are presented in app. A.

THE PRODUCT

Scope

In its scope for its antidumping duty order, Commerce defined the subject EL FPDs and display glass therefor as:

large area, matrix addressed displays, no greater than four inches in depth, with a pixel count of 120,000 or greater, whether complete or incomplete, assembled or unassembled. EL FPDs incorporate a matrix of electrodes that, when activated, apply an electrical current to a solid compound of electroluminescent material (e.g., zinc sulfide) causing it to emit light. Included are monochromatic, limited color, and full color displays used to display text, graphics, and video. EL display glass, whether or not integrated with additional components, exclusively dedicated to and designed for use in EL FPDs, is defined as processed glass substrates that incorporate patterned row, column, or both

⁹ Commerce examined one Japanese firm (Sharp) in the original investigation and assigned it an antidumping duty margin of 7.02 percent. Commerce also established an all others rate for EL displays of 7.02 percent. 56 FR 32376, July 16, 1991. Sharp has not requested any administrative reviews of the antidumping duty order.

On May 6, 1994, Commerce suspended liquidation of EL FPDs following the CIT's affirmation in Hosiden II of the Commission's remand determination that there was no material injury to the U.S. industry by reason of imports of EL FPDs. <u>Notice of Court Decision and Suspension of Liquidation</u>, 59 FR 23690, May 6, 1994. In accordance with the CIT's August 12, 1994 order amending Commerce's May 6, 1994 notice, Commerce instructed Customs to suspend the liquidation of entries on EL FPDs effective on entries made on or after February 21, 1991. Consequently, Commerce revoked the antidumping duty order on EL FPDs from Japan, effective February 21, 1991. <u>Amendment of Notice of Court Decision and Revocation of Antidumping Duty Order</u>, 59 FR 43809, August 25, 1994. On May 31, 1996, the Federal Circuit issued Hosiden III, which vacated the CIT's order. Commerce then rescinded its revocation of the antidumping duty order of EL FPDs from Japan, reinstated the suspension of liquidation of entries of EL FPDs from Japan pursuant to its May 6, 1994 <u>Notice of Court Decision</u>, and resumed the collection of cash deposits on EL FPDs from Japan as of July 31, 1996. <u>Notice of Court Decision</u> and Rescission of Revocation of Antidumping Duty Order, July 31, 1996, 61 FR 39946.

See Commerce's web site (http://www.ita.doc.gov/import_admin/records/sunset) at Case History and Scope Information.

¹⁰ 64 FR 48579, September 7, 1999.

⁸ Response of Planar, p. 17. In that Response, Planar erroneously referred to the Commission's domestic like product definition as EL FPDs. However, it correctly identified the Commission's domestic industry definition to be domestic producers of HIC FPDs.

types of electrodes, and also typically incorporate a material that reacts to a change in voltage (e.g., phosphor) and contact pads for interconnecting drive electronics. All types of FPDs (including nonsubject active matrix LCDs, and gas plasma displays as well as EL FPDs) are currently classifiable under HTS subheadings 8543, 8803, 9013, 9014, 9017.90.00, 9018, 9022, 9026, 9027, 9030, 9031, 8471.92.30, 8471.92.40, 8473.10.00, 8473.21.00, 8473.30.40, 8442,40.00, 8466, 8517.90.00, 8528.10.80, 8529.90.00, 8531.20.00, 8531.90.00, and 8541. Although the HTS subheadings are provided for convenience and customs purposes, our written description of the scope of these proceedings is dispositive.¹¹

In a subsequent clarification of the antidumping duty investigation, Commerce determined that display glass should continue to be included within the scope.¹² It has also made a series of scope rulings, some of which involved certain models of EL FPDs.¹³

Description and Uses¹⁴

The subject product is EL FPDs which, along with other types of HIC FPDs (including active matrix LCDs, passive matrix LCDs, and plasma displays), display text, graphics, or video when integrated into such end-user systems as laptop and portable computers; aerospace, medical, and office equipment; and instrumentation for the military.¹⁵ All HIC FPDs are large-area, matrix-addressed

¹³ Specifically, the following EL models were determined to be within the scope of the order: Sharp model QA-1000 computer projection panel (57 FR 19602, May 7, 1992) and certain EL FPDs (models GP-410 and GP-430) used in International Digital Electronics' graphic control panels (59 FR 8910, February 24, 1994). Additionally, Sharp's QA-1050 computer projection panel was found to fall outside the scope (57 FR 57420, December 4, 1992).

¹⁴ All of the discussion in this section is from the original investigation, unless otherwise noted. *Staff Report of August 5, 1991*, pp. A-6 through A-14, A-23, A-35 through A-36, and A-41 through A-44.

¹⁵ The original investigation did not include either CRTs or flat panel displays containing less than 120,000 pixels (i.e., LIC FPDs). CRTs are devices where an electron beam is directed onto a phosphorescent coating on a glass screen, causing the surface to phosphoresce or give off light. They are each composed of a thick-glass envelope, electron gun, and phosphor screen. Invented in 1897, the CRT is a mature device with low production costs. The specific end-use application dictates whether a CRT or flat panel technology is selected. At the time of the original investigation, industry observers were predicting that flat panel displays would replace the CRTs currently used in televisions and desktop computers. Further, petitioners stated at the Commission's hearing that "{t}he advent of the high information content flat panel display will revolutionize the design of all future electronic systems by the end of this decade." Its development "will also profoundly alter the structure of the entire electronics industry" and "will be the basic platform on which future electronic systems are built, and the basis for competitive differentiation of a new generation of electronic products."

LIC FPDs typically range in pixel count from 16,000 to 64,000 pixels and are used in calculators, handheld televisions, and other instruments that do not require high-information content. Whether a LIC or HIC is used (continued...)

¹¹ See Commerce's web site (http://www.ita.doc.gov/import_admin/records/sunset) at Case History and Scope Information.

¹² Commerce found that the continued inclusion of display glass in the scope of the investigation was warranted, given the apparent exclusive dedication of that subassembly and the fact that it represents the essential character of an FPD. 56 FR 32376, July 16, 1991.

displays no greater than 4 inches in depth, with a pixel count of 120,000 or greater. The displays are technologically sophisticated electronic displays that convert information received as electrical signals from an end-user system into visible images. Broadly speaking, they consist of display glass (i.e., the display glass assembly which contains the pixels and row and column electrodes) and associated electronic systems (the drive and control electronics) which drive the electrodes on the display glass and interpret the incoming information-bearing signals. The displays may be sold by display glass manufacturers without key components, generally the control electronics, or, less frequently, without the mechanical package.¹⁶ At the time of the original investigation, *** amounts of display glass without any electronics were sold separately by U.S. producers. Although "display glass" is the primary and distinguishing component of HIC FPDs, the electronics comprise a significant portion of the cost of a display and determine some of its performance characteristics, including monochromatic color and extent of illumination.

HIC FPDs are classified by the technology which is used to produce the display glass. The most common technologies at the time of the original investigation, and the ones for which data were collected by the Commission, were the subject EL displays, as well as LCDs and plasma displays.¹⁷ Also, flat panel display technology can be more broadly categorized as emissive or non-emissive. Non-emissive displays are those which do not emit light and cannot be viewed in the dark. In emissive displays, each pixel produces and emits light when electrically activated and is therefore visible without natural or ambient light or a backlight. Because emissive displays generate light, they typically consume more electricity than do non-emissive displays and thus require more power and are heavier. The subject EL displays, and gas plasma displays, use emissive technologies. LCDs are non-emissive.

With reference to the subject imports, EL displays manufactured in Japan were used in many of the same applications as those produced in the United States, namely, heavier portable computers,

¹⁵ (...continued)

depends upon the amount of information to be presented and the resolution needed.

