ANTIFRICTION BEARINGS (OTHER THAN TAPERED ROLLER BEARINGS) AND PARTS THEREOF FROM THE FEDERAL REPUBLIC OF GERMANY, FRANCE, ITALY, JAPAN, ROMANIA, SINGAPORE, SWEDEN, THAILAND, AND THE UNITED KINGDOM

Determinations of the Commission in Investigations Nos. 303-TA-19 and 20 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigations

Determinations of the Commission in Investigations Nos. 731-TA-391-399 (Preliminary) Under the Tariff Act of 1930, Together With the Information Obtained in the Investigations

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UNITED STATES INTERNATIONAL TRADE COMMISSION

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UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, DC

Investigations Nos. 303-TA-19 and 20 and
Investigations Nos. 731-TA-391-399 (Preliminary)

ANTIFRICTION BEARINGS (OTHER THAN TAPERED ROLLER BEARINGS) AND PARTS THEREOF FROM THE FEDERAL REPUBLIC OF GERMANY, FRANCE, ITALY, JAPAN, ROMANIA, SINGAPORE, SWEDEN, THAILAND, AND THE UNITED KINGDOM

Determinations

On the basis of the record 1/ developed in the subject investigations, the Commission determines, pursuant to section 303 of the Tariff Act of 1930 (19 U.S.C. § 1303), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from Singapore and Thailand of antifriction bearings (other than tapered roller bearings) and parts thereof, whether finished or unfinished, provided for in items 681.10, 681.39, and 692.32 of the Tariff Schedules of the United States (TSUS), 2/ that are alleged to be subsidized by the governments of Singapore and Thailand.

The Commission also determines, pursuant to section 733(a) of the Act (19 U.S.C. § 1673b(a)), that there is a reasonable indication that an industry in the United States is materially injured by reason of imports from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom of antifriction bearings (other than tapered roller bearings) and parts thereof, whether finished or unfinished, provided

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1/ The record is defined in sec. 207.2(i) of the Commission's Rules of Practice and Procedure (19 CFR § 207.2(i)).
2/ Antifriction bearings (other than tapered roller bearings) and parts thereof from Singapore and Thailand subject to investigation include ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030 and proposed Harmonized Tariff Schedule (HTS) subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HTS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HTS subheading 8708.99.50).

for in items 680.30, 680.33, 680.37, 680.39, 681.04, 681.10, 681.39, and 692.32 of the Tariff Schedules of the United States, 1/ that are alleged to be sold in the United States at less than fair value (LTFV).

Background

On March 31, 1988, petitions were filed with the Commission and the Department of Commerce by the Torrington Company, Torrington, CT, alleging that an industry in the United States is materially injured and threatened with material injury by reason of subsidized imports of antifriction bearings (other than tapered roller bearings) and parts thereof from Singapore and Thailand, and by reason of LTFV imports of antifriction bearings (other than tapered roller bearings) from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom. Accordingly, effective March 31, 1988, the Commission instituted preliminary countervailing duty investigations Nos. 303-TA-19 and 20 (Preliminary) and preliminary antidumping investigations Nos. 731-TA-391-399 (Preliminary).

1/ For purposes of these investigations, the subject bearings and parts thereof include the following articles, whether finished or unfinished: antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and HTS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HTS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HTS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 689.3952 and 689.3956, and HTS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA items 680.3960 and HTS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HTS subheadings 8483.20.80, 8483.30, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HTS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HTS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HTS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of these investigations.

Notice of the institution of the Commission's investigations 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 April 11, 1988 (53 FR 11917). The conference was held in Washington, DC, on April 21, 1988, and all persons who requested the opportunity were permitted to appear in person or by counsel.

VIEWS OF THE COMMISSION

On the basis of the information gathered in these preliminary investigations, we determine that there is a reasonable indication that the domestic industries producing ball bearings, spherical roller bearings, cylindrical roller bearings, needle roller bearings, plain bearings, and other anti-friction products respectively, are materially injured by reason of the allegedly subsidized and LTFV imports subject to these investigations. 1/

1. Like product and the domestic industry

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

1/ Having found a reasonable indication of present material injury, we do not address the question of threat in these preliminary determinations. We note, however, that the question of threat may be relevant in any final investigations. Material retardation is not at issue in these investigations and will not be discussed further.

2/ 19 U.S.C. § 1677(4)(A).

