

# **DEFROST TIMERS FROM JAPAN**

Determination of the Commission in  
Investigation No. 731-TA-643  
(Preliminary) Under the Tariff Act  
of 1930, Together With the  
Information Obtained in the  
Investigation

**USITC PUBLICATION 2609  
MARCH 1993**

United States International Trade Commission  
Washington, DC 20436



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Note.--Information that would reveal confidential operations of individual concerns may not be published and therefore has been deleted from this report.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

**DETERMINATION AND VIEWS OF THE COMMISSION**





## UNITED STATES INTERNATIONAL TRADE COMMISSION

Investigation No. 731-TA-643 (Preliminary)

## DEFROST TIMERS FROM JAPAN

Determination

On the basis of the record<sup>1</sup> developed in the subject investigation, the Commission unanimously determines, pursuant to section 733(a) of the Tariff Act of 1930 (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Japan of defrost timers for residential refrigerators, provided for in subheading 9107.00.40 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On January 19, 1993, a petition was filed with the Commission and the Department of Commerce by Paragon Electric Co., Inc., Two Rivers, WI, alleging that an industry in the United States is materially injured or threatened with material injury by reason of LTFV imports of defrost timers for residential refrigerators from Japan. Accordingly, effective January 19, 1993, the Commission instituted antidumping investigation No. 731-TA-643 (Preliminary).

Notice of the institution of the Commission's investigation and of a public conference to be held in connection therewith was given by posting copies of the notice in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and by publishing the notice in the Federal Register of January 27, 1993 (58 F.R. 6296). The conference was held in Washington, DC, on February 9, 1993, and all persons who requested the opportunity were permitted to appear in person or by counsel.

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



## VIEWS OF THE COMMISSION

Based on the record in this preliminary investigation, we find that there is a reasonable indication that an industry in the United States is materially injured by reason of imports of defrost timers for residential refrigerators from Japan that are alleged to be sold at less than fair value (LTFV).<sup>1</sup>

### I. THE LEGAL STANDARD FOR PRELIMINARY DETERMINATIONS

The legal standard in preliminary antidumping investigations requires the Commission to determine whether, based on the best information available, there is a reasonable indication of material injury or threat thereof to a domestic industry by reason of the subject imports.<sup>2</sup> In this investigation, the Commission considered whether: "(1) the record as a whole contains clear and convincing evidence that there is no material injury or threat of material injury; and (2) no likelihood exists that contrary evidence will arise in a final investigation."<sup>3</sup> The U.S. Court of Appeals for the Federal Circuit has held that this interpretation of the standard "accords with clearly discernible legislative intent and is sufficiently reasonable."<sup>4</sup>

### II. LIKE PRODUCT AND DOMESTIC INDUSTRY

To determine whether a domestic industry is materially injured or threatened with material injury by reason of the subject imports, the Commission must first define the "like product" and the "industry". Section

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<sup>1</sup> 19 U.S.C. § 1673b(a). Material retardation of the establishment of an industry is not an issue in this investigation.

<sup>2</sup> 19 U.S.C. § 1673b(a). American Lamb v. United States, 785 F.2d 994, 1001 (Fed. Cir. 1986).

<sup>3</sup> American Lamb, 785 F.2d at 1001. In a 1992 decision, the Court of International Trade (CIT) interpreted American Lamb to affirm "the Commission's practice of reaching a negative preliminary determination of injury only when" these factors are met. Torrington Co. v. United States, 790 F. Supp. 1161, 1165 (CIT 1992).

<sup>4</sup> American Lamb, 785 F.2d at 1004.

771(4) (A) of the Tariff Act of 1930 (the "Act") defines the relevant domestic industry as "the domestic producers as a whole of a like product, or those producers whose collective output of the like product constitutes a major proportion of the total domestic production of that product . . . ."<sup>5</sup> In turn, section 771(10) defines 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 investigation . . . ."<sup>6</sup>

A. Like Product

The Department of Commerce has defined the imported product subject to these investigations as:

electro-mechanical and electronic defrost timers for residential refrigerators.<sup>7</sup>

Two like product issues arise in this investigation: (1) whether electromechanical and electronic residential defrost timers constitute

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<sup>5</sup> 19 U.S.C. § 1677(4) (A) .

<sup>6</sup> 19 U.S.C. § 1677(10) .

<sup>7</sup> 58 Fed. Reg. 8255 (February 12, 1993). The Department of Commerce's notice initiating the investigation explained that:

Electro-mechanical defrost timers are comprised of several components that make or break electric circuits by activating two sets of electrical contact points--one to disconnect the compressor (the cooling mechanism) and the other to connect the defrost heater. The articles are equipped with a synchronous or subsynchronous motor. The defrost timer disconnects the compressor by opening an electrical circuit after the compressor itself has run for a length of time predetermined by the manufacturer depending on the specifications of the model. Upon completion of the compressor run cycle (and simultaneously with the compressor's disconnection) the defrost heater is activated and runs for a preset time (again depending on the model), as predetermined by the manufacturer. Electronic defrost timers have a similar function but operate with greater efficiency. This is because a microprocessor in the device uses information gathered during the defrost cycle to adjust the compressor run time. This system defrosts only when needed, thereby improving the efficiency of the refrigerator.

separate like products; and (2) whether commercial defrost timers should be included in the like product. Petitioner urges the Commission to find one like product consisting of both electromechanical and electronic residential defrost timers.<sup>8</sup> Respondent urges the Commission to find one like product consisting of electromechanical residential defrost timers only.<sup>9</sup> Neither party supports the inclusion of commercial defrost timers in the like product definition.<sup>10</sup>

1. Whether electromechanical and electronic residential defrost timers constitute separate like products.

The Commission's like product determinations are factual and the Commission applies, on a case-by-case basis, the statutory standard of "like" or "most similar in characteristics and uses."<sup>11</sup> For this preliminary investigation, we determine that there is one like product, electromechanical and electronic defrost timers for residential refrigerators.

Both types of defrost timers perform the same function, have the same channels of distribution, and appear to be interchangeable. Petitioner has stated that the electronic defrost timer is the "new generation" of residential defrost timers. Although both timers perform the same function,

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<sup>8</sup> Petitioner's postconference brief (hereinafter Petitioner's Brief) at 6-12.

<sup>9</sup> Respondent's postconference brief (hereinafter Respondent's Brief) at 14-15.

<sup>10</sup> Petitioner's Brief at 5-6; Conference Transcript (hereinafter Tr.) at 83.

<sup>11</sup> Asociacion Colombiana de Exportadores de Flores v. United States, 693 F. Supp. 1165, 1169 & n.5 (CIT 1988). In analyzing which domestic products are "like" the class or kind of imported articles subject to investigation, the Commission considers factors including: (1) physical characteristics and uses; (2) interchangeability; (3) channels of distribution; (4) customer and producer perceptions of the products; (5) common manufacturing facilities and production employees; and, when appropriate, (6) price. No single factor is dispositive and the Commission may consider other factors it deems relevant based upon the facts of a particular investigation. Generally, the Commission requires clear dividing lines among possible like products and disregards minor variations among them. See Torrington Co. v. United States, 747 F. Supp. 744, 748-49 (CIT 1990), aff'd, 938 F.2d 1278 (Fed. Cir. 1991).

the electronic version, which uses a microprocessor, is capable of adjusting the freezing and defrosting cycles to attain an ideal balance. In the aftermarket,<sup>12</sup> an electromechanical timer could easily replace an electronic timer because the terminal configuration (the plug) is the same on both devices and additional connections with wires are not required for the electromechanical model.<sup>13</sup>

Although the electromechanical and electronic defrost timers perform the same function, they have different parts. Both the electromechanical defrost timer, which contains a motor and other mechanical parts, and the electronic timer, which contains only electronic parts, perform their function by opening and closing electrical circuits.<sup>14</sup> Because the parts of the two defrost timers are different, they are produced on separate assembly lines by different production workers.<sup>15</sup> The perception of the two types of timers by refrigerator manufacturers and repairpersons may be different due to the difference in price and the energy efficiency of the electronic timer.<sup>16</sup>

We note there are significant differences in price for electromechanical and electronic defrost timers, but the preponderance of the information available on the issue of like product suggests that they should be treated as one like product.

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<sup>12</sup> The aftermarket consists of sales of defrost timers to original equipment manufacturers (hereinafter OEMs) and other distributors for use in the repair of refrigerators. Report at I-32. In this investigation the OEMs are manufacturers of residential refrigerators.

<sup>13</sup> Replacing an electromechanical timer with an electronic timer in the aftermarket is also possible. It is necessary, however, to splice two wires in the refrigerator to connect the grounding wire of the electronic device.

<sup>14</sup> Report at I-4.

<sup>15</sup> Tr. at 49-50.

<sup>16</sup> In this preliminary investigation, there is limited information concerning the customers' perception of the timers. We will consider new information gathered in any final investigation on this or any other factors that bear on the question of the like product.

In light of the identical functions performed by both kinds of timers, their interchangeability, and their common channels of distribution, we conclude that electromechanical and electronic residential defrost timers are a single like product.<sup>17</sup>

2. Whether commercial defrost timers should be included in the like product.

In this preliminary investigation we also considered whether the like product should be expanded to include commercial defrost timers. Both petitioner and respondent agree that these products should not be included in the like product. Based on the information in this investigation we have found that commercial defrost timers should not be included in the like product with residential defrost timers.

The commercial defrost timer is constructed differently than the residential timers. It is much larger, heavier, and more powerful. In addition, unlike the residential defrost timers that are preset at the factory or adjust automatically, the commercial defrost timer can be set by the owner of the commercial refrigerator to fit that owner's needs.<sup>18</sup>

The commercial defrost timers are substantially higher in price than

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<sup>17</sup> Commissioner Brunsdale applies her normal analysis of the like product issue, articulated at some length in Polyethylene Terephthalate Film etc. from Japan and Korea, Inv. Nos. 731-TA-458 and 459 (Final) USITC Pub. 2383 (May 1991), to the question of whether electronic and electromechanical timers are one like product. In this investigation, it seems that these products are not producer substitutable for the reasons recited in the text. However, they appear to be consumer substitutable, and so she agrees with her colleagues that they appear to be one like product. She urges the parties to address the issue in any final investigation, with particular attention to explaining what appear to be significant price differences.

<sup>18</sup> At the conference the parties were asked if there was any basis for finding separate like products for residential defrost timers that are programmed with different freeze and defrost cycles. Both parties agreed that this was not a sufficient reason to find separate like products. Tr. at 84. Petitioner's Brief at 8.

residential timers, making it very unlikely that commercial timers would be substituted for residential timers.<sup>19</sup> Finally, because the commercial and residential defrost timers are built differently, the manufacturing process and equipment are different.<sup>20</sup>

The information in this investigation demonstrates that commercial and residential defrost timers are not like products. Because of the sufficiency of this information we will not revisit this issue in any final investigation.

#### B. Domestic Industry

Based on our definition of the like product, we determine that the domestic industry consists of all domestic producers of defrost timers for residential refrigerators. There are three domestic producers of residential defrost timers, petitioner Paragon Electric Co., Inc., Two Rivers, WI; Controls Division of Eaton Corp., Crystal Lake, IL; and Mallory Controls Division of Emerson Electric Co., Indianapolis, IN.<sup>21 22</sup>

### III. CONDITION OF THE DOMESTIC INDUSTRY

In assessing whether there is a reasonable indication of material injury to a domestic industry by reason of allegedly dumped imports, the Commission is instructed to consider "all relevant economic factors which have a bearing on the state of the industry in the United States . . . ."<sup>23</sup> These include U.S. consumption, production, shipments, inventories, capacity utilization, market share, employment, wages, productivity, financial performance, return on investments, ability to raise capital, and research and development.<sup>24</sup> No

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<sup>19</sup> Tr. at 40.

<sup>20</sup> Tr. at 30-32.

<sup>21</sup> 19 U.S.C. §1677(4) (A).

<sup>22</sup> Paragon accounts for \*\*\* of domestic production. Mallory accounts for \*\*\* and Eaton accounts for \*\*\* of production. Report at I-9.

<sup>23</sup> 19 U.S.C. § 1677(7) (C) (iii).

<sup>24</sup> Id.



single factor is determinative, and the Commission considers all relevant factors "within the business cycle and conditions of competition distinctive to the affected industry."<sup>25</sup>

A. Conditions of Competition

The defrost timers under investigation are sold mainly to original equipment manufacturers (OEMs) for use in new residential refrigerators, with a much smaller number sold in the aftermarket for use as replacement parts. The demand for new refrigerators is closely tied to the level of new housing starts in the United States. Due to the weakness in housing starts and sales of new refrigerators during the past three years, the overall demand for defrost timers used in residential refrigerators has been relatively flat.<sup>26 27</sup>

The market for residential defrost timers used in new refrigerators consists of a small number of sellers and buyers. Sales by Paragon and Mallory and by Sankyo, the only Japanese producer exporting defrost timers to the United States,<sup>28</sup> account for most of the sales of residential defrost timers to the OEMs.<sup>29</sup> Five refrigerator manufacturers (General Electric, Whirlpool, Frigidaire, Admiral, and Amana) account for most purchases of defrost timers used in new refrigerators. In addition to buying from domestic producers during 1990-1992, General Electric, Whirlpool, and Admiral have all

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<sup>25</sup> Id.