The Commission specifically excluded LIC FPDs and CRTs from its like product definition, noting that "{a}ny similarity in characteristics and uses between such products and HIC flat panel displays is extremely limited." *High-Information Content Flat Panel Displays and Display Glass Therefor from Japan* (Final), p. 4.

¹⁶ The mechanical package is the frame which mounts the printed circuit boards for the drive and control electronics to the display glass.

¹⁷ <u>EL displays</u> use light-emitting pixels constructed of a solid material on a single substrate. When excited by electricity from the row and column electrodes, the solid material gives off visible light of a color determined by the chemistry of the material used. EL displays are differentiated by whether they use AC thin-film or DC powder technologies.

In both active matrix and passive matrix technologies, liquid crystals are sandwiched between two sheets of glass, called substrates, where the liquid crystals, in essence, act as optical shutters which either block or allow polarized light to pass through. In <u>passive matrix LCD</u> technology, the pixel positions are energized by voltages applied via intersecting row and column drivers, which causes the liquid crystal to twist, allowing light to pass through. <u>Active matrix LCDs</u> employ semiconductor technology where a transistor is imbedded in the glass substrate at each pixel cell. This allows each pixel to be turned on and off independently, increasing image quality, response time, and viewing angle.

In <u>plasma displays</u>, the pixels are minute cells of a compound gas sandwiched between two polished glass substrates which give off a red-orange glow when ionized by direct current. There are also more complex variations of plasma displays which involve the use of AC and AC/DC combinations to improve performance and create displays with memory, that is, not requiring refreshing. Plasma displays generally have higher power consumption requirements than other display technologies but may provide the most effective solution for large-sized displays.

medical equipment, and control equipment. However, no Japanese-produced EL displays were used in aerospace, specialized military, or "other" applications. (*See* table 4 of the original staff report.) Further, *** U.S.-produced and *** Japanese EL displays were manufactured using AC technology. However, *** percent of the Japanese-manufactured product was gray-scale in 1990; in contrast, *** U.S. products were gray-scale. (*See* table 5 of the original staff report.)

Comparability of Different Types of HIC FPDs¹⁸

Table 1 of the original staff report compares the HIC FPD technologies for various attributes. As shown, there were a number of distinguishing characteristics among the various types of displays. However, the technology at that time was changing rapidly. Indeed, the original staff report commented that "with the movement toward higher performance display technologies, the appearance and power requirements of the HIC FPDs may be converging, erasing historically dichotomous relationships." Further, as the Commission stated in its views, "HIC flat panel displays are generally made to order and consequently there is no interchangeability even among displays of the same format and technology."¹⁹

One of the most sought-after design goals was color. The staff report for the original investigation indicated that "{i}ndustry analysts generally agree that the ability to produce high-resolution color at marketable prices is essential for the future wide-spread marketability of any technology and, in fact, often characterize the technologies as being in a competitive 'race' toward this goal." Further, "perceptions in the differences between technologies and their ability to achieve color have influenced investment and technology decisions that have already been made-both by U.S. firms and Japanese manufacturers." At the time of the original investigation, almost all HIC FPDs sold in the U.S. market were monochrome. Only color LCDs were then available for purchase in commercial quantities. However, both EL technologies–AC thin-film and DC powder–were reporting progress in the race towards color. In its views, the Commission stated that "{t}he record indicates that the domestic industry has actively pursed advanced products such as full color EL displays."²⁰

Table 2 in the original staff report listed the different types of technologies that were used for the most popular HIC FPD applications in 1990. As shown, the majority of the subject EL displays were used in control and medical equipment where their high contrast and resolution and rapid response time were required. Also, EL displays can sustain environmental stress and are excellent for use in the harsh conditions found in military applications. Relatively few EL FPDs were incorporated into computers. Most computers at that time with HIC FPDs used passive matrix LCDs due to their low requirement for power and their light weight. Responses to questionnaires issued during the original investigation emphasized that the various HIC FPD technologies had unique features or performance characteristics that were matched to or correlated with the requirements for the varying applications or end-user

¹⁸ All of the discussion in this section is from the original investigation, unless otherwise noted. *Staff Report of August 5, 1991*, pp. A-26 through A-32, pp. A-41 through A-42, and A-71.

¹⁹ Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan (Final), pp. 8-9. Respondents to the original investigation stressed the importance of power consumption as a distinguishing characteristic. However, the Commission found that "the evidence is too unclear for power consumption alone to form a sufficient basis for distinguishing between types of HIC flat panel displays for like product purposes." *Id.*

²⁰ Id., p. 22, citing petitioners' posthearing brief at 14.

systems.²¹ However, petitioners reported that each of their products competed for sale with all the major technologies used to product HIC FPDs. With the exception of the lightest of the personal computers, more than one HIC FPD technology was used for each of the major display applications (*see* table 2 in the original staff report). And, as noted by the Commission in its views, "{a}ll HIC flat panel displays have the same general end use: providing to an electronic end user system a continuous, visible display of text, images, and graphics."²²

The Commission indicated in its original final views that the record in the original investigation was mixed on customer and producer perceptions of HIC FPDs. The Commission also noted that prices within each technology can vary widely. Further, it found that although some display types tended to be priced higher or lower than others during the period of investigation, "prices for all types overlapped to what we find to be a significant degree."²³ Further "HIC flat panel displays of all technologies usually share similar channels of distribution. They are generally sold to original equipment manufacturers."²⁴

Regarding manufacturing, the display glass assembly for the various HIC FPD technologies is generally produced using conceptually similar but technologically distinct manufacturing processes in separate production facilities. Although there are several generic manufacturing steps for all types of displays (i.e., glass cleaning, assembly, aging, and testing) that presumably could be accomplished in a common facility, the technology involved and equipment required for the etching or printing of a pattern of electrode lines, electrode formation, material filling, and sealing processes are completely different and in no way interchangeable. In the later stages of production, liquid crystal technology is used for LCDs, vacuum technology is used for plasma displays, and thin-film technology (like that used in the manufacture of solid-state integrated circuits) is used for EL displays. The cost of manufacture also varies among technologies: passive matrix LCDs are generally the easiest and least costly HIC FPDs to manufacture; in contrast, the manufacture of active matrix LCDs is the most complex and, in 1991, was characterized by low manufacturing yields.

Marketing and Investment²⁵

HIC FPDs are sold into a wide variety of markets based on user needs and purchasing criteria. For computer manufacturers, the design of the display assumes great importance for "leading-edge models" and the display is one of the most expensive components of the computer. The technical and design aspects of the display are equally important to users with military and aerospace applications, except here the display accounts for a small portion of the value of the end-user system. A third key market is comprised of the small-volume users who purchase off-the-shelf models, mainly for industrial and medical applications. In 1990, *** percent of U.S.-produced EL displays were sold to industrial and medical equipment manufacturers. (*See* table 4 of the original staff report.)

²⁴ *Id.*, p. 8.

²¹ In re-examining the class or kind of merchandise, Commerce stated in its final LTFV determinations that "{o}ur analysis shows that the technology of the FPD determines or limits the FPD's functional capabilities (e.g., power consumption, viewing angle, brightness, and weight). In turn, these capabilities establish the boundaries of the FPD's ultimate use and customer expectations." 56 FR 32379, July 16, 1991.

²² Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan (Final), p. 9.

²³ *Id.*, p. 12.

²⁵ All of the discussion is from the original investigation, unless otherwise noted. *Staff Report of August 5, 1991*, pp. A-71, A-142 through A-146, A-162, and A-178. Also see tables I-1 and I-2 of the original staff report.