3/ 19 U.S.C. § 1677(10).

The "article subject to an investigation" is defined by the scope of the investigations initiated by the Department of Commerce. In these investigations, the articles subject to investigation include the following, whether finished or unfinished:

1. Antifriction balls and rollers;
2. Ball bearings with integral shafts;
3. Ball bearings (including radial ball bearings) and parts thereof;
4. Spherical roller bearings and parts thereof;
5. Other roller bearings (except tapered roller bearings) and parts thereof;
6. Ball or roller bearing type pillow blocks and parts thereof;
7. Ball or roller bearing type flange, take-up, cartridge, and hanger units and parts of the foregoing;
8. Machinery parts containing any of the foregoing bearings, not containing electrical features and not specifically provided for; and
9. Parts of motor vehicles containing any of the foregoing bearings and not specifically provided for. 4/

The Commission's decision regarding the appropriate like product(s) in any investigation is a factual determination made on a case-by-case basis. In analyzing like product issues, the Commission generally considers a number of

4/ Finished but unground or semiground balls are not included in the scope of this investigation. 53 Fed. Reg. 15073-74 (April 27, 1988).

factors, including (1) physical appearance, (2) interchangeability between the articles, (3) channels of distribution, (4) customer perceptions of the articles, and (5) common manufacturing facilities and production employees. 5/ 6/

When considering whether "semifinished" or "component" articles are "like" the finished product, the Commission looks at: (1) the necessity for further processing, (2) the costs of such processing and the value added thereby, (3) whether the article at an earlier stage of production embodies or imparts to the finished article an essential characteristic or function, (4) whether there are independent markets for the finished and unfinished articles, and (5) the degree of interchangeability of articles at the different stages of production. 7/ No single factor is determinative, and the Commission may consider other factors which it deems relevant based on the facts of a given investigation.

5/ Certain Forged Steel Crankshafts from the Federal Republic of Germany and the United Kingdom, Invs. Nos. 731-TA-351 and 353 (Final), USITC Pub. 2014 (September 1987) (hereinafter Crankshafts); Tapered Roller Bearings and Parts Thereof, and Certain Housings Incorporating Tapered Rollers from Italy and Yugoslavia, Invs. Nos. 731-TA-342 and 346 (Final), USITC Pub. 1999 (August 1987) (hereinafter Tapered Roller Bearings II); 64K Dynamic Random Access Memory Components from Japan, Inv. No. 731-TA-270 (Final), USITC Pub. 1862 (June 1986) (hereinafter 64K DRAMs).

6/ Vice Chairman Brunsdale notes that the Commission's like product determination focuses on distinctions between products that have economic consequences. See Digital Readout Systems from Japan, Inv. No. 731-TA-390 (Preliminary) USITC Pub. _____ (May 1988) (Views of Chairman Liebeler, Vice Chairman Brunsdale, and Commissioner Cass).

7/ Crankshafts, supra n.5; 64K DRAMs, supra n.5; Tapered Roller Bearings II, supra n.5; Cellular Mobile Telephones and Subassemblies Thereof from Japan, Inv. No. 731-TA-207 (Final), USITC Pub. 1786 (December 1985) (hereinafter Cellular Mobile Telephones).

Minor variations are an insufficient basis for defining separate like products, rather, the Commission has looked for clear dividing lines among products. 8/ Moreover, the like product requirement should not be "interpreted in such a narrow fashion as to permit minor differences in physical characteristics and uses to lead to the conclusion that the products are not like each other." 9/

a. Prior Commission Decisions: Tapered Roller Bearings

The Commission considered several like product arguments similar to those raised in these investigations in cases involving tapered roller bearings. 10/ In making those determinations, the Commission concluded that all tapered roller bearings constituted one like product regardless of individual sizes, specification, or uses of bearings because there were no clear dividing lines between the multitude of tapered roller bearings. Further, tapered roller bearing manufacturers made all types of tapered roller bearings at the same manufacturing facilities and in some instances on common production machinery. The Commission also determined that parts and

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8/ E.g. Operators for Jalousie and Awning Windows from El Salvador, Invs. Nos. 701-TA-272 and 731-TA-319 (Final), USITC Pub. 1934 (January 1987) at 4, n.4.