<sup>26</sup> Report at I-32; Tr. at 22-23.

<sup>27</sup> Commissioner Rohr notes that although he agrees factually with this statement, he considers it to be a part of his causation analysis and not as part of his condition analysis.

<sup>28</sup> Report at I-9.

<sup>29</sup> Report at I-32. Two domestic firms, Paragon and Mallory, and the Japanese producer, Sankyo, account for \*\*\* sales of defrost timers to the residential refrigerator manufacturers. Id.

imported defrost timers directly from Sankyo.<sup>30</sup>

Sales by the domestic producers in the aftermarket are made to three groups of buyers: the OEMs which market the defrost timers through their service arms; master distributors; and independent dealers and distributors.<sup>31</sup> OEMs are the major customers of the domestic producers in this market, as well.

Subject defrost timers from Japan account for only a small percentage of the total aftermarket sales.<sup>32</sup> Petitioner currently does not consider imports from Japan to be an important source of competition in the aftermarket.<sup>33</sup> Because the aftermarket represents only a small percentage of the defrost timer market in the United States, for the purposes of this preliminary investigation, we have focused our inquiry and analysis on the original equipment market.

The majority of sales to OEMs are on a contract basis. The contract duration can range from one to five years. Although there is no formal bidding procedure, only "qualified" defrost timer producers are able to participate in negotiations for supply contracts. OEMs consider quality to be very important because defective timers can result in expensive repair costs for new refrigerators during the warranty period.<sup>34</sup>

With these conditions of competition in mind, we have examined the various indicators of the domestic industry's performance. In this investigation, the size of the domestic industry is too small to allow us to explain in any detail our analysis of the condition of the domestic industry

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<sup>30</sup> Id.

<sup>31</sup> Report at I-32; Tr. at 20-21.

<sup>32</sup> Report at I-32.

<sup>33</sup> Report at I-36, n.31. Tr. at 27.

<sup>34</sup> Report at I-32.

in a public opinion. To provide sufficient explanation to fully support our determination, business proprietary facts are addressed in the footnotes to this section.

As the law requires, we made our determination as to the domestic industry as a whole. However, to put the economic trends in perspective, we note that Paragon, a major domestic producer, was acquired by its present owner, Siebe plc of the United Kingdom, in 1989. At the time, Paragon was generating losses reflecting low gross margins. Under the new management, Paragon began to implement strategies to improve its ability to meet customer schedules, to improve the quality of its timers, and to reduce costs. The results were positive between fiscal year 1990 and 1992. Sales and gross profits were up and losses caused by production of defrost timers were more than halved. Then in fiscal year 1993 Paragon's improvement reversed itself following increased competition by imports from Japan.<sup>35</sup>

Our affirmative preliminary determination is supported by our consideration of the factors listed in the statute. In general, data on the industry's production, shipments, profitability, net sales, research and development, capacity utilization, inventories, and employment and wages show the condition of the industry to be consistent with our affirmative preliminary determination.<sup>36 37</sup>

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<sup>35</sup> Petitioner's Brief at 2-4.

<sup>36</sup> U.S. producers' U.S. shipments of defrost timers \*\*\* by quantity, from 1990 to 1991, \*\*\* those shipments \*\*\* from 1991 to 1992. By value, the shipments \*\*\* from 1990 to 1991 and \*\*\* from 1991 to 1992. Report at I-11. Regarding profitability, operating income and loss to net sales ratio for the industry showed \*\*\* in 1990 to \*\*\* in 1991. The \*\*\* in 1992. Net sales \*\*\* from 1990 to 1991, from \*\*\*. Net sales \*\*\* in 1992. Cost of goods sold \*\*\* from 1990 to 1991, \*\*\*. Selling, general, and administrative expenses \*\*\* from 1990 to 1991, \*\*\*. Research and development expenses \*\*\* in 1990 \*\*\* in 1991. These expenses \*\*\* in 1992. Capital expenditures \*\*\* in 1990 to \*\*\* in 1991. These

(continued...)

V. REASONABLE INDICATION OF MATERIAL INJURY BY REASON OF ALLEGED LTFV IMPORTS FROM JAPAN

In determining whether there is a reasonable indication that the domestic industry is materially injured by reason of the imports under investigation, the statute directs the Commission to consider:

(I) the volume of imports of the merchandise which is the subject of the investigation;

(II) the effect of imports of that merchandise on prices in the United States for like products; and

(III) the impact of imports of such merchandise on domestic producers of like products, but only in the context of production operations in the United States.<sup>38</sup>

In making this determination, the Commission may consider "such other economic factors as are relevant to the determination . . . ." <sup>39</sup> Although we may consider information that indicates that injury to the industry is caused by factors other than LTFV imports, we do not weigh causes.<sup>40 41 42</sup>

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<sup>36</sup> (...continued)

expenditures \*\*\* in 1992. Report at I-14 and 17.

Production of residential defrost timers \*\*\* from 1990 to 1991 before \*\*\* from 1991 to 1992. Capacity utilization \*\*\* in 1990 \*\*\* in 1991. Capacity utilization \*\*\* in 1992. The U.S. defrost timer industry appears to have \*\*\* throughout the period of investigation. Report at I-11. U.S. producers' inventories \*\*\* from 1990 to 1991, \*\*\* from 1991 to 1992. As a percentage of production, inventories were \*\*\* in 1990, \*\*\* in 1991, and \*\*\* in 1992. The information on employment and wages \*\*\* the other indicators. The number of production and related workers producing defrost timers \*\*\* from 1990 to 1991 and \*\*\* from 1991 to 1992. Hours worked \*\*\* from 1990 to 1991 and \*\*\* from 1991 to 1992. Productivity, measured in units per hour, \*\*\* from 1990 to 1991 and \*\*\* from 1991 to 1992. The average hourly wages and hourly total compensation \*\*\* from 1990 to 1992. Report at I-11 and I-14.

<sup>37</sup> Based on their analysis of the information in the record, Chairman Newquist and Commissioner Rohr conclude that there is a reasonable indication that the domestic residential defrost timers industry is currently experiencing material injury.

<sup>38</sup> 19 U.S.C. § 1677(7)(B)(i).

<sup>39</sup> 19 U.S.C. § 1677(7)(B)(ii).

<sup>40</sup> Chairman Newquist, Commissioner Rohr, and Commissioner Nuzum note that the Commission need not determine that imports are "the principal, a substantial or a significant cause of material injury." S. Rep. No. 249, 96th Cong., 1st (continued...)

We have examined the economic factors stated above and find a reasonable indication that the domestic industry is materially injured by reason of imports of residential defrost timers from Japan which are alleged to be sold

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<sup>40</sup> (...continued)

Sess. 57 and 74 (1979). Rather, a finding that imports are a cause of material injury is sufficient. See, e.g., Metallwerken Nederland, B.V. v. United States, 728 F. Supp. 730, 741 (CIT 1989); Citrosuco Paulista S.A. v. United States, 704 F. Supp. 1075, 1101 (CIT 1988).

<sup>41</sup> Vice Chairman Watson notes that the courts have interpreted the statutory requirement that the Commission consider whether there is material injury "by reason of" the subject imports in a number of different ways. Compare, e.g., United Engineering & Forging v. United States, 779 F. Supp. 1375, 1391 (CIT 1991) ("rather it must determine whether unfairly-traded imports are contributing to such injury to the domestic industry. Such imports, therefore need not be the only cause of harm to the domestic industry" (citations omitted)); Metallwerken Nederland B.V. v. United States, 728 F. Supp. 730, 741 (CIT 1989) (affirming a determination by two Commissioners that "the imports were a cause of material injury"); USX Corporation v. United States, 682 F. Supp. 60, 67 (CIT 1988) ("any causation analysis must have at its core, the issue of whether the imports at issue cause, in a non de minimis manner, the material injury to the industry. . .")

Accordingly, Vice Chairman Watson has decided to adhere to the standard articulated by Congress in the legislative history of the pertinent provisions, which states that the Commission must satisfy itself that, in light of all the information presented, there is a "sufficient causal link between the less-than-fair-value imports and the requisite injury." S. Rep. No. 249, 96th Cong., 1st Sess. 75 (1979).

<sup>42</sup> Commissioner Brunsdale and Commissioner Crawford note that the statute requires that the Commission determine whether a domestic industry is "materially injured by reason of" the allegedly LTFV imports. Many, if not most, domestic industries are subject to injury from more than one economic factor. Of these factors, there may be more than one that independently is causing material injury to the domestic industry. It is assumed in the legislative history that the "ITC will consider information which indicates that harm is caused by factors other than the less-than-fair-value imports." S. Rep. No. 249 at 75. However, the legislative history makes it clear that the Commission is not to weigh or rank the factors that are independently causing material injury. Id. at 74; H.R. Rep. No. 317 at 47. The Commission is not to determine if the allegedly LTFV imports are "the principal, a substantial or a significant cause of material injury." S. Rep. No. 249 at 74. Rather, it is to determine whether any injury "by reason of" the allegedly LTFV imports is material. That is, the Commission must determine if the subject imports are causing material injury to the domestic industry. "When determining the effect of imports on the domestic industry, the Commission must consider all relevant factors that can demonstrate if unfairly traded imports are materially injuring the domestic industry." S. Rep. No. 71, 100th Cong., 1st Sess. 116 (1987) (emphasis supplied).

at LTFV.

Although business proprietary information precludes our characterization of the trends of the Japanese imports during the period of investigation for the public record, we find the volume of such imports to be significant for purposes of a preliminary investigation.<sup>43</sup> Although petitioner contended that imports from Japan increased dramatically during the period of investigation, respondent, Sankyo, argued that petitioner exaggerated the level of imports by including those defrost timers from Japan shipped to U.S. foreign trade zones. Sankyo urged the Commission not to include in its import data and data on share of U.S. consumption those defrost timers exported from Japan directly to an FTZ in the United States.<sup>44</sup> Respondent argues that the defrost timers are not imports when they enter an FTZ because they have not entered the United States for the purposes of imposition of customs duties. Petitioner alleges that shipments into an FTZ are imports into the United States for material injury purposes.

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<sup>43</sup> Based on quantity, market penetration by imports by Japan (consumed within the U.S. customs territory and not including imports transformed in foreign trade zones) \*\*\* in 1990 to \*\*\* in 1991. Market penetration \*\*\* in 1992. Japanese defrost timers began entering U.S. FTZs \*\*\*. If these imports were to be considered as imports of defrost timers into U.S. territory, the total market penetration between 1991 and 1992 would be \*\*\*. Report at I-27.

Excluding consumption of imports within FTZs, the record shows that U.S. shipments of imports from Japan \*\*\* in 1990, \*\*\* in 1991, and \*\*\* in 1992. If the imports transformed in the FTZs are included in the import figures, the 1990 and 1991 U.S. shipments of imports from Japan \*\*\*, \*\*\* 1992 shipments are \*\*\*. Report at I-30, Table 15.

During the period of investigation, domestic consumption, excluding consumption of imports within FTZs, \*\*\* in 1990 \*\*\* in 1991. Apparent consumption \*\*\* in 1992. If the defrost timers transformed in the FTZs are included in the data, the apparent domestic consumption for 1992 is \*\*\*. Report at I-30, Table 15.

<sup>44</sup> Respondent's Brief at 10-12. We note that there was some difficulty obtaining reliable information on purchases of Japanese defrost timers by \*\*\*. \*\*\* it was unable to break out the information for the purposes of this preliminary investigation. The Commission \*\*\*, but we will seek a more reliable breakout of Japanese imports from \*\*\* in any final investigation.

In previous investigations the Commission has analyzed the issue of foreign trade zones only in the context of deciding that producers located in FTZs in the United States will be considered members of the U.S. industry.<sup>45</sup> We have examined this issue in the context of this investigation but have decided to defer any definitive decision to the final investigation, when we expect to obtain further briefing from both sides on this issue. For the purposes of this preliminary investigation, we would reach an affirmative determination whether or not data on shipments of Japanese defrost timers to and through FTZs were included in our calculation of import volume and apparent market share.

In evaluating the price effect of subject imports, the statute states that the Commission shall consider whether:

(I) there has been significant price underselling by the imported merchandise as compared with the price of like products of the United States; and

(II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.