In the display market, purchasers usually follow certain steps in choosing a supplier of displays. In the design or model stage, they determine the specifications of the end product to be manufactured and evaluate the type of display needed. These evaluations may be made through general research, reviews of data sheets, display demonstrations and test-use, and visits to suppliers. At this stage, the decision about the type of HIC FPD technology required may not yet be made. Next, purchasers typically evaluate prototypes and, for developing technologies, may reach a development agreement. By this stage in the process, the decision as to the technology that will be used has usually been determined. During the original investigation, firms generally purchased and evaluated prototypes from no more than two or three firms before selecting one firm (and occasionally a backup supplier) to receive the commercial order.²⁶

Display prices were generally determined during the period reviewed in the original investigation through a series of informal negotiations between a single supplier and the purchaser rather than formal bids by more than one supplier.²⁷ The first price that was discussed was usually referred to as the "target price." Only after a supplier was chosen was a firm price determined and a contract awarded. Petitioners in the original investigation reported that prices of displays varied "depending upon the size of the panel, number of pixels, and complexity of the display technology used-in addition to the relative advancement of the HIC FPD producer along the cost/production curve."²⁸ The Commission stated in its views that "{t}he record indicates that price, while not the most important factor in most sales, is a significant factor in the decision to purchase this product. An indication of this is the fact that "target" prices often have been discussed during the early stages of the negotiation of supply contracts. Indeed, even the large purchasers who claimed to prefer Japanese displays for non-price reasons admitted that price is an important factor in the decision to purchase a flat panel display."²⁹ The Commission further found that "{i}n our view, more important in this investigation than simple pricing and lost sales is lost investment. Several sources confirmed that the domestic industry was unable to raise capital due to the presence of Japanese imports. ... Without substantial funding from internal or external sources, domestic producers, even the non-developmental ones, lack the capacity to achieve initial design wins which are crucial to the future of the industry, and cannot qualify as vendors for large customers outside of certain market niches. Consequently, domestic producers are caught in a cycle that denies them the opportunity to increase their production to a level that would result in economies of scale and increased expertise."³⁰ During the original investigation, Planar provided *** in its attempts to raise capital.31

²⁶ Also, the majority of U.S. HIC FPD producers and importers contacted during the original investigation reported that they had to meet certain qualifications before being considered as a potential supplier. The factors considered included the financial strength of the supplier, current availability of the product, past production experiences of the supplier, product quality, capacity and production capability, quality control and assurance systems, and reliability of the firm.

²⁷ However, a few suppliers reported that a formal bid process was followed. This procedure was typically used in sales to large OEMs and was required by the military. Also, some firms reported using price lists as a starting point in negotiations.

²⁸ Staff Report of August 5, 1991, p. A-79, citing petitioners' postconference brief at 18.

²⁹ Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan (Final), p. 24.

³⁰ *Id.*, p. 26.

³¹ Staff Report of August 5, 1991, p. A-112.

With reference to the present, Planar states that the "situation is substantially the same as it was {at} the time of the original order. Sales of EL FPDs continue to be made pursuant to contracts. Loss of a contract and the stream of future cash flow it provides severely hampers a company's ability to invest in the capital expenditures and research and development ... expenditures necessary to remain competitive. Without these expenditures, an EL FPD producer's ability to secure future contracts will be diminished."³² According to Planar's web site "{e}xtensive R&D has generated a number of strategic process and product patents and has been the key factor in keeping Planar at the forefront of the industry."³³ Planar's combined research and development expenditures and capital expenditures represented almost *** percent of its revenues from FY 1997 through FY 1999.³⁴ In contrast, Planar was only able to devote about *** percent of its EL display revenues during 1988-90 to such expenditures.³⁵

Changes in the Product and Market Since the Original Investigation

As noted earlier, the original staff report predicted that differences among the various HIC FPD technologies might diminish over time. This has not entirely come to pass. The technological attributes associated with the various HIC FPDs at the time of the original investigation continue, at least in part, to distinguish the displays.³⁶ ATIP's web site indicates that LCDs are still the most common type of HIC FPD; Sharp labels them "the display of choice."³⁷ Passive matrix LCDs are thin and lightweight and consume very little power. They continue to be the HIC FPD technology most frequently found in laptop computers. Plasma displays have a wide viewing angle, and can be manufactured at a thickness of 3 to 4 inches. Although not as bright as other displays, they do have a good contrast ratio and color saturation. Plasma HIC FPDs are often used in wall-hanging television applications and are excellent for presentations.³⁸ In its *Response*, Planar refers to competition between EL displays and active matrix LCDs (which are relatively expensive) and EL displays (which are relatively inexpensive in monocolor but more expensive in color than active matrix LCDs.).³⁹ The price of active matrix displays has fallen since 1991 and active matrix LCDs are now the mainstream technology for notebook displays. Recently, active

³³ Further, "Planar's research work is continually pushing back the frontiers of advanced technology in both monochrome and color flat panel displays. For example, Planar is the first company in the world to have introduced both multi-color and full color EL displays, a task the industry experts considered unachievable. These new displays provide color capability with all the inherent advantages of EL flat panel technology with a production simplicity comparable to monochrome technology." *See* "Planar Technology" at *http://www.planar.com*.

³⁴ *Response* of Planar, p. 8.

³⁵ Calculated from tables 23, 24, and 26 of the *Staff Report of August 5, 1991*.

³⁶ Planar states in its *Response* that "technological differences in different FPDs remain." *Response* of Planar, p. 15.

³⁷ See "Introduction to Major Flat Panel Display Technologies" at *http://atip.or.jp* and "Cutting Edge of Display Technology" at *http://sharp-world.com*.

³⁸ Their drawbacks are their cost and the amount of power they consume. See "Passion for Plasma" in *Presentations*, February 1999, at *http://proquest.umi.com*.

³⁹ *Response* of Planar, p. 15.

³² *Response* of Planar, p. 8.

matrix displays have been purchased for the financial-services industry, where employees require multiple screens on their desktops.⁴⁰

Both Planar and Sharp indicate on their web sites that EL displays are now used in a wider range of applications, including laptop computers.⁴¹ At its web site, Planar cites "dramatic improvements" in "the brightness of the luminescent films, development of drive schemes to extend display life, significantly improved brightness, contrast, reduced power consumption, proprietary gray-scale algorithms, improved packing to reduce size and enhanced shock and vibration resistance as well as in the development of color …" of EL displays. Planar also indicates that power consumption in the displays has improved to the point where customers can now use them in battery power applications instead of passive matrix LCDs, which have "less satisfactory viewing characteristics."⁴² However, one analyst indicates that "{i}n their quest to come up with computer monitors and other high information content displays based on {EL displays}, industry developers are struggling with durability issues, and concerns such as inadequate gray scales and incomplete color ranges. Another issue for {EL displays} is their cost, still relatively high compared to competing technologies."⁴³ 44 Most EL FPDs continue to be used for applications other than computers.⁴⁵ Planar's 10-K identifies the following markets: medical, instrumentation, industrial process control and defense equipment, as well as transportation and communication systems.⁴⁶

In its *Response*, Planar states that "{t}here are differences and similarities in the supply and demand factors affecting the domestic EL FPD industry between the time of the original ITC determination in 1991 and those affecting it now. To begin with, in 1991 the domestic EL FPD industry was emerging, whereas today it is mature."⁴⁷ Planar also notes that "the move from CRTs to FPDs has only accelerated, partly because the performance of FPDs has increased relative to CRTs and partly because the increased performance of microprocessors has created growth opportunities for FPDs. Not only do FPD producers hope to replace CRTs in the ever-increasing numbers of computers and televisions, but also in portable medical monitors, gas pumps, and copy machine readers.⁴⁸

However, in ATIP's view, the CRT is still the most common display type.⁴⁹ Some of its drawbacks recently have been addressed. Developments in state-of-the art video electronics have reduced the screen flicker that can lead to eye fatigue in users; the new flat-surface CRTs eliminate

⁴¹ See "Planar Systems" and "Planar Technology" at *http://www.planar.com*. Also see "Flat Panel Displays" at *http://sharp-world.com*.

⁴³ See "Using Polymer Technology for High-Information Content FPDs" at http://proquest.umi.com.