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

10/ Tapered Roller Bearings and Parts Thereof, and Certain Housings Incorporating Tapered Rollers from Hungary, the People's Republic of China, and Romania, Inv. Nos. 731-TA-341, 344, and 345 (Final) USITC Pub. 1983 (June 1987) (Tapered Roller Bearings I) and Tapered Roller Bearings II, supra n.5. The tapered roller bearings investigations involved a particular class of antifriction roller bearings that has been specifically excluded from the scope of these investigations.

components of tapered roller bearings were all part of the same like product primarily because of their lack of an independent use apart from incorporation in tapered roller bearings. Finally, the Commission concluded that certain machine parts incorporating tapered roller bearings, such as hanger units, wheel hub units, and housings (but not pillow blocks), were also part of one like product. However, the Commission was not presented with, nor did it explicitly consider, whether tapered roller bearings were part of a broader like product--all anti-friction bearings.

Since Commission like product determinations are inherently factual ones dependent upon the record developed in particular investigations, even apparently similar investigations such as Tapered Roller Bearings have limited precedential value. 11/ Several arguments, especially with respect to the inclusion of all anti-friction bearings within a single like product, were not presented to the Commission in Tapered Roller Bearings. Further, given the limited staff resources, evidence regarding these issues was not collected by the staff or submitted by the parties to those investigations. In addition, in these investigations there is a more fully developed record regarding the possible like product distinctions within each type of anti-friction bearing (i.e., super precision v. precision, clear breaks in sizes).

While even Tapered Roller Bearings has limited precedential value, the Commission's rationale in those investigations implicitly suggests that a

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11/ See Armstrong Bros. Tool Co. v. United States, 483 F.Supp. 312, 328 (Cust. Ct. 1980).

single like product consisting of all anti-friction bearings would be overinclusive, and that it would be more appropriate to make like product distinctions by the type of bearing. Further, the conclusion reached regarding components and housed and mounted products suggests that they should not be treated as separate products in these investigations, assuming that there are no significant differences in the factual record.

b. Petitioner's argument

Petitioner insists that all the items within the scope of the investigations constitute a single like product. Its argument is based on two independent grounds, one legal and the other factual. First, it insists that, as a matter of law, the Commission is required to find only one like product and one domestic industry in every investigation regardless of the facts revealed in each investigation. 12/ This one like product and one domestic industry, it argues, must be identical to the scope of the investigation stated by the petition and the notice of investigation issued by the Department of Commerce. Second, assuming that the Commission does have a role in defining the like product and the domestic industry, petitioner argues that all items within the scope of the investigations should be classified as one like product as a factual matter because they have the same four characteristics, are subjected to the same basic manufacturing processes, and

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12/ Post-Conference Brief of Petitioner at 19-24.

are put to the same end uses. 13/ Petitioner's legal argument, that like product and domestic industry have no independent meaning but instead must correspond to the scope of the investigation, does not follow the vast majority of Commission decisions and runs contrary to congressional intent disclosed in legislative history of title VII, which clearly directs the Commission to decide these questions and approving the Commission's practice of doing so. 14/

In its alternative factual argument, petitioner thoroughly compares and contrasts previous Commission determinations finding more than one product 15/ with those finding a single like product 16/ and concludes that the facts of these investigations warrant a determination that there is a single like product. In these investigations, petitioner argues that the most important factors in these investigations are the product characteristics, end uses, and similarity in production processes. Petitioner argues that all the products within the scope of the investigations contain the same four physical characteristics: (1) an inner ring, (2) an outer ring, (3) rolling elements, and (4) a cage or separator holding the rolling elements in place. The use or

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13/ Post-Conference Brief of Petitioner at 24-65.

14/ See S. Rep No. 249 at 90-91.

15/ See, e.g., Certain Fresh Cut Flowers from Canada, Chile, Colombia, Costa Rica, Ecuador, Israel and the Netherlands, Inv. Nos. 701-TA-275-278, 731-TA-327-331 (Final) USITC Pub. 1956 (March 1987) (Views of Commissioners Eckes, Lodwick, and Rohr).