A factor in examining the comparative prices of the Japanese imports and the domestic defrost timers is the issue of quality. Although there is mixed information in the record on whether the relative quality of the imported and domestic defrost timers is as important or more important than price, there is certain information that quality agreements contained in sales contracts between producers and OEMs may be a significant factor for price comparisons.

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<sup>45</sup> Commercial Microwave Ovens, Assembled or Unassembled, from Japan, Inv. No. 731-TA-523 (Preliminary), USITC Pub. 2405 (July 1991) at I-10; Certain All-Terrain Vehicles from Japan, Inv. No. 731-TA-388 (Final), USITC Pub. 2163 (March 1989). See *id.* at n.46 (location of production in an FTZ in Nebraska is "United States production" even though an FTZ is outside "the customs territory of the United States").

Respondent pointed out that in its 1991 contract with GE, it entered into a Value Added Supplier Agreement with GE. This may be a significant provision in that Sankyo takes on the risk of the cost of repairing GE refrigerators that malfunction because of a defective Sankyo defrost timer.<sup>46 47</sup>

Again, the specific data on prices are business proprietary information. We can say that the data are mixed, but shows some fairly consistent underselling by the Japanese imports.<sup>48</sup> In addition, while the information obtained in this preliminary investigation does not indicate price depression, examination of this information suggests that price suppression may be occurring.<sup>49</sup>

We note that in this market for defrost timers, where there are few purchasers for the majority of the sales (*i.e.*, sales to OEMs) and the contracts through which the sales are made can extend from 1 to 5 years, any lost sale to the imports from Japan would have a significant impact on the domestic producers.<sup>50</sup>

As noted above, the issues of quality and reliability have been raised in this investigation in the context of causation. We will reexamine the role

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<sup>46</sup> Despite the financial risk entailed by this provision, Sankyo was apparently willing to enter into a contract with this provision because of its quality history. In early 1993, a purchasing agent for GE told Sankyo's sales manager that for 1992 GE had received no reports of manufacturing rejects, defects or problems with any Sankyo defrost timer. Respondent's Brief at 5-8.

<sup>47</sup> \*\*\*. Report at I-37, n.35.

<sup>48</sup> Commissioner Brunsdale rarely gives much weight to evidence of underselling since it usually reflects some combination of differences in quality, other nonprice factors, or fluctuations in the market during the period in which comparisons were sought.

<sup>49</sup> Report at I-33 to I-36, I-14 to I-22, and I-37.

<sup>50</sup> The information the Commission received on lost sales and lost revenues supports this point. Report at I-36-37. See also Aluminum Sulfate from Venezuela, Inv. No. 731-TA-431 (Final), USITC Pub. 2242 (Dec. 1989); Electrolytic Manganese Dioxide from Greece and Japan, Inv. Nos. 731-TA-406 and 408 (Final), USITC Pub. 2177 (Apr. 1989).



that quality plays in the purchasing decisions by OEMs in any final investigation.<sup>51</sup>

VI. CONCLUSION

For the reasons set forth above, we determine that there is a reasonable indication that the domestic residential defrost timer industry is materially injured by reason of the subject imports from Japan.

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<sup>51</sup> Commissioner Brunsdale finds an absence of clear and convincing evidence that there is no material injury to the U.S. industry based on the significant market share of the Japanese imports and the dumping margin of over 80 percent the petitioner alleges. Although only an allegation, this margin (which is the best evidence available now) is sufficiently large that she has to assume that these imports would not be sold in this country at all, unless the differences in quality were substantial. There is not now clear and convincing evidence that this is the case, so she could not but make an affirmative determination.



**INFORMATION OBTAINED IN THE INVESTIGATION**



## INTRODUCTION

On January 19, 1993, the Commission received a petition filed by counsel on behalf of Paragon Electric Co., Inc., Two Rivers, WI. The petition alleges that an industry in the United States is materially injured and threatened with material injury by reason of imports from Japan of defrost timers for residential refrigerators<sup>1</sup> that are alleged to be sold in the United States at less than fair value (LTFV).

Accordingly, the Commission instituted, effective January 19, 1993, preliminary antidumping investigation No. 731-TA-643 (Preliminary), under section 733(a) of the Tariff Act of 1930, to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Japan of defrost timers for residential refrigerators, provided for in subheading 9107.00.40 of the Harmonized Tariff Schedule of the United States (HTS), that are allegedly being sold in the United States at LTFV.

Notice of the institution of the Commission's investigation and of a conference to be held in connection therewith was posted in the Office of the Secretary, U.S. International Trade Commission, Washington, DC, and published in the Federal Register on January 27, 1993 (58 F.R. 6296).<sup>2</sup> The conference was held on February 9, 1993,<sup>3</sup> and the Commission voted on this investigation on March 2, 1993. The statute directs that the Commission make its determination in this case within 45 days after receipt of the petition, or by March 5, 1993.

A summary of the data collected in this investigation is presented in appendix C.

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<sup>1</sup> As defined by the U.S. Department of Commerce in its "scope of investigation" statement, defrost timers are electromechanical and electronic defrost timers for residential refrigerators. Electromechanical defrost timers are comprised of several components that make or break electric circuits by activating two sets of electrical contact points--one to disconnect the compressor (the cooling mechanism) and the other to connect the defrost heater. The articles are equipped with a synchronous or subsynchronous motor. The defrost timer disconnects the compressor by opening an electrical circuit after the compressor itself has run for a length of time predetermined by the manufacturer depending on the specifications of the model. Upon completion of the compressor run cycle (and simultaneously with the compressor's disconnection) the defrost heater is activated and runs for a preset time (again depending on the model), as predetermined by the manufacturer. Electronic defrost timers have a similar function but operate with greater efficiency. This is because a microprocessor in the device uses information gathered during the defrost cycle to adjust the compressor run time. This system defrosts only when needed, thereby improving the efficiency of the refrigerator.

<sup>2</sup> Copies of the Commission's and Commerce's notices are shown in app. A.

<sup>3</sup> A list of witnesses appearing at the conference is presented in app. B.

## THE PRODUCT

### Description and Uses

The imported articles under investigation are defrost timers used in residential refrigerators to reduce or eliminate the buildup of ice on the evaporator coils. Defrost timers for residential refrigerators are either electromechanical or electronic. Unlike defrost timers used as a component of commercial refrigerators, defrost timers of residential refrigerators do not activate a defrost cycle based upon the time of day and, therefore, do not incorporate a time clock. Defrost timers for residential refrigerators are also smaller in size and voltage output and are less than one-fifth the cost of commercial refrigerator defrost timers.

Electromechanical defrost timers, equipped with a synchronous or subsynchronous motor, make or break electric circuits by activating two sets of electrical contact points, one to disconnect the compressor (the cooling mechanism) and the other to connect the defrost heater. The electromechanical defrost timer disconnects the compressor by opening an electrical circuit after the compressor has run for a length of time predetermined by the refrigerator manufacturer, depending on the specifications of the model. Upon completion of the compressor run cycle and simultaneously with the compressor's disconnection, the defrost timer activates the defrost heater to run for a predetermined period of time. The defrost heater melts the ice that has accumulated on the evaporator coil. During the defrost cycle, the electromechanical defrost timer is on at all times. The refrigerator manufacturer generally specifies a defrost time approximately five minutes longer than actual defrost occurs, with the extra time allowing for water to run off the evaporator coil before the timer turns on the compressor following a defrost.

Electronic defrost timers have a similar function as electromechanical defrost timers. However, instead of a synchronous motor, electronic defrost timers contain a microprocessor that uses information gathered during the defrost cycle to adjust the motor's compressor run time for more efficient operation of the refrigerator. After completion of a defrost, the electronic defrost timer compares the actual defrost time to the factory-programmed optimum defrost time. If the actual defrost time is longer than the optimum defrost time, the electronic defrost timer shortens the time between defrosts during the next cycle. Alternatively, if the actual defrost time is shorter than the optimum defrost time, the electronic defrost timer lengthens the time between defrosts during the following cycles. Thus, by repeated measurements of actual defrost times and automatic adjustments to the times between defrosts, the electronic defrost timer reportedly allows the refrigerator to defrost only when needed.

### Manufacturing Processes

Imported electromechanical defrost timers are believed to be manufactured using similar technological processes as those currently employed by domestic manufacturers in electromechanical defrost timers produced for the original equipment market. Many of the parts that make up domestic

electromechanical defrost timers are fabricated, machined, and assembled by dedicated equipment and production workers. \*\*\*.<sup>4</sup>

The domestic manufacture of electromechanical defrost timers involves design and development of the unit to conform with timing specifications established by refrigerator manufacturers and with substantially automated fabrication and assembly of subassemblies that make up the finished product. Machine tooling on variously sized molding presses allows automatic operation in the molding of plastics used in cases, covers, reduction and worm gearing, and cams. Personnel set up molds for operators, who run the molding machines and inspect completed molded parts.<sup>5</sup>

The contact-bearing blades used in the switching mechanism are run from an automatic forming/shearing machine that punches out forms and assembles contacts from rolls of copper alloy and silver composite materials, respectively. Metal parts are stamped, washed, and inspected with various measuring instruments and gages. Subassembly mechanisms in the motor are assembled automatically with customized high-speed, dedicated production equipment. Operators load parts, perform minor maintenance, and inspect production quality. Coils of magnet wire are automatically wound, soldered, and tested for surges and resistance levels. Upon final assembly, each electromechanical defrost timer is tested on specially-built test racks for proper operation of the motor, and the timing is checked against print specifications. Subsequently, timers are packed according to customer packaging requirements.

The domestic manufacture and assembly of electronic defrost timers are substantially different from those for electromechanical defrost timers. The production of electronic defrost timers, currently numbering \*\*\* less units than that of electromechanical defrost timers, incorporates different components, materials, equipment, processes, and personnel; proportionately more parts (chiefly electronic circuitry and components) procured from outside vendors; and sensitive handling of delicate electronic circuitry.

#### U.S. Tariff Treatment

Electromechanical defrost timers for residential refrigerators are classified for tariff purposes in subheading 9107.00.40 of the HTS, which encompasses time switches with clock or watch movements or with synchronous

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<sup>4</sup> Per conversations with \*\*\*, during a tour of petitioner's manufacturing plant on Feb. 3, 1993.

<sup>5</sup> The petitioner also continues to manufacture a model of electromechanical defrost timer, intended for the aftermarket, that contains components and casing fabricated of metal and that operates interchangeably with the model manufactured mostly of materials of plastics. Subject imports from Japan are similar to and interchangeable with the domestic products and are fabricated mostly of plastics.

motors, valued not over \$5 each.<sup>6</sup> The column 1-general (most-favored-nation) rate of duty for this subheading, applicable to imports of the subject electromechanical defrost timers imported from Japan, is a compound rate of duty of 15 cents each plus 4 percent of the customs value plus 2.5 cents per jewel.

At the present time, the petitioner believes that electronic defrost timers for residential refrigerators are not being imported into the United States, and the respondent stated at the conference that it does not manufacture such products. The Customs Service believes that electronic defrost timers for residential refrigerators comparable to those produced domestically by the petitioner, if they were to be imported into the United States, would be classified for tariff purposes under HTS heading 9107.<sup>7</sup>

It is believed that a substantial portion of the defrost timers imported into the United States from Japan (falling under HTS subheading 9107.00.40), including subject electromechanical defrost timers for refrigerators, are imported into special purpose foreign-trade zones (subzones) for incorporation into such finished products as refrigerators. Foreign-trade zones, including subzones, are considered to be outside the customs territory of the United States. Import duties on foreign merchandise are not collected until the merchandise is entered into U.S. customs territory. The importer has the choice of paying duties on goods in their condition as originally admitted into a zone (privileged status) or in their condition at the time of entry into the customs territory (nonprivileged status), the latter generally used for certain finished goods. Most subzone operations are pursued for the advantage of the so-called "inverted tariff" situations. These situations exist when the rates of duty on zone-manufactured or zone-advanced articles are lower than the rates applicable to the foreign components contained in the articles. Such is the case with respect to defrost timers for residential refrigerators imported from Japan into a subzone; the timers would, if imported directly into the customs territory, have a rate of duty considerably in excess of the 2.9 percent ad valorem rate of duty on completed household refrigerators.

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<sup>6</sup> Time switches are devices that regulate the operation of various control switches on a timed basis. They are usually components of larger systems that make or break an electric circuit automatically. Time switches are used in such areas as home appliances, heating and air-conditioning systems, and lighting circuits. They usually contain clock movements or modules and fall into one of three types: mechanical, electromechanical, and electronic. Mechanical time switches are spring wound and most often used in appliances. Electromechanical time switches, which generally have a synchronous motor, are employed when precision or switching power somewhat greater than that of mechanical time switches is required; they are found in both household and industrial applications. Electronic time switches have a solid-state module, making them the most precise of the three types, and have applications in both industry and the home.

<sup>7</sup> Per telephone conversation with \*\*\*, on Feb. 24, 1993.