⁴⁴ Sharp's web site states that "there is still strong demand for multicolor or full-color versions that enable the display of multifaceted data. At the present stage of development, EL displays have been created which can emit green, red or yellow light based on the use of filters and the development of new phosphor layering technologies... As these EL displays approach a suitable level for practical use, we can anticipate the availability of high resolution, full-color EL displays in the near future." See "Flat Panel Displays" at http://sharp-world.com.

⁴⁵ Actually, most EL technology is used in LIC applications, primarily for wristwatches and clocks.

⁴⁶ See Planar 10-K at *http://www.sec.gov*.

⁴⁰ See "Flat No More, Flat-Panel Sales Begin to Rise" at *http://proquest.umi.com* and "Prices Drop for Flat-Panel Desktop Displays" at *http://www.techweb.com*.

⁴² See "Planar Systems" and "Planar Technology" at http://www.planar.com.

⁴⁷ *Response* of Planar, p. 13.

⁴⁸ *Id.*, p. 15.

⁴⁹ See "Introduction to Major Flat Panel Display Technologies" at http://atip.or.jp.

geometrical distortion caused by the standard curved surface. Further, in May 1999, a new thin CRT, whose sales prices are expected to be competitive with active matrix LCDs, was introduced.⁵⁰ Still, analysts continue to predict that there will be an eventual decline in the use of CRTs if only because of the finer pixel pitches of FPDs, which provide a clearer picture. Also, HIC FPDs are thinner, lighter, and consume less power than standard CRTs. Prices of HIC FPDs are continuing to drop, but they are still three times the cost of an equivalent CRT. At this time most HIC FPDs (but not including the subject EL displays) are built into laptop computers, but some are used in stand-alone displays.⁵¹

Other promising display technologies include LEPs (light emitting polymers), VFDs (vacuum fluorescent displays), and FEDs (field emission displays). LEPs glow when exposed to an electric current.⁵² VFDs utilize the thermal emission of electronics and phosphor excitation to generate color and could be used in larger displays for monitor applications. FEDs have many similarities to CRTs and, in fact, are sometimes referred to as a "flat CRT."⁵³ Also, there is a new active matrix electroluminescent (AMEL) technology that is produced by the combination of integrated circuit and thin-film EL technologies on a silicon water to produce very small, very high resolution displays for head-mounted and personal viewer applications.⁵⁴

THE INDUSTRY IN THE UNITED STATES

U.S. Producers

In 1991, there were six firms actually producing HIC FPDs in the United States. Two firms (Cherry and Planar) produced EL FPDs, three firms (Electro Plasma, Photonics, and Plasmaco) produced plasma displays, and OIS manufactured active matrix LCDs. There was no U.S. production of passive matrix LCDs. Planar was the U.S. industry leader in the development of EL technology (using thin-film AC) and had recently introduced its first multi-color display. Effective January 1, 1991, Planar acquired Lohja's EL manufacturing operations in Finland. The new firm, Planar International, Olarinluoma, Finland, was ***-percent owned by Planar. Cherry also manufactured EL displays, but by using DC powder technology rather than AC thin-film technology.⁵⁵

In addition to the petitioners, other firms purchased display glass (either from the petitioners or from Japanese sources), fabricated or assembled purchased electronics components, and performed the final HIC FPD assembly. Most of these firms concentrated on HIC FPDs designed for military and aerospace applications. One U.S. company, In Focus, developed a subtractive color technology which involved stacking three LCD panels to "produce" overhead projection panels. Additional companies were involved in flat panel display R&D.⁵⁶ The petition for the original investigation identified

(continued...)

⁵⁰ The thin CRT combines the screen technology of the standard CRT with a low-power cold cathode in a display module less than eight millimeters thick. *See* "Recent ThinCRT Events" at *http://www.candescent.com*.

⁵¹ See "Flat-panel Displays," Computerworld, November 29, 1999 at http://proquest.umi.com.

⁵² See "Will Light-Emitting Polymers Outshine LCDs," Chemical Week, June 3, 1998 at http://project.umi.com.

⁵³ See "Introduction to Major Flat Panel Display Technologies" at http://atip.or.jp.

⁵⁴ See "Planar Technology" at http://www.planar.com.

⁵⁵ Staff Report of August 5, 1991, pp. A-49 through A-51.

⁵⁶ The original staff report stated that "{t}he key hurdle for such firms is moving from research and development to production for commercial sale. Because of the large infusions of capital required both for manufacturing

a number of U.S. firms that had ceased manufacturing operations or been unable to move from research into production of HIC FPDs.^{57 58}

Planar, the only firm to respond to the Commission's notice of institution, accounted for *** percent of 1990 production of HIC FPDs and for *** production of EL displays in that year.⁵⁹ It is believed to have accounted for *** of 1998 production of HIC FPDs. In its *Response*, Planar indicated that it is not aware of any other current U.S. manufacturers of EL displays.⁶⁰ The other U.S. EL producer at the time of the original investigation, Cherry, has since left the industry.⁶¹ However, there reportedly are about a dozen firms that now produce other types of FPD technologies in the United States.⁶² Also, Planar continues to operate its Finnish subsidiary.⁶³

At the time of the original investigation, EL displays were the only type of HIC FPDs manufactured by Planar. Today, the firm has diversified its operations and also develops and markets passive matrix and active matrix LCDs (as well as producing CRTs for the military). Major customers include Datascope, Hewlett-Packard, Protocol Systems, Sun Microsystems, Gilbarco, Siemens, and Smiths Industries.⁶⁴

⁵⁶ (...continued)

⁵⁸ Staff Report of August 5, 1991, pp. A-54 through A-68.

⁵⁹ *Id.*, p. A-58.

⁶⁰ *Response* of Planar, p. 2.

⁶¹ *Id.*, p. 13.

⁶³ See Planar's 10-Q at *http://www.sec.gov*. Information on the exact nature of Planar's current operations in Finland is not available.

⁶⁴ See Planar's 10-K at http://www.sec.gov.

facilities (most specifically, for technologies other than passive matrix LCDs) and the manufacturing experience necessary for reduced manufacturing costs and economies of scale, technological success is not necessarily correlated with competitiveness in the market place in this industry." *Id.*, p. 61.

⁵⁷ These firms included Alphasil (for ***), AT&T, Babcock Display (for ***), Dale (for ***), GTE (for ***), GE (for ***), IBM (for ***), LC Systems (for ***), Lucitron (for ***), and Sigmatron Nova (for ***).

⁶² See "Producer Profile Report" at http://displaysearch.com. These other technologies do not, however, include active matrix. Active matrix LCDs continue to be manufactured in Japan, which currently holds 85 percent of the world market share of active matrix LCDs. The remaining 15 percent are produced in Korea. However, IBM continues to manufacture LCDs in Japan through a joint venture with Toshiba Corp. OIS, the one U.S. producer of active matrix LCDs listed in the original investigation, closed in 1998 after "years of losses." See "A Sorry Display of Corporate Welfare," Upside, May 1999, at http://proquest.umi.com.

U.S. Production, Capacity, and Shipments

Data⁶⁵ reported by U.S. producers of all HIC FPDs in the Commission's original investigation are presented in table I-1. As shown, capacity to produce the displays expanded from 1988 to 1990, as did production and domestic shipments. In its views, the Commission stated that "{t}he industry's increases in sales, production, and shipments are not surprising. Whereas sales and shipments are important considerations in investigations concerning mature industries, this investigation concerns an emerging industry for which growth and investment are especially important. We would expect positive trends in such indicators as sales and production for an emerging industry making a product for which demand is rapidly rising. More important to our material injury determination is the inability of this particular industry to turn that increasing demand into an improved financial situation. Even more significant is the inability of the industry faced with growing demand to obtain or generate significant financing for increased capital and research investment."⁶⁶ While capital expenditures by the domestic industry rose from 1988 to 1990, the Commission labeled them "minuscule" and noted that the record indicated that much higher levels of investment were required for large scale commercial production.⁶⁷ Capital expenditures for all HIC FPDs by non-development-stage firms (Planar and Electro Plasma) rose from \$*** in 1988 to \$*** in 1989 then declined to \$*** in 1990. Such expenditures by developmentstage firms (Plasmaco and Cherry) were \$*** in 1988, \$*** in 1989, and \$*** in 1990. (See table 24 of the original staff report.)

Table I-1

HIC FPDs: U.S. producers' capacity, production, and domestic shipments, 1988-90

* * * * * *

Planar did not provide current data on all U.S. HIC FPD operations. Therefore, comparative data are available only for its EL displays (table I-2). As shown, production and shipments by the firm have expanded *** in the period since the antidumping order was imposed.⁶⁸ Further, Planar's financial

⁶⁵ Data shown in the original staff report are for all HIC FPDs combined (i.e., including complete, incomplete, and prototype displays). Complete displays were defined as consisting of the display glass, drive and control electronics, and mechanical package. Incomplete displays contained the display glass, but lacked at least one and possibly all of the other components. Prototypes are used for evaluation by customers to examine both the technology and production feasibility of the HIC FPD. Customers generally purchase the prototype, sometimes under a development agreement, and also may pay non-recurring engineering costs. Prototypes are sold in small quantities relative to displays in "commercial production," a term which refers to mature products where the specifications are fixed. *Staff Report of August 5, 1991*, p. A-72.

⁶⁶ Certain High-Information Content Flat Panel Displays and Display Glass Therefor from Japan (Final), p. 21.

⁶⁷ *Id.*, citing the hearing transcript at 168.

^{68 ***}

Table I-2

*

EL FPDs: U.S. producers' capacity, production, shipments, inventories, employment, and financial data, CY 1988-90, FY 1998-99, January-June 1998, and January-June 1999

* * * * * *

situation is *** over that reported during 1988-90. ***. In its *Response*, Planar describes itself as in "a ***."^{69 70}

There are no current pricing data available for the subject product. The decline in EL display unit values from 1990 to 1998 is believed to be a reflection of increased economies of scale and technological/production advances.

U.S. IMPORTS AND CONSUMPTION

U.S. Imports

During the original investigation, the Commission received questionnaires from 34 importers of HIC FPDs from Japan. Most of the imports were by U.S.-owned OEMs or wholly-owned U.S. divisions of Japanese HIC FPD manufacturers that imported displays for use in their (primarily computer) manufacturing facilities. As a minimum, all of the reported imports contained display glass. The subject EL displays were imported by *** and by ***. The only additional source of imports reported (and then only of EL displays) was Finland.⁷¹ In its response to the Commission's notice of institution in this review, Planar indicated that Sharp continues to import EL displays from Japan into the United States.⁷²

As shown in figure I-1 and table I-3, U.S. imports of EL displays from Japan increased from 1988 to 1989, then declined in 1990 to a point that was slightly lower than that reported for 1988.⁷³ Data on imports of subject EL displays are not available for the period immediately following the imposition of the antidumping duty order in 1991.⁷⁴ However, there have been considerable imports of the product since 1990. Custom's *Antidumping/Countervailing Duty Annual Report* reports subject displays valued at \$5.6 million for FY 1994, which is a *** higher figure than the value of imports from Japan in 1990 (\$***). However, by FY 1994, the Commission had made a negative determination on remand for EL displays from Japan (March 1993); further, Commerce suspended liquidation on EL FPDs in May 1994 following the CIT's affirmation of the Commission's remand determination. Subject imports continued to increase until FY 1996. Then, in July 1996, Commerce rescinded its revocation of the

⁷¹ Staff Report of August 5, 1991, pp. A-69 through A-71, A-134, and A-135. ***. Id., p. A-135.

⁷² Response of Planar, p. 10. It further stated that Sharp was the only known subject importer.

⁷³ The imports actually considered by the Commission at the time of the original determination included active matrix LCDs since such displays were then subject to investigation. *See* table 37 (in the original staff report) and table 38a (which was circulated later) for these data. *Certain High-Information Content Flat Panel Displays and Display Glass Thereof* (Final), p. 23. Data on importers' U.S. shipments of active matrix displays, as well as data for nonsubject passive matrix LCDs and plasma displays, are presented in the next section of this report.

⁷⁴ As noted earlier, HIC FPDs are imported under a variety of HTS statistical reporting numbers.

⁶⁹ Response of Planar, p. 9.

⁷⁰ However, Planar's 10-Q for 1999 indicates that EL sales have have "increased significantly over the prior year due to robust end user sales." See Planar's 10-Q at *http://www.sec.gov*.

Figure I-1 EL FPDs: U.S. imports from Japan, by value, 1988-98



* Data not available.

Source: *Staff Report of August 5, 1991*, p. A-133, for 1988-90 (from questionnaires), and Customs *Antidumping/Countervailing Duty Annual Report* for 1994-98 (which are fiscal years for the October 1 to September 30 period).

| Table I-3EL FPDs: U.S. imports, 1988-90 and 1998 | | | | |
|--|--|------|------|-------------------|
| Item | 1988 | 1989 | 1990 | 1998 ¹ |
| | Quantity (units) | | | |
| Japan | *** | *** | *** | (2) |
| Finland ³ | *** | *** | *** | (4) |
| Total | *** | *** | *** | (2) |
| | Landed duty-paid value (1,000 dollars) | | | |
| Japan | *** | *** | *** | 2,410 |
| Finland ³ | *** | *** | *** | (4) |
| Total | *** | *** | *** | 2,410 |
| | Unit value <i>(per unit)</i> | | | |
| Japan | *** | *** | *** | (2) |
| Finland ³ | *** | *** | *** | (4) |
| Total | *** | *** | *** | (2) |

¹ Fiscal year (October 1 to September 30)

² Not available.

³ Fiscal year (March 1 to February 28).

⁴ Planar did not indicate in its *Response* whether it imports any EL displays that may be produced in its Finnish facility into the United States.

Note.–Data on the value of annual imports reviewed by Customs are as follows: \$5.6 million for FY 1994, \$7.1 million for FY 1995, \$11.2 million for FY 1996, \$4.2 million for FY 1997, and \$2.4 million for FY 1998. Customs *Antidumping/Countervailing Duty Annual Report*.

Source: Staff Report of August 5, 1991, pp. A-133 and A-135 (which were from questionnaires) for 1988-90 data; Customs Antidumping/Countervailing Duty Annual Report for import values in 1998.

antidumping duty order at the direction of the Federal Circuit and subject imports fell sharply, decreasing 63 percent, in terms of value, from FY 1996 to FY 1997, and then fell by an additional 43 percent during the following fiscal year.