## THE NATURE AND EXTENT OF ALLEGED SALES AT LTFV

The petition compared prices of the defrost timers sold by Sankyo Seiki Manufacturing Co., Ltd. (Sankyo) in the United States with the estimated prices of defrost timers sold by Sankyo in Japan. The petition notes that defrost timers sold by Sankyo in the United States are not identical to defrost timers sold by Sankyo in Japan; therefore, adjustments were made to the Japanese price to account for the differences. By subtracting the weighted-average U.S. selling price from the weighted-average foreign market value, the petitioner arrived at alleged LTFV margins ranging from 81 to 86 percent.

Computation of the alleged LTFV margins is discussed in detail in the petition.<sup>8</sup>

## THE DOMESTIC MARKET

### U.S. Consumption

The data on apparent U.S. consumption of defrost timers presented in table 1 are composed of U.S. defrost timer producers' U.S. shipments reported in response to the Commission's producers' questionnaires plus U.S. shipments of imported defrost timers reported in response to the Commission's importers' questionnaires.

On the basis of the data presented in table 1, apparent consumption of defrost timers (excluding imports consumed in U.S. foreign-trade zones), measured in units, \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992. Apparent consumption of defrost timers (including imports consumed in U.S. foreign-trade zones), measured in units, \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992.

### U.S. Producers

The petition lists the following producers of defrost timers for residential refrigerators:<sup>9</sup>

Paragon Electric Co., Inc., Two Rivers, WI  
Controls Division of Eaton Corp., Crystal Lake, IL  
Mallory Controls Division of Emerson Electric Co.,  
Indianapolis, IN

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<sup>8</sup> Petition, pp. 24-33.

<sup>9</sup> There are three producers of defrost timers for commercial refrigerators: Independent Energy, Inc., East Greenwich, RI; Paragon Electric Co., Inc., Two Rivers, WI; and Precision Multiple Controls, Inc., Midland, NJ. \*\*\*. Counsel for petitioner contends, and counsel for respondent Sankyo agrees (transcript of conference, p. 83), that defrost timers for commercial refrigerators are not relevant in this investigation.

Table 1

Defrost timers for residential refrigerators: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, by types, 1990-92

(In 1,000 units)			
Item	1990	1991	1992
Excluding importers' consumption within foreign-trade zones: <sup>1</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Apparent consumption.....	***	***	***
Including importers' consumption within foreign-trade zones: <sup>2</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Apparent consumption.....	***	***	***

<sup>1</sup> Includes U.S. importers' shipments within the U.S. customs territory but excludes U.S. importers' shipments within U.S. foreign-trade zones (i.e., excludes consumption of imports within U.S. foreign-trade zones).

<sup>2</sup> Includes all U.S. importers' U.S. shipments (i.e., within the U.S. customs territory and U.S. foreign-trade zones).

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

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

Paragon Electric Co., Inc. (Paragon), a Wisconsin corporation, is a subsidiary of Ranco, Inc., a Delaware corporation. Ranco is a subsidiary of Siebe, Inc., a Delaware corporation, which is wholly owned by Siebe plc of the United Kingdom.<sup>10</sup> Eaton Corp. (Eaton) manufactures defrost timers at Crystal Lake, IL. Eaton's corporate headquarters are located in Cleveland, OH. Mallory Controls Division of Emerson Electric Co. (Mallory) manufactures defrost timers at Sparta, TN. Mallory's corporate headquarters are located in Indianapolis, IN.<sup>11</sup>

<sup>10</sup> Petition, p. 2. In its questionnaire response, Paragon stated that \*\*\*.

<sup>11</sup> \*\*\*. \*\*\*.

All domestic producers of defrost timers for residential refrigerators responded to the Commission's questionnaire, and the following tabulation presents each company's share of 1992 production, based on units, and the firm's position with respect to the petition:

<u>Firm</u>	<u>Share of 1992 total production (percent)</u>	<u>Position with respect to the petition</u>
Eaton		
Crystal Lake, IL . . . .	***	***
Mallory		
Indianapolis, IN . . . .	***	***
Paragon		
Two Rivers, WI . . . . .	***	Supports
	<u>100.0</u>	

#### U.S. Importers

The petition identified three producers of defrost timers in Japan: Sankyo; Tokyo Parts Kogyo Co., Ltd. (Tokyo); and Nakagawa Denka Co., Ltd. (Nakagawa), but, according to the petition and confirmed at the Commission's conference, Sankyo is the only Japanese exporter of defrost timers to the United States.<sup>12</sup> In addition to Sankyo, the petition identified Admiral Refrigeration Co. (Admiral), General Electric, and Whirlpool Corp. (Whirlpool) as likely importers of defrost timers from Japan.<sup>13</sup> Information provided by the U.S. Customs Service identified a limited number of other possible importers. Questionnaires were sent to all firms identified as likely importers of defrost timers.

\*\*\*. \*\*\*. No other importers of defrost timers from Japan were identified in this preliminary investigation.

#### Channels of Distribution

Most sales are made directly by the producer to end users; however, some sales of replacement defrost timers are made through distributors. The petition has an extensive discussion of the U.S. market for defrost timers.<sup>14</sup>

Shipments of defrost timers in 1992 by domestic producers were \*\*\* percent to unrelated distributors and \*\*\* percent to unrelated end users. Captive shipments by refrigerator manufacturers accounted for \*\*\* percent of total shipments of defrost timers imported from Japan in 1992. The remainder, \*\*\* percent, were sold to unrelated distributors.

<sup>12</sup> Petition, p. 24. Transcript of conference, p. 93.

<sup>13</sup> Petition, p. 12.

<sup>14</sup> Petition, pp. 13-22.

CONSIDERATION OF THE QUESTION OF ALLEGED MATERIAL INJURY  
TO AN INDUSTRY IN THE UNITED STATES

Section 771(7)(B) of the Tariff Act of 1930 (19 U.S.C. § 1677(7)(B)) provides that in making its determination in this investigation the Commission--

shall consider (I) the volume of imports of the merchandise which is the subject of the investigation, (II) the effect of imports of that merchandise on prices in the United States for like products, and (III) the impact of imports of such merchandise on domestic producers of like products, but only in the context of production operations within the United States; and

may consider such other economic factors as are relevant to the determination regarding whether there is material injury by reason of imports.

Section 771(7)(C) of the Act (19 U.S.C. § 1677(7)(C)) further provides that--

In evaluating the volume of imports of merchandise, the Commission shall consider whether the volume of imports of the merchandise, or any increase in that volume, either in absolute terms or relative to production or consumption in the United States is significant.

In evaluating the effect of imports of such merchandise on prices, the Commission shall consider whether (I) there has been significant price underselling by the imported merchandise as compared with the price of like products of the United States, and (II) the effect of imports of such merchandise otherwise depresses prices to a significant degree or prevents price increases, which otherwise would have occurred, to a significant degree.

In examining the impact required to be considered under subparagraph (B)(iii), the Commission shall evaluate (within the context of the business cycle and conditions of competition that are distinctive to the affected industry) all relevant economic factors which have a bearing on the state of the industry in the United States, including, but not limited to, (I) actual and potential decline in output, sales, market share, profits, productivity, return on investments, and utilization of capacity, (II) factors affecting domestic prices, (III) actual and potential negative effects on cash flow, inventories, employment, wages, growth, ability to raise capital, and investment, and (IV) actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.

Available information on the volume of imports (item (B)(I) above) is presented in the section of this report entitled "U.S. Imports." Information on the other factors specified is presented in this section, and (except as noted) is based on the questionnaire responses of 3 firms that accounted for 100 percent of U.S. production of defrost timers for residential refrigerators during 1992.

### U.S. Capacity, Production, and Capacity Utilization

The Commission requested producers of defrost timers to provide data on their capacity from 1990 to 1992.<sup>15</sup> Reported capacity \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992 (table 2).

U.S. production of defrost timers by U.S. producers \*\*\* percent from 1990 to 1991 and then \*\*\* percent from 1991 to 1992.

Capacity utilization \*\*\* percent in 1990 to \*\*\* percent in 1991 and \*\*\* percent in 1992. The U.S. defrost timer industry appears to have substantial excess capacity when capacity is compared to apparent consumption presented in table 1.

### U.S. Producers' Shipments

U.S. producers' U.S. shipments of defrost timers \*\*\* percent, on the basis of quantity, from 1990 to 1991 and \*\*\* percent from 1991 to 1992 (table 3). On the basis of value, U.S. producers' U.S. shipments \*\*\* percent from 1990 to 1991 and then \*\*\* percent from 1991 to 1992.

U.S. producers' export shipments of defrost timers \*\*\* percent, on the basis of quantity, from 1990 to 1991 and \*\*\* percent from 1991 to 1992. On the basis of value, U.S. producers' export shipments \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992.

### U.S. Producers' Inventories

U.S. producers' yearend inventories \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992 (table 4). \*\*\* the inventories consisted of electromechanical defrost timers. As a percent of production, inventories were \*\*\* percent in 1990, \*\*\* percent in 1991, and \*\*\* percent in 1992.

### Employment and Wages

The number of production and related workers producing defrost timers \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992 (table 5).

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<sup>15</sup> Practical capacity was defined as the greatest level of output a plant can achieve within the framework of a realistic work pattern. Producers were asked to consider, among other factors, a normal product mix and an expansion of operations that could be reasonably attained in their industry and locality in setting capacity in terms of the number of shifts and hours of plant operations.

Table 2

Defrost timers for residential refrigerators: U.S. capacity, production, and capacity utilization, by products and by firms, 1990-92

Item	1990	1991	1992
<u>Average-of-period capacity (1,000 units)</u>			
Electromechanical:			
Eaton.....	***	***	***
Mallory.....	***	***	***
Paragon.....	***	***	***
Total.....	***	***	***
Electronic:			
Paragon.....	***	***	***
Total.....	***	***	***
All defrost timers:			
Eaton.....	***	***	***
Mallory.....	***	***	***
Paragon.....	***	***	***
Total.....	***	***	***
<u>Production (1,000 units)</u>			
Electromechanical:			
Eaton.....	***	***	***
Mallory.....	***	***	***
Paragon.....	***	***	***
Total.....	***	***	***
Electronic:			
Paragon.....	***	***	***
Total.....	***	***	***
All defrost timers:			
Eaton.....	***	***	***
Mallory.....	***	***	***
Paragon.....	***	***	***
Total.....	***	***	***
<u>Capacity utilization (percent)</u>			
Electromechanical:			
Eaton.....	***	***	***
Mallory.....	***	***	***
Paragon.....	***	***	***
Average.....	***	***	***
Electronic:			
Paragon.....	***	***	***
Average.....	***	***	***
All defrost timers:			
Eaton.....	***	***	***
Mallory.....	***	***	***
Paragon.....	***	***	***
Average.....	***	***	***

Note.--Average ratios are calculated using data of firms supplying both numerator and denominator information.

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

Table 3

Defrost timers for residential refrigerators: Shipments by U.S. producers, by products and by types, 1990-92

Item	1990	1991	1992
<hr/>			
	Quantity (1,000 units)		
Electromechanical:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
Electronic:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
All defrost timers:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
<hr/>			
	Value (1,000 dollars)		
Electromechanical:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
Electronic:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
All defrost timers:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
<hr/>			
	Unit value		
Electromechanical:			
Domestic shipments <sup>1</sup> .....	\$***	\$***	\$***
Exports.....	***	***	***
Average.....	***	***	***
Electronic:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Average.....	***	***	***
All defrost timers:			
Domestic shipments <sup>1</sup> .....	***	***	***
Exports.....	***	***	***
Average.....	***	***	***

<sup>1</sup> There were no reported company transfers.

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

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

Table 4

Electromechanical defrost timers for residential refrigerators: Yearend inventories of U.S. producers, 1990-92

Item	1990	1991	1992
Inventories (1,000 units)....	***	***	***
Ratio of inventories to production (percent).....	***	***	***

Note.--Ratios are calculated using data of firms supplying both numerator and denominator information.

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

Hours worked \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992. Productivity, measured in units per hour, \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992. Unit labor costs \*\*\* percent from 1990 to 1991 and \*\*\* percent from 1991 to 1992.

#### Financial Experience of U.S. Producers

Three U.S. producers--Paragon, Mallory, and Eaton--accounting for all U.S. production of defrost timers for residential refrigerators in 1992, provided income-and-loss data on their operations on defrost timers for residential refrigerators. Paragon, the only producer of electronic defrost timers for residential refrigerators, also provided income-and-loss data for electronic defrost timers.

With regard to defrost timers for commercial refrigerators, Paragon and Eaton supplied income-and-loss data. Data on their operations on defrost timers for commercial refrigerators are presented in appendix D. Mallory does not produce defrost timers for commercial refrigerators.