In its *Response*, Planar provides data for the EL display market in North America for the period 1989-92, 1998, and (estimated) 1999. *** imports of EL displays from Japan were shown entering the

United States in 1998; however, \$*** were projected to enter in 1999.⁷⁵ Planar states that the U.S. industry producing the subject product is currently in a "vulnerable state" because of what it labels "***" as well as competition from active matrix LCDs.⁷⁶ Planar also argues that in finding a like product that included other types of FPDs, the Commission recognized that EL displays do not simply compete with other EL displays. Cross-display competition is a significant condition of competition. According to petitioner, "{i} f the order on EL FPDs were revoked, Planar would be competing not only against a significant volume of imports of non-subject flat panel displays, but would also have to struggle to keep its customers from switching to EL imports that are likely to be dumped."⁷⁷

Apparent U.S. Consumption

HIC FPDs are an important component in numerous types of electronic equipment including aircraft instrumentation, electronic publishing and composing equipment, laptop computers, machinetool controllers, and medical-monitoring instruments. Thus, the demand for HIC FPDs is derived from the demand for a wide variety of products. During the period reviewed in the original investigation, two striking technological trends increased demand for certain HIC FPDs. First, the trend toward smallersized portable computers resulted in a search for the smallest and lightest components and, second, color technology was of increasing importance. At that time, these trends resulted in increased purchases of LCD displays since LCDs tended to be lighter in weight then other HIC FPD technologies, consumed less power, and were more likely to be available in color.⁷⁸ As shown in table I-4, nonsubject passive matrix LCDs accounted for *** percent of the U.S. market for HIC FPDs in 1990; subject EL displays were the smallest category at *** percent of apparent U.S. consumption. In its views, the Commission recognized "that imports not found to be dumped have a larger share of the overall market for HIC flat panel displays than do imports subject to Commerce's dumping finding, and that the impact of the former cannot be the basis for our affirmative determination." However, it added that "the presence and dimensions of the nonsubject imports appear to be a condition of trade that has left the domestic industry in a weakened condition and particularly vulnerable to dumped imports."79 As noted earlier, Planar reports current competition from nonsubject active matrix LCDs in its Response.⁸⁰

Table I-4

HIC FPDs: Apparent U.S. consumption, by types of displays, 1990

* * * * * * *

⁷⁵ Response of Planar, p. 5. These data were obtained from the "SRI EL Market Reports." However, the values reported for 1988-90 do not reconcile with those reported in the original staff report (and which are listed in table I-3). Likewise, the Planar statement that *** is contradicted by the Customs Antidumping/Countervailing Duty Annual Report (which reports subject entries in FY 1998).

⁷⁶ *Id.*, p. 9.

⁷⁷ *Id*., p. 14.

⁷⁸ Staff Report of August 5, 1991, pp. A-160 and A-161.

⁷⁹ Certain High-Information Content Flat Panel Displays and Display Glass Therefor (Final), p. 27.

⁸⁰ Response of Planar, p. 9.

The share of the entire HIC FPD market that was held by U.S. producers of the subject EL displays for the period reviewed during the original investigation is presented in table I-5.⁸¹ As shown, the domestic market shares for EL displays were less than *** percent during 1988-90. There are no current data on total HIC FPD production in the United States nor on U.S. imports of the products. However, EL technology continues to account for only a small portion of the total information display market.⁸²

Table I-5

HIC FPDs: U.S. producers' U.S. shipments, U.S. shipments of imports, and apparent U.S. consumption, 1988-90

* * * * * * *

It is possible to calculate market shares for EL displays alone for 1998, in terms of value, using data supplied by Planar (table I-6). As shown, the value of U.S. apparent consumption of EL displays has almost *** since 1990.⁸³ SRI data provided by Planar also depict the North American market (including Canada and Mexico) as expanding *** since the time of the original investigation. However, the actual figures they provide differ from those presented in table I-6. Specifically, the SRI data show increases from \$*** in 1990 to \$*** in 1998. (*See* the tabulation on page 5 of the *Response*.) The SRI figure for 1990 includes nonsubject imports which are *** than those which were reported to the Commission during the original investigation. The primary source of the seeming discrepancy in the 1998 consumption figures is from Planar's sales figure of \$50 million (which it indicates is the value provided for the SRI EL Reports) being *** than the domestic shipment value for Planar of \$*** provided on page 11 of its *Response*."⁸⁴

According to data released by DisplaySearch,⁸⁵ the demand for FPDs (including LIC displays) will continue to grow. They project that due to the increasing requirement for "more content" (i.e., text, graphics, and video) in products, displays will surpass CRTs by 2004 and FPDs will account for 54 percent of the \$130 billion display market in 2005. Reportedly, "FPDs will gain market share at the expense of CRTs due to a number of key advantages including improved portability, lighter weight, lower power requirement, high pixel densities, improved front of screen performance and narrowing cost

⁸⁵ DisplaySearch is a leading display market research firm.

⁸¹ The market shares actually considered by the Commission at the time of the original determination included active matrix LCDs since such displays were then subject to investigation. See table 37 (in the original staff report) and table 38a (which was circulated later) for these data. Certain High-Information Content Flat Panel Displays and Display Glass Thereof (Final), p. 23.

⁸² See Planar's 10-Q at http://www.sec.gov.

⁸³ During 1990-98, the U.S. producer price index increased at an average annual rate of less than 1 percent. International Monetary Fund, *International Financial Statistics Yearbook*, 1999.

⁸⁴ It should be noted that the SRI numbers include sales to Canada and Mexico. However, Planar reports that there are negligible sales of EL displays to those countries. *Response* of Planar, attachment 1, p. 3. One possible explanation for the discrepancy is that Planar is continuing to operate the Finnish production facility that it purchased from Lohja and that it ships EL displays produced in Finland to the United States. SRI might well have included such production in its North American figures for Planar. In contrast, the data that Planar itself compiled for its operations (and which are that presented in table I-2) are believed to apply only to its domestic operations.

| Table I-6 | | | | | |
|------------|-----------------|-----------------|----------------------------|----------------|------------------|
| EL FPDs: | U.S. producers' | U.S. shipments, | U.S. shipments of imports, | and apparent U | .S. consumption, |
| 1988-90 ar | nd 1998 | | | | |

| | l | | | |
|---|---|------------------|-------------|--------------------|
| Item | 1988 | 1989 | 1990 | 1998 ¹ |
| | | Quantity (units) | | |
| U.S. producers' U.S. shipments | *** | *** | *** | *** |
| U.S. shipments of imports from Japan | *** | *** | *** | (2) |
| Finland | *** | *** | *** | (3) |
| Total | *** | *** | *** | (2) |
| Apparent U.S. consumption | *** | *** | *** | (2) |
| | | Value (1,0 | 00 dollars) | |
| U.S. producers' U.S. shipments | *** | *** | *** | *** |
| U.S. shipments of imports from Japan | *** | *** | *** | 2,4104 |
| Finland | *** | *** | *** | (3) |
| Total | *** | . *** | *** | 2,410 ⁴ |
| Apparent U.S. consumption | *** | *** | *** | *** |
| | Share of consumption, in terms of quantity (<i>percent</i>) | | | |
| U.S. producers' U.S. shipments | *** | *** | *** | (2) |
| U.S. imports: Japan | *** | *** | *** | (2) |
| Finland | *** | *** | *** | (3) |
| Total | *** | *** | *** | (2) |
| | Share of consumption, in terms of value (percent) | | | |
| U.S. producers' U.S. shipments | *** | *** | *** | *** |
| U.S. imports: Japan | *** | *** | *** | *** |
| Finland | *** | *** | *** | (3) |
| Total | *** | *** | *** | *** |
| Continued. | | | | |

Continuation.

¹ Fiscal year (*** through ***).

² Not available.

³ As indicated earlier, it is not known whether any EL displays from Finland were imported into the United States in 1998.

⁴ Data are imports and not U.S. shipments of imports.

Source: *Staff Report of August 5, 1991,* pp. A-139 and A-140, for 1988-90 data (of which import data were from questionnaires); the value of FY 1998 imports are from the Customs *Antidumping/Countervailing Duty Annual Report*; and 1998 U.S. producers' shipments are from the *Response* of Planar, p. 11.

difference. As FPD costs fall, new and larger markets will become available such as TVs and other consumer products. In addition, new ... display-based products will also boost demand."⁸⁶

THE FOREIGN INDUSTRY

Sharp was the only Japanese firm manufacturing the subject product during the period reviewed in the original investigation, having begun the mass-production of EL displays in 1983. In addition to producing (AC thin-film) EL displays, Sharp also manufactured passive matrix LCDs and active matrix LCDs in 1990. Planar indicated in its *Response* that Sharp remains the only subject Japanese manufacturer.⁸⁷ Further, Sharp (and Planar) are "virtually" the only worldwide producers of the product.⁸⁸ Sharp was at the time of the original investigation and remains a vertically integrated firm that produces a wide variety of other electronic products, including other types of HIC FPDs.⁸⁹

Table I-7 presents the data on Sharp's EL display operations during the 1988-90 period. Sharp's capacity to produce and actual production of the subject product increased *** from 1988 to 1990, rising by *** percent and *** percent, respectively. The firm reported *** home market shipments. In 1990, *** percent of its total shipments of EL displays were exported to the United States.