#### Operations on Defrost Timers for Residential Refrigerators

Aggregate income-and-loss data of the three producers on their defrost timers for residential refrigerators are shown in table 6. Table 7 presents selected company-by-company income-and-loss indicators for these same operations. Net sales value \*\*\* by \*\*\* percent from \*\*\* in 1990 to \*\*\* in 1991, and then \*\*\* by \*\*\* percent to \*\*\* in 1992. Net sales quantities \*\*\* by \*\*\* percent from 1990 to 1991 and \*\*\* by \*\*\* percent from 1991 to 1992. Paragon reported a \*\*\* of \*\*\* percent in its sales volume from 1991 to 1992. During this period, the other producers showed \*\*\*.

Aggregate data for the three producers show operating \*\*\* in each of the years covered by the investigation. The operating \*\*\* from \*\*\*, or \*\*\* percent of net sales, in 1990 to \*\*\*, or \*\*\* percent of net sales, in 1991 and then \*\*\* to \*\*\*, or \*\*\* percent of net sales, in 1992.



Table 5

Average number of U.S. production and related workers producing defrost timers for residential refrigerators, hours worked,<sup>1</sup> wages and total compensation paid to such employees, and hourly wages, productivity, and unit labor costs,<sup>2</sup> by products, 1990-92<sup>3</sup>

Item	1990	1991	1992
Number of production and related workers (PRWs)			
Electromechanical.....	***	***	***
Electronic.....	***	***	***
Total.....	***	***	***
Hours worked by PRWs (1,000 hours)			
Electromechanical.....	***	***	***
Electronic.....	***	***	***
Total.....	***	***	***
Wages paid to PRWs (1,000 dollars)			
Electromechanical.....	***	***	***
Electronic.....	***	***	***
Total.....	***	***	***
Total compensation paid to PRWs (1,000 dollars)			
Electromechanical.....	***	***	***
Electronic.....	***	***	***
Total.....	***	***	***
Hourly wages paid to PRWs			
Electromechanical.....	\$***	\$***	\$***
Electronic.....	***	***	***
Average.....	***	***	***
Hourly total compensation paid to PRWs			
Electromechanical.....	\$***	\$***	\$***
Electronic.....	***	***	***
Average.....	***	***	***
Productivity (units per hour)			
Electromechanical.....	***	***	***
Electronic.....	***	***	***
Average.....	***	***	***
Unit labor costs			
Electromechanical.....	\$***	\$***	\$***
Electronic.....	***	***	***
Average.....	***	***	***

<sup>1</sup> Includes hours worked plus hours of paid leave time.

<sup>2</sup> On the basis of total compensation paid.

<sup>3</sup> Firms providing employment data accounted for 100 percent of reported total U.S. shipments (based on quantity) in 1992.

Note.--Ratios are calculated using data of firms supplying both numerator and denominator information.

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

Table 6  
Income-and-loss experience of U.S. producers<sup>1</sup> on their operations  
producing defrost timers for residential refrigerators, calendar years  
1990-92

Item	1990	1991	1992
Quantity (1,000 units)			
Net sales . . . . .	***	***	***
Value (1,000 dollars)			
Net sales . . . . .	***	***	***
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
Interest expense <sup>2</sup> . . . . .	***	***	***
Other income or (expense) net <sup>2</sup> . . . . .	***	***	***
Net income or (loss) before income taxes. . . . .	***	***	***
Depreciation and amortization <sup>3</sup> . . . . .	***	***	***
Cash flow <sup>4</sup> . . . . .	***	***	***
Value (per unit)			
Net sales . . . . .	\$***	\$***	\$***
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
Share of net sales (percent)			
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
Net income or (loss) before income taxes. . . . .	***	***	***
Number of firms reporting			
Operating losses. . . . .	***	***	***
Net losses. . . . .	***	***	***
Data. . . . .	***	***	***

<sup>1</sup> Producers are Paragon, Mallory, and Eaton.

<sup>2</sup> \*\*\* did not allocate interest expense and other income or expense to defrost timers.

<sup>3</sup> \*\*\* did not provide depreciation and amortization expense. \*\*\* did not provide amortization of intangible assets.

<sup>4</sup> Cash flow is defined as net income or loss plus depreciation and amortization.

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

Table 7

Selected income-and-loss data of U.S. producers on their operations producing defrost timers for residential refrigerators, by firms, calendar years 1990-92

Item	1990	1991	1992
<u>Quantity (1,000 units)</u>			
Net sales:			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Eaton. . . . .	***	***	***
Total. . . . .	***	***	***
<u>Value (1,000 dollars)</u>			
Net sales:			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Eaton. . . . .	***	***	***
Total. . . . .	***	***	***
Operating income or (loss):			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Eaton. . . . .	***	***	***
Total. . . . .	***	***	***
<u>Ratio to net sales (percent)</u>			
Operating income or (loss):			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Eaton. . . . .	***	***	***
Total. . . . .	***	***	***

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

Average selling price per unit \*\*\* by \*\*\* percent from 1990 to 1992. Cost of goods sold per unit \*\*\* by \*\*\* percent from 1990 to 1991 and \*\*\* by \*\*\* percent from 1991 to 1992. Gross profit \*\*\* by \*\*\* percent per unit in 1991 and then \*\*\* by \*\*\* percent per unit in 1992. Selling, general, and administrative expenses per unit \*\*\* in 1991 because of higher sales volume, but \*\*\* in 1992 to \*\*\* in 1990. Operating \*\*\* per unit \*\*\* from \*\*\* in 1990 to \*\*\* in 1991 and then \*\*\* to \*\*\* in 1992.

Paragon is the only producer that reported \*\*\*. Its direct labor cost per unit \*\*\* from \*\*\* in 1990 to \*\*\* in 1991 and 1992. The company attributed this \*\*\* to \*\*\*. Paragon's factory overhead per unit \*\*\*. Its cost per unit \*\*\* in 1991 partly because of \*\*\* and of \*\*\*. Paragon's unit costs for major elements of cost of goods sold are shown in the following tabulation:

<u>Item</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
Raw materials. . . . .	\$***	\$***	\$***
Direct labor . . . . .	***	***	***
Factory overhead . . . . .	***	***	***
Total cost of goods sold . . . . .	***	***	***
* * * * *	*	*	*16

#### Operations on Electromechanical Defrost Timers for Residential Refrigerators

Aggregate income-and-loss data on electromechanical defrost timers for residential refrigerator operations are presented in table 8. These data are slightly different in 1991 and 1992 from the data shown in table 6 for all defrost timers for residential refrigerators because they exclude the data on electronic defrost timers. \*\*\*. \*\*\*.

#### Operations on Electronic Defrost Timers for Residential Refrigerators

Paragon began production of electronic defrost timers for residential refrigerators in 1991. No other firms produce this product. Paragon's data on electronic defrost timers for residential refrigerators are presented in table 9. \*\*\*. Average selling price per unit \*\*\*.

#### Investment in Productive Facilities

The value of property, plant, and equipment and total assets of Paragon and Mallory for their operations on defrost timers for residential refrigerators are presented in table 10 (Eaton did not provide asset data). The return on the book value of fixed assets and the return on total assets are also shown in that table. Operating returns and net returns on the book value of fixed assets and on total assets \*\*\* during the period of investigation.

#### Capital Expenditures

The capital expenditures incurred by Paragon and Mallory are shown in the following tabulation (in 1,000 dollars):

<u>Capital expenditures</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
All defrost timers:			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Total. . . . .	***	***	***
Defrost timers for residential refrigerators:			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Total. . . . .	***	***	***

Eaton did not provide data on its capital expenditures. \*\*\*. \*\*\*.

Table 8

Income-and-loss experience of U.S. producers<sup>1</sup> on their operations producing electromechanical defrost timers for residential refrigerators, calendar years 1990-92

Item	1990	1991	1992
<u>Quantity (1,000 units)</u>			
Net sales . . . . .	***	***	***
<u>Value (1,000 dollars)</u>			
Net sales . . . . .	***	***	***
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
Interest expense <sup>2</sup> . . . . .	***	***	***
Other income or (expense) net <sup>2</sup> . . . . .	***	***	***
Net income or (loss) before income taxes. . . . .	***	***	***
Depreciation and amortization <sup>3</sup> . . . . .	***	***	***
Cash flow <sup>4</sup> . . . . .	***	***	***
<u>Value (per unit)</u>			
Net sales . . . . .	\$***	\$***	\$***
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
<u>Share of net sales (percent)</u>			
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
Net income or (loss) before income taxes. . . . .	***	***	***
<u>Number of firms reporting</u>			
Operating losses. . . . .	***	***	***
Net losses. . . . .	***	***	***
Data. . . . .	***	***	***

<sup>1</sup> Producers are Paragon, Mallory, and Eaton.

<sup>2</sup> \*\*\* did not allocate interest expense and other income or expense to the defrost timers products.

<sup>3</sup> \*\*\* did not provide depreciation and amortization expense. \*\*\* did not provide amortization of intangible assets.

<sup>4</sup> Cash flow is defined as net income or loss plus depreciation and amortization.

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

Table 9

Income-and-loss experience of U.S. producers<sup>1</sup> on their operations producing electronic defrost timers for residential refrigerators, calendar years 1990-92

Item	1990	1991	1992
	Quantity (1,000 units)		
Net sales . . . . .	***	***	***
	Value (1,000 dollars)		
Net sales . . . . .	***	***	***
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
Interest expense. . . . .	***	***	***
Other income or (loss), net . . . . .	***	***	***
Net income or (loss) before income taxes. . . . .	***	***	***
Depreciation and amortization . . . . .	***	***	***
Cash flow <sup>2</sup> . . . . .	***	***	***
	Value (per unit)		
Net sales . . . . .	\$***	\$***	\$***
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
	Share of net sales (percent)		
Cost of goods sold. . . . .	***	***	***
Gross profit. . . . .	***	***	***
Selling, general, and administrative expenses . . . . .	***	***	***
Operating income or (loss). . . . .	***	***	***
Net income or (loss) before income taxes. . . . .	***	***	***
	Number of firms reporting		
Operating losses. . . . .	***	***	***
Net losses. . . . .	***	***	***
Data. . . . .	***	***	***

<sup>1</sup> Data are for Paragon only, because Mallory and Eaton did not produce this product.

<sup>2</sup> Cash flow is defined as net income or loss plus depreciation and amortization.

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

Table 10

Value of assets and return on assets of U.S. producers<sup>1</sup> on their operations producing defrost timers for residential refrigerators, calendar years 1990-92

Item	As of the end of calendar year--		
	1990	1991	1992
	Value (1,000 dollars)		
Fixed assets:			
Original cost. . . . .	***	***	***
Book Value . . . . .	***	***	***
Total assets <sup>2</sup> . . . . .	***	***	***
	Return on book value of fixed assets (percent) <sup>3</sup>		
Operating return <sup>4</sup> . . . . .	***	***	***
Net return <sup>5</sup> . . . . .	***	***	***
	Return on total assets (percent) <sup>3</sup>		
Operating return <sup>4</sup> . . . . .	***	***	***
Net return <sup>5</sup> . . . . .	***	***	***

<sup>1</sup> Eaton did not provide assets data. Hence, data are for two firms, Paragon and Mallory.

<sup>2</sup> Defined as the book value of fixed assets plus current and noncurrent assets. Total establishment assets are apportioned, by firm, to product groups on the basis of the ratios of the respective book values of fixed assets.

<sup>3</sup> Computed using data from only those firms supplying both asset and income-and-loss information and, as such, may not be derivable from data presented.

<sup>4</sup> Defined as operating income or loss divided by asset value.

<sup>5</sup> Defined as net income or loss divided by asset value.

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

### Research and Development Expenses

The research and development (R&D) expenses reported by each firm are shown in the following tabulation (in 1,000 dollars):

<u>Research and development expenses</u>	<u>1990</u>	<u>1991</u>	<u>1992</u>
All defrost timers:			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Eaton. . . . .	***	***	***
Total. . . . .	***	***	***
Defrost timers for residential refrigerators:			
Electromechanical:			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Eaton. . . . .	***	***	***
Subtotal . . . . .	***	***	***
Electronic:			
Paragon. . . . .	***	***	***
Mallory. . . . .	***	***	***
Eaton. . . . .	***	***	***
Subtotal . . . . .	***	***	***
Total. . . . .	***	***	***

#### Impact of Imports on Capital and Investment

The Commission requested each producer to describe any actual and/or potential negative effects of imports of defrost timers for residential refrigerators from Japan on its growth, investment, and ability to raise capital, or on its existing development and production efforts (including efforts to develop a derivative or improved version of its products). Appendix E presents the producers' responses.

#### CONSIDERATION OF THE QUESTION OF THREAT OF MATERIAL INJURY

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

In determining whether an industry in the United States is threatened with material injury by reason of imports (or sales for importation) of any merchandise, the Commission shall consider, among other relevant economic factors<sup>17</sup>--

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<sup>17</sup> Section 771(7)(F)(ii) of the Act (19 U.S.C. § 1677(7)(F)(ii)) provides that "Any determination by the Commission under this title that an industry in the United States is threatened with material injury shall be made on the basis of evidence that the threat of material injury is real and that actual injury is imminent. Such a determination may not be made on the basis of mere conjecture or supposition."



(I) If a subsidy is involved, such information as may be presented to it by the administering authority as to the nature of the subsidy (particularly as to whether the subsidy is an export subsidy inconsistent with the Agreement),

(II) any increase in production capacity or existing unused capacity in the exporting country likely to result in a significant increase in imports of the merchandise to the United States,

(III) any rapid increase in United States market penetration and the likelihood that the penetration will increase to an injurious level,

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

(V) any substantial increase in inventories of the merchandise in the United States,

(VI) the presence of underutilized capacity for producing the merchandise in the exporting country,

(VII) any other demonstrable adverse trends that indicate the probability that the importation (or sale for importation) of the merchandise (whether or not it is actually being imported at the time) will be the cause of actual injury,

(VIII) the potential for product-shifting if production facilities owned or controlled by the foreign manufacturers, which can be used to produce products subject to investigation(s) under section 701 or 731 or to final orders under section 736, are also used to produce the merchandise under investigation,

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

(X) the actual and potential negative effects on the existing development and production efforts of the domestic industry, including efforts to develop a derivative or more advanced version of the like product.<sup>18</sup>

Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Merchandise and the Alleged Material Injury;" and information on the effects of imports of the subject merchandise on U.S. producers' existing development and production efforts (item (X)) is presented in the section entitled "Consideration of the Question of Alleged Material Injury to an Industry in the United States." Available information on U.S. inventories of the subject products (item (V)); foreign producers' operations, including the potential for "product-shifting" (items (II), (VI), and (VIII) above); and any other threat indicators, if applicable (item (VII) above), follows. Other threat indicators have not been alleged or are otherwise not applicable.

#### **U.S. Importers' Inventories**

All reported imports were of electromechanical defrost timers for residential refrigerators. Importers' inventories are presented in table 11.

#### **Ability of Foreign Producers to Generate Exports and the Availability of Export Markets Other Than the United States**

There are three defrost timer producers in Japan, but only Sankyo exports defrost timers to the United States. Sankyo retained counsel and actively opposed the petition before the Commission. The other Japanese producers did not file entries as parties to this investigation.

The Commission requested counsel for Sankyo to provide information on the firm's operations in Japan. The information requested consisted of production, capacity, capacity utilization, home-market shipments, exports to the United States, and total exports for 1990-92; projected changes in production, capacity, or capacity utilization in 1993; and intentions or projections as to the quantity of exports of the subject defrost timers to the United States in 1993. Data received from Sankyo's counsel are presented in table 12. As shown, Sankyo's capacity \*\*\*. According to Sankyo's data, \*\*\*. Production \*\*\*. Exports to the United States \*\*\* from 1990 to 1991 and from

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<sup>18</sup> Section 771(7)(F)(iii) of the Act (19 U.S.C. § 1677(7)(F)(iii)) further provides that, in antidumping investigations, ". . . the Commission shall consider whether dumping in the markets of foreign countries (as evidenced by dumping findings or antidumping remedies in other GATT member markets against the same class or kind of merchandise manufactured or exported by the same party as under investigation) suggests a threat of material injury to the domestic industry."

Table 11

Electromechanical defrost timers for residential refrigerators: End-of-period inventories of U.S. importers, by types and by sources, 1990-92

Item	1990	1991	1992
Quantity (1,000 units)			
Customs territory:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Foreign-trade zone:			
Japan.....	***	***	***
Total.....	***	***	***
Customs territory and foreign-trade zone:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Ratio to imports (percent)			
Customs territory:			
Japan.....	***	***	***
Other sources.....	***	***	***
Average.....	***	***	***
Foreign-trade zone:			
Japan.....	***	***	***
Average.....	***	***	***
Customs territory and foreign-trade zone:			
Japan.....	***	***	***
Other sources.....	***	***	***
Average.....	***	***	***

Note.--Ratios are calculated using data of firms supplying both numerator and denominator information. Part-year inventory ratios are annualized.

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

1991 to 1992. Exports to markets other than the United States \*\*\* from 1990 to 1991 and \*\*\* from 1991 to 1992. End-of-period inventories \*\*\* from 1990 to 1991 and \*\*\* from 1991 to 1992.

The same information was requested for all Japanese producers through diplomatic channels, but no information was received.

Table 12

Defrost timers for residential refrigerators:<sup>1</sup> Sankyo's capacity, production, capacity utilization, shipments, and inventories, fiscal years<sup>2</sup> 1990-92, and projections for 1993

(In 1,000 of units, except as noted)				
Item	Actual experience			Projections
	1990	1991	1992	1993
Production capacity <sup>3</sup> . . . . .	***	***	***	***
Production . . . . .	***	***	***	***
Capacity utilization (percent) . . . . .	***	***	***	***
Shipments:				
Home market . . . . .	***	***	***	***
Exports to--				
United States,				
by customer:				
*** . . . . .	***	***	***	***
*** . . . . .	***	***	***	***
*** . . . . .	***	***	***	***
*** . . . . .	***	***	***	***
Total, United States . .	***	***	***	***
All other export markets . . . . .	***	***	***	***
Total exports . . . . .	***	***	***	***
Total shipments . . . . .	***	***	***	***
Beginning inventories . . . . .	***	***	***	***
End-of-period inventories . . . .	***	***	***	***

<sup>1</sup> Of the subject products, Sankyo only produces electromechanical defrost timers for residential refrigerators.

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

<sup>3</sup> Reported practical capacity is based on operating \*\*\* hours per week, \*\*\* weeks per year.

Source: Data submitted by counsel for Sankyo.

CONSIDERATION OF THE CAUSAL RELATIONSHIP BETWEEN IMPORTS OF THE  
SUBJECT MERCHANDISE AND THE ALLEGED MATERIAL INJURY

U.S. Imports

Official U.S. Department of Commerce data cannot be used in this investigation because imports under HTS subheading 9107.00.40 include merchandise other than defrost timers for residential refrigerators. The petition states that imports of the subject defrost timers from countries other than Japan are insignificant.<sup>19</sup>

\*\*\*. \*\*\*. Therefore, imports reported for Japan in response to the Commission's importers' questionnaire are overstated for 1990 and 1991.<sup>20</sup>

\* \* \* \* \*

At the Commission's conference, counsel for Sankyo raised the issue of whether imports into U.S. foreign-trade zones constitute imports because foreign-trade zones are outside the customs territory of the United States.<sup>21</sup> Petitioner considers all entries into the United States to be imports, including entries into foreign-trade zones.<sup>22</sup> Therefore, imports of defrost timers for residential refrigerators into the U.S. customs territory and into foreign-trade zones are presented both separately and combined for the Commission's consideration (table 13). Shipments of imports from Japan are presented in table 14.

Market Penetration of Imports

U.S. imports of defrost timers as a share of apparent U.S. consumption are presented in table 15. Based on quantity, market penetration by imports from Japan (consumed within the U.S. customs territory) \*\*\* from \*\*\* percent in 1990 to \*\*\* percent in 1991 and to \*\*\* percent in 1992. Market penetration by imports from Japan (consumed within the U.S. customs territory and within U.S. foreign-trade zones) \*\*\* from \*\*\* percent in 1990 to \*\*\* percent in 1991 and to \*\*\* percent in 1992. Market penetration based on value followed similar trends.

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<sup>19</sup> Petition, p. 11.

<sup>20</sup> \*\*\*. Therefore, it would appear that imports \*\*\*.

<sup>21</sup> Transcript of conference, pp. 73-75 and p. 107.

<sup>22</sup> Transcript of conference, pp. 101-102.

Table 13

Electromechanical defrost timers for residential refrigerators:<sup>1</sup> U.S. imports, by types and by sources, 1990-92

Item	1990	1991	1992
	Quantity (1,000 units)		
Customs territory:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Foreign trade zone:			
Japan.....	***	***	***
Total.....	***	***	***
Customs territory and foreign trade zone:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
	Value (1,000 dollars)		
Customs territory:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Foreign trade zone:			
Japan.....	***	***	***
Total.....	***	***	***
Customs territory and foreign trade zone:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
	Unit value		
Customs territory:			
Japan.....	\$***	\$***	\$***
Other sources.....	***	***	***
Average.....	***	***	***
Foreign trade zone:			
Japan.....	***	***	***
Average.....	***	***	***
Customs territory and foreign trade zone:			
Japan.....	***	***	***
Other sources.....	***	***	***
Average.....	***	***	***

<sup>1</sup> No imports of electronic defrost timers were reported.

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

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

Table 14

Electromechanical defrost timers for residential refrigerators:<sup>1</sup> Shipments of U.S. imports (including foreign-trade zone imports) from Japan, by types, 1990-92

Item	1990	1991	1992
Quantity (1,000 units)			
Company transfers.....	***	***	***
Domestic shipments.....	***	***	***
Subtotal.....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
Value (1,000 dollars)			
Company transfers.....	***	***	***
Domestic shipments.....	***	***	***
Subtotal.....	***	***	***
Exports.....	***	***	***
Total.....	***	***	***
Unit value			
Company transfers.....	\$***	\$***	\$***
Domestic shipments.....	***	***	***
Average.....	***	***	***
Exports.....	***	***	***
Average.....	***	***	***

<sup>1</sup> No imports of electronic defrost timers were reported.

Note.--Unit values are calculated using data of firms supplying both quantity and value information.

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

Table 15

Defrost timers for residential refrigerators: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, by types, 1990-92

Item	1990	1991	1992
Quantity (1,000 units)			
Excluding importers' consumption within foreign-trade zones: <sup>1</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Apparent consumption.....	***	***	***
Including importers' consumption within foreign-trade zones: <sup>2</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Apparent consumption.....	***	***	***
Value (1,000 dollars)			
Excluding importers' consumption within foreign-trade zones: <sup>1</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Apparent consumption.....	***	***	***
Including importers' consumption within foreign-trade zones: <sup>2</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Apparent consumption.....	***	***	***

See footnotes at end of table.



Table 15--Continued

Defrost timers for residential refrigerators: U.S. shipments of domestic product, U.S. shipments of imports, and apparent U.S. consumption, by types, 1990-92

Item	1990	1991	1992
	Share of the quantity of U.S. consumption (percent)		
Excluding importers' consumption within foreign-trade zones: <sup>1</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Including importers' consumption within foreign-trade zones: <sup>2</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
	Share of the value of U.S. consumption (percent)		
Excluding importers' consumption within foreign-trade zones: <sup>1</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***
Including importers' consumption within foreign-trade zones: <sup>2</sup>			
Producers' U.S. shipments..	***	***	***
Importers' U.S. shipments:			
Japan.....	***	***	***
Other sources.....	***	***	***
Total.....	***	***	***

<sup>1</sup> Includes U.S. importers' shipments within the U.S. customs territory but excludes U.S. importers' shipments within U.S. foreign-trade zones (i.e., excludes consumption of imports within U.S. foreign-trade zones).

<sup>2</sup> Includes all U.S. importers' U.S. shipments (i.e., within the U.S. customs territory and U.S. foreign-trade zones).

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

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

### Market Characteristics

The defrost timers under investigation are sold mainly to original equipment manufacturers (OEMs) for use in new residential refrigerators, with a much smaller amount going to the aftermarket for use as replacement parts. The demand for new refrigerators is closely tied to the level of new housing starts in the United States. Because of the weakness in housing starts and sales of new refrigerators during the past 3 years, the overall demand for defrost timers used in residential refrigerators has been relatively flat.<sup>23</sup>

The market for defrost timers to be used in new refrigerators consists of a small number of sellers and buyers. Two domestic firms, Paragon and Mallory, and the Japanese producer, Sankyo, account for \*\*\* sales of defrost timers to the residential refrigerator manufacturers. The \*\*\* domestic producer, Eaton, \*\*\*. Five refrigerator manufacturers (General Electric, Whirlpool, Frigidaire, Admiral, and Amana) account for most purchases of defrost timers that are used in new refrigerators.<sup>24</sup> In addition to buying from domestic producers during 1990-92, General Electric, Whirlpool, and Admiral have all imported defrost timers directly from Sankyo.

Sales by the domestic producers in the aftermarket are made to three basic groups of buyers. They include OEMs who market the defrost timers through their service arms master distributors, and independent dealers and distributors.<sup>25</sup> The OEMs, who sell defrost timers originally purchased from a domestic producer, are the major competitors of Paragon, Mallory, and Eaton in this market segment. Most sales in the aftermarket are on a spot basis. At present, defrost timers produced by Sankyo account for only a small percentage of total aftermarket sales.