Table I-7

EL FPDs: Sharp's capacity and shipments, 1988-90

*

* * *

There are limited data available on Sharp's current operations for EL displays. Apparently, its capacity to produce the product continued to expand after 1990. ***.⁹⁰ In its *Response*, Planar provided data to the Commission which was obtained from the SRI EL Market Reports showing that Sharp had

⁸⁶ See "Press Releases" (February 2, 2000) at http://displaysearch.com.

⁸⁷ *Response* of Planar, p. 4.

⁸⁸ Id. As noted earlier, it is believed that Planar's facility in Finland is continuing to manufacture EL displays.

⁸⁹ Staff Report of August 5, 1991, p. A-124. Also see "SHARP History Park" at http://sharp-world.com.

⁹⁰ Staff Report of August 5, 1991, p. A-123.

worldwide sales of EL displays valued at \$*** in 1998, which were estimated to reach \$*** in 1999.91 Direct comparisons between the quantity figures provided in table I-7 for the 1988-90 period and the value figures provided by Planar for 1998-99 are not possible. However, it is possible to derive a rough estimate of the value of Sharp's total sales in 1990 by applying the U.S. import unit value in 1990 (which was \$*** per unit as provided in table 35 of the original staff report) to the data in table I-7 to estimate that the value of Sharp's total EL display shipments in 1990 was approximately \$***.⁹² This figure is substantially lower than the SRI worldwide sales figures for Sharp of \$*** in 1998 and \$*** (estimated) in 1999 and, therefore, indicates that the firm's EL display sales appear to have increased since the time of the original investigation.⁹³ However, Planar cites SRI figures for "others" (i.e., non-Planar) worldwide sales in 1990 (of \$***) to argue that Sharp's sales have declined since the time of the original investigation. Planar states that "{i}t seems clear, then, that Sharp has *** production capacity, and the company has a *** to sell in the United States market than it has been utilizing since the antidumping duty order went into effect. Given its unused production capacity and existing distribution system, Sharp is well-positioned to continue to increase its exports of EL FPDs and display glass therefor to the United States if the order were revoked."94 Since Planar's comparisons are derived from a continuous database, its trends normally would be presumed to be the more accurate. However, considerable distortion would be introduced if the data for EL displays produced in Finland are included in the "others" figures for 1989 and 1990 (which they presumably are).⁹⁵ Also, certain SRI numbers appear to be inflated compared to data compiled during the original investigation and that presented separately by Planar for the current period.⁹⁶

⁹¹ *Response* of Planar, p. 5.

⁹² This estimate is accurate only insofar as the U.S. import value is applicable for all of Sharp's sales in 1990. The staff report for the original investigation noted that changes in product mix (specifically changes in the various models and options) made discussions of price trends difficult for a given supplier. *Staff Report of August 5, 1991*, p. A-166.

⁹³ As noted earlier, the U.S. producer price index increased at an average annual rate of less than 1 percent from 1990 to 1998.

94 Response of Planar, pp. 6-7.

⁹⁵ Although Planar's *Response* (attachment 1, p. 2) indicates that the SRI "others" category represents "for all practical purposes Sharp's sales" since "there are virtually no other producers of these EL FPD products anywhere in the world," Finland was producing EL FPDs at that time. ***.

⁹⁶ See the earlier discussion about the discrepancy between SRI figures for Planar and those Planar itself reported in its *Response* for 1998. Also, while the SRI figures for 1989-90 for Planar are *** to those reported in the original staff report (and listed in table I-2), the SRI figures for EL imports into North America are *** than those listed in the original staff report for U.S. imports of EL displays from Japan and Finland (and shown in table I-6 of this report). .

APPENDIX A

FEDERAL REGISTER NOTICES

INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-469 (Review)]

Electroluminescent Flat Panel Displays From Japan

AGENCY: United States International Trade Commission.

ACTION: Scheduling of an expedited fiveyear review concerning the antidumping duty order on electroluminescent flat panel displays from Japan.

SUMMARY: The Commission hereby gives notice of the scheduling of an expedited review pursuant to section 751(c)(3) of the Tariff Act of 1930 (19 U.S.C. 1675(c)(3)) (the Act) to determine whether revocation of the antidumping duty order on electroluminescent flat panel displays from Japan would be likely to lead to continuation or recurrence of material injury within a reasonably foreseeable time. For further information concerning the conduct of this review and rules of general application, consult the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A, D, E, and F (19 CFR part 207). Recent amendments to the Rules of Practice and Procedure pertinent to five-year reviews, including the text of subpart F of part 207, are published at 63 FR 30599, June 5, 1998, and may be downloaded from the Commission's World Wide Web site at http:// www.usitc.gov/rules.htm.

EFFECTIVE DATE: November 4, 1999.

FOR FURTHER INFORMATION CONTACT: Debra Baker (202-205-3180), Office of Investigations, U.S. International Trade Commission, 500 E Street SW, Washington, DC 20436. Hearingimpaired persons can obtain information on this matter by contacting the Commission's TDD terminal on 202-205–1810. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202–205–2000. General information concerning the Commission may also be obtained by accessing its internet server (http:// www.usitc.gov).

SUPPLEMENTARY INFORMATION:

Background

On November 4, 1999, the Commission determined 1 that the domestic interested party group response to its notice of institution (64 FR 41951, Aug. 2, 1999) was adequate and the respondent interested party group response was inadequate. The Commission did not find any other circumstances that would warrant conducting a full review.² Accordingly, the Commission determined that it would conduct an expedited review pursuant to section 751(c)(3) of the Act. A record of the Commissioners' votes, the Commission's statement on adequacy, and any individual Commissioner's statements will be available from the Office of the Secretary and at the Commission's web site.

Staff Report

A staff report containing information concerning the subject matter of the review will be placed in the nonpublic record on February 29, 2000, and made available to persons on the Administrative Protective Order service list for this review. A public version will be issued thereafter, pursuant to section 207.62(d)(4) of the Commission's rules.

Written Submissions

As provided in section 207.62(d) of the Commission's rules, interested parties that are parties to the review and that have provided individually adequate responses to the notice of institution,³ and any party other than an interested party to the review may file written comments with the Secretary on what determination the Commission should reach in the review. Comments are due on or before March 3, 2000, and may not contain new factual information. Any person that is neither a party to the five-year review nor an interested party may submit a brief written statement (which shall not contain any new factual information) pertinent to the review by March 3, 2000. If comments contain business proprietary information (BPI), they must conform with the requirements of sections 201.6, 207.3, and 207.7 of the Commission's rules. The Commission's rules do not authorize filing of submissions with the Secretary by facsimile or electronic means.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the review must be served on all other parties to the review (as identified by either the public or BPI service list), and a certificate of service must be timely filed. The Secretary will not accept a document for filing without a certificate of service.

Determination

The Commission has determined to exercise its authority to extend the review period by up to 90 days pursuant to 19 U.S.C. 1675(c)(5)(B).

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.62 of the Commission's rules.

By order of the Commission.

Issued: November 10, 1999.

Donna R. Koehnke,

Secretary.

[FR Doc. 99–29957 Filed 11–16–99; 8:45 am] BILLING CODE 7020–02–P

¹Vice Chairman Miller is not participating in this five-year review.

² Commissioner Koplan dissenting.