The majority of sales to OEMs by the domestic producers and by Sankyo are on a contract basis, with the contracts varying in duration. Paragon, the petitioner, reported that contract duration can range from 1 to 5 years. Under contract agreements, prices and quantities are often fixed for a given period, but terms can vary widely. For example, \*\*\*.

Although no formal bidding procedure is used in the competition to obtain contracts with the OEMs, only qualified defrost timer producers are able to participate in negotiations for supply agreements. OEMs consider quality to be very important because defective timers can result in expensive repair costs for new refrigerators during the warranty period.<sup>26</sup> To obtain qualification, a producer is required to submit sample timers to the OEMs for testing. If the sample timers produce satisfactory results the producer is considered a qualified supplier, and thus eligible to take part in price negotiations for a contract.

Responses to the producers and importers questionnaires indicated a strong disagreement over the relative quality of domestically produced defrost timers and those imported from Japan. All three domestic producers reported

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<sup>23</sup> Conference transcript, pp. 22-23.

<sup>24</sup> \*\*\*. \*\*\*. \*\*\*.

<sup>25</sup> Conference transcript, pp. 20-21.

<sup>26</sup> \*\*\*.

that there are no quality differences between domestically produced timers and those imported from Japan. However, \*\*\* indicated that the imported product from Sankyo is superior in quality to domestically produced timers. \*\*\* stated in its questionnaire that it began to purchase timers from Japan in \*\*\* because of quality concerns with the \*\*\* defrost timers. \*\*\* also reported in its questionnaire response that it has been more satisfied with the product offered by Sankyo than with the domestic product offered by \*\*\*. \*\*\*. \*\*\*. \*\*\* reported in its questionnaire that it has used Japanese timers since \*\*\* and that they have achieved a superior quality record, but it has generally been less satisfied with the domestic purchases. In the case of one domestic supplier, it reported that a problem was recently experienced with \*\*\*. In the case of a \*\*\*.<sup>27</sup>

\*\*\*. \*\*\*. \*\*\*. None of the domestic producers consider transportation costs to be an important competitive consideration.

Defrost timers are sold throughout the United States and most shipments are made by truck, with distances ranging from 100 to more than 500 miles. Lead times for delivery ranged from 4 to 8 weeks for OEM customers, and from 3 days to 4 weeks for aftermarket customers.

## Prices

### Questionnaire Price Data

Producers and importers were asked to provide price data on products that are most comparable to the three defrost timers produced and marketed by Paragon. The specified products included its electromechanical models 499 and 2001, and its electronic model.<sup>28</sup> Prices were also requested on sales of commercial defrost timers. Producers were requested to report prices on contract sales during 1990-92 to OEMs and to report spot prices on sales to the aftermarket during this period. Importers were asked to report prices paid on their contract purchases from Japan and prices on any sales of Japanese timers in the U.S. aftermarket.

Four producers and four importers provided varying amounts of price data. These producers and importers have accounted for all domestic shipments and all imports of defrost timers during 1990-92.<sup>29</sup> \*\*\* was able to provide complete data on sales of \*\*\* of its products to OEMs and to aftermarket customers. \*\*\* furnished annual prices on sales to its OEM customers, but did

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<sup>27</sup> \*\*\* did not specify the names of the domestic producers.

<sup>28</sup> The model 499 is an older type of defrost timer that Paragon sells primarily in the aftermarket for use in repair and replacement. The model 2001 is Paragon's best-selling model to OEMs.

<sup>29</sup> \*\*\* reported domestic prices on sales of defrost timers used in commercial refrigerators. \*\*\* does not produce residential timers. These timers are larger, more complicated, and much more expensive than residential defrost timers. During 1990-92, \*\*\* prices for its best-selling commercial defrost timer ranged from \*\*\* to \*\*\*, and \*\*\* price was \*\*\* per unit during 1990-91. None of the importers reported purchases or sales of commercial defrost timers.

not report aftermarket sales. \*\*\* provided prices on its aftermarket sales. Among importers, \*\*\*. \*\*\*.

The discussion of the price data is divided into two separate sections. The first section, relating to transactions in the OEM market, discusses prices received by domestic timer producers on sales to OEMs during 1990-92, and prices paid by OEMs for imports from Japan. The second section discusses spot sales in the aftermarket.

### **OEM Market**

Paragon, the petitioner, provided the most complete price data relating to the OEM market. It reported quarterly prices on contract sales to its largest customers of its two electromechanical timers (models 499 and 2001) and its electronic model. It also provided quarterly shipment data for these products. \*\*\* considered the defrost timer that it markets to OEMs to be the most similar to Paragon's 2001 model. It did not report sales of an electronic model. \*\*\* also reported that the electromechanical timers that they have imported from Sankyo are most similar to Paragon's 2001 model. None of these firms reported imports of electronic models, or models similar to the 499.

With the exception of Paragon, none of the firms were able to break out quarterly shipments of defrost timers. \*\*\* was only able to provide annual data on these shipments. Similarly, the three importers were not able to break out quarterly purchases of defrost timers from Japan. Since timers are generally purchased under contract with prices and quantities agreed upon for periods of 1 year or longer, it is understandable that quarterly shipment data would not necessarily be maintained. Because of the lack of this data, quarterly weighted-average prices could not be computed either for the domestic product or for imports.

Delivered prices for Paragon's model 2001 are shown in table 16 for January-March 1990 through October-December 1992.<sup>30</sup> With the exception of the low value of \*\*\* per unit in \*\*\* and the high value of \*\*\* per unit in \*\*\* of that year, the price \*\*\* throughout the period. During the last two quarters of 1992, the price was \*\*\* per unit, \*\*\* over the level of \*\*\* per unit that had prevailed during the previous year. As shown in the table, \*\*\* total shipments of this product were \*\*\* in all quarters of 1992 than in comparable quarters in 1991. \*\*\* has been Paragon's largest customer for the 2001 model during 1990-92.

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<sup>30</sup> Paragon's sales of the 499 model and its electronic timer to OEMs are not shown in the table since none of the other firms reported sales or purchases of comparable defrost timers during the period. The price of the 499 model to OEMs \*\*\* during the period from \*\*\* in the first quarter of 1991 to \*\*\* in the third quarter of 1991 and \*\*\* throughout 1992. During the last two quarters of 1992, the price was \*\*\*. The price of Paragon's electronic timer to OEMs was over \*\*\* per unit from the fourth quarter of 1991 through the third quarter of 1992. It \*\*\* to \*\*\* in the fourth quarter of 1992.

Table 16

Defrost timers for residential refrigerators: Prices received by domestic producers on sales to OEMs and prices paid by importers for purchases of defrost timers that are most comparable to the 2001 model sold by Paragon, by quarters, January 1990-December 1992<sup>1</sup>

Period	Domestic producers			Importers		
	***'s		Quantity shipped	***'s		***'s
	price <sup>2</sup>	Price		price	price	price
	---Per unit---		1,000 units	-----Per unit-----		
1990:	*	*	*	*	*	*
1991:	*	*	*	*	*	*
1992:	*	*	*	*	*	*

<sup>1</sup> With the exception of \*\*\* purchases, all prices reported in the table are on a contract basis.

<sup>2</sup> \*\*\*'s price is reported on an f.o.b. plant basis. All other prices in the table are on a delivered basis.

<sup>3</sup> Average price of two separate models purchased from Sankyo of Japan.

<sup>4</sup> No prices reported.

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

Prices from \*\*\* on contract sales were available on an annual basis during 1990-92. \*\*\* price for its defrost timer that is most similar to Paragon's 2001 model \*\*\* from \*\*\* per unit during 1990 and 1991 to \*\*\* per unit in 1992.

While domestic prices have \*\*\* during 1992, delivered prices reported by importers on contract purchases of imports from Sankyo have trended \*\*\*. For example, \*\*\*, \*\*\*, \*\*\*.

Because of the fact that quarterly weighted-average prices could not be computed, the usual comparisons of domestic and imported prices and calculations of margins of underselling and overselling could not be performed in the present case. The data do show that \*\*\* for its \*\*\* purchase prices in the first quarter of 1990, but were \*\*\* during the remainder of 1990 and throughout 1991 and 1992. \*\*\* prices were \*\*\* than \*\*\* purchase prices in all periods except \*\*\*. \*\*\* prices were \*\*\* than \*\*\* purchase prices throughout 1991 and 1992.

The f.o.b. prices reported by \*\*\* are \*\*\* than the delivered prices reported by \*\*\*. However, since \*\*\*, a direct comparison between \*\*\* prices and the import prices cannot be made.

### Aftermarket

Prices of defrost timers sold in the aftermarket were reported by \*\*\*, although \*\*\* was only able to provide prices on sales during 1992. \*\*\*.<sup>31</sup>

Prices reported by Paragon on sales of its model 499 and model 2001 are shown in table 17. \*\*\*. The data show that prices of the 499 have tended to \*\*\* during 1990-92, but with \*\*\*. The price of the 2001 generally \*\*\* from July-September 1990 to July-September 1992 but then \*\*\* in the fourth quarter of 1992. Paragon receives higher prices on its sales in the aftermarket than on those in the OEM market, where profit margins are smaller.<sup>32</sup> In the case of \*\*\*, quarterly prices in the aftermarket ranged from \*\*\* to \*\*\*, while in the OEM market they ranged between \*\*\* and \*\*\*.

	*	*	*	*	*	*	*
<u>Period</u>	Electromechanical <u>model price</u> (Per unit)						
1992:							
Jan.-Mar.....	\$***						
Apr.-June.....	***						
July-Sept.....	***						
Oct.-Dec.....	***						

### Exchange Rates

Quarterly data reported by the International Monetary Fund indicate that, during January-March 1990 through October-December 1992, the nominal value of the Japanese yen fluctuated, appreciating overall by 20.6 percent relative to the U.S. dollar (table 18).<sup>33</sup> Adjusted for movements in producer price indexes in the United States and Japan, the real value of the Japanese currency appreciated 15.6 percent overall between January-March 1990 and the fourth quarter of 1992.

### Lost Sales and Lost Revenues

\*\*\* provided two lost sales allegations and one lost revenue allegation \*\*\*. \*\*\* alleged that it lost sales of \*\*\* defrost timers, valued at \*\*\*, as a result of competition from LTFV imports from Japan. \*\*\* also alleged that it lost revenues of \*\*\* because of such import competition. \*\*\*. The staff contacted purchasers to investigate these allegations.

<sup>31</sup> The staff contacted these firms in an unsuccessful attempt to obtain price data on these transactions. The petitioner does not consider imports from Japan to be an important source of competition in the aftermarket at the present time (conference transcript, p. 27).

<sup>32</sup> Conference transcript, p. 18.

<sup>33</sup> International Financial Statistics, February 1993.

Table 17

Defrost timers for residential refrigerators: Prices received by Paragon on spot sales of its 499 and 2001 models on sales to distributors in the aftermarket, and total shipments, by quarters, January 1990-December 1992

Period	499 model			2001 model	
	Price		Quantity	Price	Quantity
	Per unit		1,000 units	Per unit	1,000 units
1990:	*	*	*	*	*
1991:	*	*	*	*	*
1992:	*	*	*	*	*

<sup>1</sup> No price reported in this quarter.

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

\*\*\* alleged that it lost a sale of \*\*\* defrost timers, valued at \*\*\*, to \*\*\* in \*\*\* as a result of competition from imports from Japan. \*\*\*. \*\*\* denied that \*\*\* shifted its purchases from \*\*\* because of lower prices.

However, \*\*\* said that \*\*\* did finally stop purchasing \*\*\*. According to \*\*\*, the shift was due entirely to quality considerations rather than to price.<sup>34</sup> He said that \*\*\* were forcing \*\*\* during the period in which the \*\*\* refrigerators were under warranty. The average cost to \*\*\* of a visit to replace a defective \*\*\* timer is \*\*\*. \*\*\*.<sup>35</sup>

\*\*\* also alleged that it lost a sale to \*\*\* because of competition from imports from Japan. \*\*\* did not have complete information available to address the allegation. \*\*\*. \*\*\* said that \*\*\* had been having serious problems with the quality of \*\*\* product \*\*\*.

However, \*\*\* said that the \*\*\* reported \*\*\* could easily have been valid. \*\*\* said that the defect rate on \*\*\* defrost timers improved greatly in \*\*\*, but that it did face competition from imports from Sankyo of Japan. \*\*\*.<sup>36</sup>

\*\*\* alleged that it lost a sale of \*\*\* defrost timers to \*\*\* because of competition from imports from Japan. \*\*\*, the purchasing agent for \*\*\*, was not able to respond directly to the allegation. \*\*\*.

<sup>34</sup> \*\*\*.

<sup>35</sup> \*\*\*. \*\*\*. \*\*\*.

<sup>36</sup> \*\*\*. \*\*\*.