³The Commission has found the response submitted by Planar Systems, Inc. to be individually adequate. Comments from other interested parties will not be accepted (see 19 CFR 207.62(d) (2)).

Statute and Regulations

This review was conducted pursuant to sections 751(c) and 752 of the Tariff Act of 1930, as amended ("the Act"). The Department's procedures for the conduct of sunset reviews are set forth in Procedures for Conducting Five-year ("Sunset") Reviews of Antidumping and Countervailing Duty Orders B3 FR 13516 (March 20, 1998) ("Sunset Regulations"), and 19 CFR Part 351 (1999) in general. Guidance on methodological or analytical issues relevant to the Department's conduct of sunset reviews is set forth in the Department Policy Bulletin 98:3-Policies Regarding the Conduct of Fiveyear ("Sunset") Reviews of Antidumping and Countervailing Duty Orders; Policy Bulletin 63 FR 18871 (April 16, 1998) (Sunset Policy Bulletin).

DEPARTMENT OF COMMERCE

International Trade Administration

[A-588-817]

Electroluminescent Flat Panel Displays and Display Glass Therefor From Japan; Final Results of Antidumping Duty Sunset Review

AGENCY: Import Administration, International Trade Administration, Department of Commerce. ACTION: Notice of final results of antidumping duty sunset review.

SUMMARY: On August 2, 1999, the Department of Commerce ("the Department") published the notice of initiation of sunset review of the antidumping duty order on electroluminescent ("EL") high information content flat panel displays ("FPD") and display glass therefor from Japan. The merchandise covered by this order is EL FPDs. On the basis of a notice of intent to participate and adequate substantive response filed on behalf of a domestic interested party, and inadequate response (in this case no response) from respondent interested parties, we determined to conduct an expedited sunset review. Based on our analysis of the comments received, we find that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of dumping at the levels listed below in the section entitled "Final Results of the Review." EFFECTIVE DATE: March 7, 2000.

FOR FURTHER INFORMATION CONTACT: Martha V. Douthit, Import

Administration, International Trade Administration, U.S. Department of Commerce, Washington, D.C. 20230; telephone: (202) 482–5050. SUPPLEMENTARY INFORMATION: Background

On August 2, 1999, the Department published the notice of initiation of sunset review of the antidumping duty order on EL FPDs (64 FR 41915). We invited parties to comment. On the basis of a notice of intent to participate and adequate substantive response filed on behalf of a domestic interested party, and inadequate response (in this case no response) from respondent interested parties, we determined to conduct an expedited sunset review. The Department has conducted this sunset review in accordance with sections 751 and 752 of the Act.

In accordance with section 751(c)(5)(C)(v) of the Act, the Department may treat a review as extraordinarily complicated if it is a review of a transition order (i.e., an order in effect on January 1, 1995). This review covers a transition order within the meaning of section 751(c)(6)(C)(ii) of the Act. Therefore, on December 3, 1999, the Department determined that the sunset review of the antidumping duty order on EL FPDs from Japan is extraordinarily complicated and extended the time limit for completion of the final results of this review until not later than February 28, 2000, in accordance with section 751(c)(5)(B) of the Act.¹

Scope of Review

The merchandise covered by this order is EL FPDs. EL FPDs are large area, matrix addressed displays, no greater than four inches in depth, with a pixel count of 120,000 or greater, whether complete or incomplete, assembled or unassembled. EL FPDs

¹Extension of Time Limit for Final Results of Five-Year Reviews, 64 FR 67847 (December 3, 1999).

incorporate a matrix of electrodes that, when activated, apply an electrical current to a solid compound of electroluminescent material (e.g., zinc sulfide) causing it to emit light. Included are monochromatic. limited color, and full color displays used to display text, graphics, and video. EL FPD glass, whether or not integrated with additional components, exclusively dedicated to and designed for use in EL FPDs, is defined as processed glass substrates that incorporate patterned row, column, or both types of electrodes, and also typically incorporate a material that reacts to a change in voltage (e.g., phosphor) and contact pads for interconnecting drive electronics. All types of FPDs described above are currently classifiable under subheadings 8543, 8803, 9013, 9014, 9017.90.00, 9018, 9022, 9026, 9027, 9030, 9031, 8471.92.30, 8471.92.40, 8473.10.00, 8473.21.00, 8473.30.40, 8442,40.00, 8466, 8517.90.00, 8528.10.80, 8529.90.00, 8531.20.00, 8531.90.00, and 8541 of the Harmonized Tariff Schedule (HTS). Although the HTS subheadings are provided for convenience and customs purposes, our written description of the scope of this proceeding is dispositive.

Since the issuance of the order on EL FPDs from Japan, the Department clarified that certain that certain EL FPDs used in Graphic Control Panels models GP-410 and GP-430 are within the scope of the order (*see Notice of Scope Rulings*, 59 FR 8910 (February 24, 1994)).

Although domestic interested parties suggested that other scope rulings on FPDs, particularly those involving Sharp, may be related to this order, our review of those scope rulings reveal they were not.

Analysis of Comments Received

All issues raised in the substantive response by parties to this sunset review are addressed in the "Issues and Decision Memorandum" ("Decision Memo") from Jeffrey A. May, Director, Office of Policy, Import Administration, to Robert S. LaRussa, Assistant Secretary for Import Administration, dated February 28, 2000 which is hereby adopted and incorporated by reference into this notice. The issues discussed in the attached Decision Memo include the likelihood of continuation or recurrence of dumping and the magnitude of the margin likely to prevail were the order revoked. Parties can find a complete discussion of all issues raised in this review and the corresponding recommendations in

this public memorandum which is on file in B–099.

In addition, a complete version of the Decision Memo can be accessed directly on the Web at www.ita.doc.gov/ import__admin/records/frn/, under the heading "Japan". The paper copy and electronic version of the Decision Memorandum are identical in content.

Final Results of Review

We determine that revocation of the antidumping duty order would be likely to lead to continuation or recurrence of dumping at the following percentage weighted-average margins:

| Manufacturer/exporter | Margin (percent) |
|-----------------------|---------------------|
| Sharp Corporation | 7.02 |
| All Others | 7.02 |

This notice also serves as the only reminder to parties subject to administrative protective orders ("APO") of their responsibility concerning the return or destruction of proprietary information disclosed under APO in accordance with 19 CFR 351.305 or conversion to judicial protective order is hereby requested. Failure to comply with the regulations and terms of an APO is a violation, which is subject to sanction.

We are issuing and publishing this determination and notice in accordance with sections 751(c), 752, and 777(i) of the Act.

Dated: February 28, 2000.

Joseph A. Spetrini,

Acting Assistant Secretary for Import

Administration.

[FR Doc. 00-5508 Filed 3-6-00; 8:45 am] BILLING CODE 3510-DS-P

APPENDIX B

STATEMENT ON ADEQUACY

.

EXPLANATION OF COMMISSION DETERMINATION OF ADEQUACY

in

Electroluminescent Flat Panel Displays from Japan, Inv. No. 731-TA-469 (Review)

On November 4, 1999, the Commission determined that it should proceed to an expedited review in the subject five-year review pursuant to section 751(c)(3)(B) of the Tariff Act of 1930, as amended, 19 U.S.C. § 1675(c)(3)(B).¹ Commissioner Koplan dissented.

The Commission received a single response to the notice of institution from Planar Systems, Inc., a domestic manufacturer of electroluminescent flat panel displays. Based on the information available, the Commission determined this response to be an adequate domestic interested party group response because it accounts for a significant share of domestic production of the like product.

The Commission did not receive a response from any respondent interested party. Consequently the Commission determined that the respondent interested party group response was inadequate in this review.

The Commission did not find any circumstances that would warrant conducting a full review. The Commission, therefore, determined to conduct an expedited review.²

¹Vice Chairman Miller is not participating in this review.

² Commissioner Koplan voted for a full review because of significant like product issues.