Table 18

Exchange rates:<sup>1</sup> Indexes of nominal and real exchange rates of the Japanese yen and indexes of producer prices in the United States and Japan,<sup>2</sup> by quarters, January 1990-December 1992

Period	U.S. producer price index	Japanese producer price index	Nominal exchange rate index	Real exchange rate index <sup>3</sup>
1990:				
January-March.....	100.0	100.0	100.0	100.0
April-June.....	99.8	100.8	95.3	96.2
July-September.....	101.6	100.8	101.8	101.0
October-December....	104.7	101.4	113.1	109.6
1991:				
January-March.....	102.5	101.6	110.5	109.5
April-June.....	101.5	101.1	106.9	106.5
July-September.....	101.4	100.8	107.8	107.2
October-December....	101.5	100.1	114.2	112.6
1992:				
January-March.....	101.3	99.8	115.2	113.5
April-June.....	102.3	99.8	113.5	110.7
July-September.....	102.8	99.7	118.4	114.8
October-December <sup>4</sup> ...	103.1	98.8	120.6	115.6

<sup>1</sup> Exchange rates expressed in U.S. dollars per Japanese yen.

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

<sup>3</sup> The real exchange rate is derived from the nominal rate adjusted for relative movements in producer prices in the United States and Japan.

<sup>4</sup> Derived from U.S. and Japanese price data reported for Oct.-Nov. only.

Note.--January-March 1990 = 100.

Source: International Monetary Fund, International Financial Statistics, Feb. 1993.



**APPENDIX A**

**FEDERAL REGISTER NOTICES**



## INTERNATIONAL TRADE COMMISSION

[Investigation No. 731-TA-643  
(Preliminary)]

### Defrost Timers From Japan

AGENCY: International Trade Commission.

ACTION: Institution and scheduling of a preliminary antidumping investigation.

**SUMMARY:** The Commission hereby gives notice of the institution of preliminary antidumping investigation No. 731-TA-643 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from Japan of defrost timers for residential refrigerators, provided for in subheading 9107.00.40 of the Harmonized Tariff Schedule of the United States, that are alleged to be sold in the United States at less than fair value. The Commission must complete preliminary antidumping investigations in 45 days, or in this case by March 5, 1993.

For further information concerning the conduct of this investigation 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 and B (19 CFR part 207).

EFFECTIVE DATE: January 19, 1993.

**FOR FURTHER INFORMATION CONTACT:** Tedford Briggs (202-205-3181), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired 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.

#### SUPPLEMENTARY INFORMATION:

##### Background

This investigation is being instituted in response to a petition filed on January 19, 1993, by Paragon Electric Co., Inc., Two Rivers, WI.

##### Participation in the Investigation and Public Service List

Persons (other than petitioners) wishing to participate in the investigation as parties must file an

entry of appearance with the Secretary to the Commission, as provided in sections 201.11 and 207.10 of the Commission's rules, not later than seven (7) days after publication of this notice in the Federal Register. The Secretary will prepare a public service list containing the names and addresses of all persons, or their representatives, who are parties to this investigation upon the expiration of the period for filing entries of appearance.

##### Limited Disclosure of Business Proprietary Information (BPI) Under an Administrative Protective Order (APO) and BPI Service List

Pursuant to section 207.7(a) of the Commission's rules, the Secretary will make BPI gathered in this preliminary investigation available to authorized applicants under the APO issued in the investigation, provided that the application is made not later than seven (7) days after the publication of this notice in the Federal Register. A separate service list will be maintained by the Secretary for those parties authorized to receive BPI under the APO.

##### Conference

The Commission's Director of Operations has scheduled a conference in connection with this investigation for 9:30 a.m. on February 9, 1993, at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Tedford Briggs (202-205-3181) not later than February 5, 1993, to arrange for their appearance. Parties in support of the imposition of antidumping duties in this investigation and parties in opposition to the imposition of such duties will each be collectively allocated one hour within which to make an oral presentation at the conference. A nonparty who has testimony that may aid the Commission's deliberations may request permission to present a short statement at the conference.

##### Written Submissions

As provided in sections 201.8 and 207.15 of the Commission's rules, any person may submit to the Commission on or before February 12, 1993, a written brief containing information and arguments pertinent to the subject matter of the investigation. Parties may file written testimony in connection with their presentation at the conference no later than three (3) days before the conference. If briefs or written testimony contain BPI, they must conform with the requirements of

sections 201.8, 207.3, 207.7 of the Commission's rules.

In accordance with sections 201.16(c) and 207.3 of the rules, each document filed by a party to the investigation must be served on all other parties to the investigation (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.

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

Issued: January 11, 1993.

By order of the Commission.

Paul E. Barden,

Acting Secretary.

[FR Doc. 93-1985 Filed 1-26-93; 8:45 am]

BILLING CODE 7020-20-0

of the U.S. industry producing the product subject to this investigation. If any interested party, as described under paragraphs (C), (D), (E), or (F) of section 771(8) of the Act, wishes to register support for, or opposition to, this petition, it should file a written notification with the Assistant Secretary for Import Administration.

#### Scope of Investigation

For purposes of this investigation, defrost timers are electro-mechanical and electronic defrost timers for residential refrigerators. Electro-mechanical defrost timers are comprised of several components that make or break electric circuits by activating two sets of electrical contact points—one to disconnect the compressor (the cooling mechanism) and the other to connect the defrost heater. The articles are equipped with a synchronous or subynchronous motor. The defrost timer disconnects the compressor by opening an electrical circuit after the compressor itself has run for a length of time predetermined by the manufacturer depending on the specifications of the model. Upon completion of the compressor run cycle (and simultaneously with the compressor's disconnection) the defrost heater is activated and runs for a preset time (again depending on the model), as predetermined by the manufacturer. Electronic defrost timers have a similar function but operate with greater efficiency. This is because a microprocessor in the device uses information gathered during the defrost cycle to adjust the compressor run time. This system defrosts only when needed, thereby improving the efficiency of the refrigerator.

The defrost timers subject to this investigation are currently classifiable under subheading 9107.00.4000 of the Harmonized Tariff Schedule of the United States (HTSUS). The HTSUS subheadings are provided for convenience and customs purposes. The written description of the scope of this investigation is dispositive.

#### United States Price (USP) and Foreign Market Value (FMV)

Petitioner based USP on information obtained from a United States sales representative. Petitioner calculated USP by subtracting U.S. duty, credit expense, freight and insurance.

FMV is based on home market prices obtained through sources in Japan. Petitioner calculated FMV by subtracting the freight costs from the home market price to reach an ex-factory price. Additionally, petitioner subtracted the cost of extending credit

to Japanese purchasers of defrost timers. Finally, petitioner added a difference-in-merchandise adjustment to account for differences in manufacturing costs between the most similar Japanese and U.S. models.

Based on petitioner's calculation, the alleged weighted-average dumping margins ranged from 81 to 86 percent. For the purposes of this initiation, no adjustments were made to petitioner's calculations. If it becomes necessary at a later date to consider the petition as a source of best information available (BIA), we may review all of the bases for the petitioner's estimated dumping margins in determining BIA.

#### Initiation of Investigation

We have examined the petition on defrost timers from Japan and have found that the petition meets the requirements of section 732(b) of the Act. Therefore, we are initiating an antidumping duty investigation to determine whether imports of defrost timers from Japan are being, or are likely to be, sold in the United States at less than fair value. If the investigation proceeds normally, we will make our preliminary determination by June 28, 1993.

#### Period of Investigation

The period of investigation is July 1, 1992, through December 31, 1992.

#### International Trade Commission (ITC) Notification

Section 732(d) of the Act requires us to notify the ITC of this action and we have done so.

#### Preliminary Determinations by the ITC

The ITC will determine by March 4, 1993, whether there is a reasonable indication that imports of defrost timers from Japan are materially injuring, or threaten material injury to, a U.S. industry. A negative ITC determination will result in the investigation being terminated; otherwise, the investigation will proceed according to statutory and regulatory time limits.

This notice is published pursuant to section 732(c) of the Act and 19 CFR 353.13(b).

Dated: February 8, 1993.

Joseph A. Spethall,

Acting Assistant Secretary for Import Administration.

[FR Doc. 93-3408 Filed 2-11-93; 8:45 am]  
BUREAU CODE 3016-08-01

#### 91-630-6291

#### Initiation of Antidumping Duty Investigation: Defrost Timers From Japan

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

**EFFECTIVE DATE:** February 12, 1993.  
**FOR FURTHER INFORMATION CONTACT:** Raphael Hampton, Office of Antidumping Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 462-0176.

#### PETITION OF INVESTIGATION:

#### The Petition

On January 19, 1993, we received a petition filed in proper form by the Fergon Electric Company (petitioner) on behalf of the U.S. defrost timer industry. In accordance with 19 CFR 353.12, petitioner alleges that certain defrost timers from Japan are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports are materially injuring, or threaten material injury to, a U.S. industry.

Petitioner has stated that it has standing to file the petition because it is an interested party, as defined under section 771(8)(C) of the Act, and because the petition was filed on behalf

B-1

**APPENDIX B**

**LIST OF WITNESSES APPEARING AT  
THE COMMISSION'S CONFERENCE**



CALENDAR OF PUBLIC CONFERENCE

Investigation No. 731-TA-643 (Preliminary)

DEFROST TIMERS FROM JAPAN

Those listed below appeared at the United States International Trade Commission's conference held in connection with the subject investigation on February 9, 1993, in the Hearing Room of the USITC Building, 500 E Street SW., Washington, DC.

In support of the imposition of antidumping duties

Fried, Frank, Harris, Shriver & Jacobson--Counsel  
Washington, DC  
on behalf of--

Paragon Electric Co., Inc.  
Two Rivers, WI

Terry D. Growcock, Vice President & General Manager

Gary D. Fredell, Vice President, Engineering

L. Matthew Leeka, Executive Account Manager, Appliance OEM Sales

Samuel M. Rosenblatt, President, SMR Inc.

David E. Birenbaum)  
Mark Fajfar )--OF COUNSEL

In opposition to the imposition of antidumping duties

Wickens & Lebow--Counsel  
Washington, DC  
on behalf of--

Sankyo Seiki Manufacturing Co., Ltd.  
Tokyo, Japan

Sankyo Seiki (America), Inc.  
Irvine, CA

Robert P. Forster, National Marketing & Sales Manager

Edward M. Lebow--OF COUNSEL





**APPENDIX C**  
**SUMMARY DATA**



Table C-1

Electromechanical defrost timers for residential refrigerators: Summary data concerning the U.S. customs territory market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-2

Electromechanical defrost timers for residential refrigerators: Summary data concerning the U.S. customs territory and foreign-trade zone market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-3

Electronic defrost timers for residential refrigerators: Summary data concerning the U.S. market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-4

All defrost timers for residential refrigerators: Summary data concerning the U.S. customs territory market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-5

All defrost timers for residential refrigerators: Summary data concerning the U.S. customs territory and foreign-trade zone market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-6

Electromechanical defrost timers for commercial refrigerators: Summary data concerning the U.S. market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-7

Electronic defrost timers for commercial refrigerators: Summary data concerning the U.S. market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-8

All defrost timers for commercial refrigerators: Summary data concerning the U.S. market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-9

Defrost timers for all refrigerators: Summary data concerning the U.S. customs territory market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	Reported data			Period changes		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

Table C-10

Defrost timers for all refrigerators: Summary data concerning the U.S. customs territory and foreign-trade zone market, 1990-92

(Quantity=1,000 units, value=1,000 dollars, period changes=percent, except where noted)

Item	<u>Reported data</u>			<u>Period changes</u>		
	1990	1991	1992	1990-92	1990-91	1991-92
	*	*	*	*	*	*

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

**APPENDIX D**

**INCOME-AND-LOSS EXPERIENCE OF U.S. PRODUCERS ON THEIR  
OPERATIONS PRODUCING ELECTROMECHANICAL  
DEFROST TIMERS FOR COMMERCIAL  
REFRIGERATORS**





Table D-1  
 Income-and-loss experience of U.S. producers on their operations  
 producing electromechanical defrost timers for commercial refrigerators,  
 fiscal years 1990-92

Item					1990	1991	1992
	*	*	*	*	*	*	*

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



**APPENDIX E**

**COMMENTS RECEIVED FROM PRODUCERS ON THE EFFECT OF  
IMPORTS OF DEFROST TIMERS FROM JAPAN ON THEIR  
GROWTH, INVESTMENT, ABILITY TO RAISE  
CAPITAL, AND EXISTING DEVELOPMENT  
AND PRODUCTION EFFORTS**



The Commission requested U.S. producers to describe and explain the actual and potential negative effects of imports from Japan of defrost timers for residential refrigerators on their growth, investment, ability to raise capital, and development and production efforts (including efforts to develop a derivative or more advanced version of the product).

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