16/ See, e.g., Tapered Roller Bearings I, supra n.10.

function that they all allegedly share is the reduction of friction between moving parts. Finally, they are subject to the same production steps--machining, heat treatment, grinding, inspection and assembly. Petitioner notes that the production equipment for all types of bearings is "identical or similar." 17/

Petitioner's argument, however, leads to a contrary conclusion. Petitioner's one like product includes items (such as ball screws, linear guides, plain bearings, and other items) that do not share these same characteristics and uses, while it excludes other items, such as tapered roller bearings, that do. Accepting petitioner's rationale, but not the conclusion, would lead to a determination that all ball and roller bearings, including tapered roller bearings, constitute a single like product, but that separate products exist for plain bearings, ball screws, and linear guides, either individually or collectively. 18/

With respect to components, petitioner argues that they should be included within the same like product as the bearings themselves because the components are dedicated to use in the finished bearing and the production processes overlap considerably. With respect to housed and mounted products

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17/ Post-Conference Brief of Petitioner at 49.

18/ Petitioner does not directly address why such products are "like" ball and roller bearings other than its general rationale that they reduce friction, go through the same production steps, and have the same four characteristics and they are all in the scope of the investigation. Nor does petitioner explain why tapered roller bearings should not be part of the like product other than to note that they already have an order covering those imports.

such as pillow blocks, flanged cartridges, cylindrical cartridges, other housed units, and wheel hub units, petitioner does not present any detailed argument regarding their inclusion other than to argue that they should be treated the same as components and to note that they were included in Tapered Roller Bearings.

c. Respondents' arguments

Seven different respondents addressed the like product issues at the preliminary conference and in their post-conference submissions. In doing so they collectively argued for at least ten different combinations of like products. Moreover, even when they agreed on the number of like products, they disagreed on the appropriate classifications. Each of the various breakouts for anti-friction bearings, however, implicitly suggests that plain bearings, ball screws, linear guides and other items should be treated separately. Further, the respondents differ on the treatment of components and housed and mounted bearings.

One possible distinction suggested by a number of respondents is to separate anti-friction bearings into two categories: ball bearings and roller bearings. 19/ This distinction is allegedly justified by the fact that ball bearings are generally used in high speed applications when load carrying is not required, while roller bearings are used when high speeds are not necessary but load carrying ability is more important. Further, production facilities for ball and roller bearings are separate, and producers often make one but not the other.

19/ See, e.g., Post-Conference Brief of NSK at 16-22.

A second possible distinction is to break out anti-friction bearings by type of rolling element: ball, cylindrical roller, spherical roller, and needle roller. 20/ The principal arguments in support of these distinctions are that (1) the production processes, while similar in some instances, in fact occur in separate plants or on separate equipment dedicated to particular types of bearings, (2) the types of bearings are not interchangeable, and (3) their substitutability at the design stage is limited. Different types of roller bearings allegedly have different applications and different end-user markets. This distinction finds some support in the record, although the degree of substitutability of different types of roller bearings at the design stage is not yet clear. The distinction on the basis of type of roller bearing does comport, however, with the implicit distinction drawn in Tapered Roller Bearings. 21/

Regarding components and housed and mounted products, respondents have made several arguments. First, a number of respondents insist that components

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20/ See, e.g., Post-Conference Brief of American NTN at 42-67.

21/ As noted previously, the Commission did not explicitly consider whether all anti-friction bearings was the appropriate like product in Tapered Roller Bearings, as this distinction was not argued by the parties. However, the Commission's like product analysis is not limited to the possibilities suggested by the parties. Given the factual analysis in those investigations, it is reasonable to conclude that tapered roller bearings differ in characteristics and uses from other types of roller bearings and from ball bearings. Moreover, such a conclusion suggests that like product distinctions by type of rolling element are appropriate.

constitute a separate like product. 22/ They note that components have different commercial markets, different channels of distribution, and different physical appearance than finished bearings; components and bearings are not interchangeable, components are subjected to additional processing at substantial cost before they are incorporated into finished bearings, and none of the components embody the essential characteristics of finished bearings. Respondents generally acknowledge that components are dedicated to use in particular types of bearings, but they insist that this one factor is not determinative in this case. Curiously the respondents argue for one separate category for components, while dividing the finished bearings into two or more categories.

Second, respondents urged the Commission to find that housed and mounted bearings are a separate like product. 23/ Housed and mounted bearing units contain additional materials, typically a cast iron forging that allows for easier installation and locks and seals. Bearings used in housings allegedly are specially designed for incorporation into that particular housing. Once a bearing unit is assembled, it must be integrated into a specific piece of machinery at a specific location. In fact, the bearings are typically manufactured specifically for incorporation into particular housings. Finally, casting of iron housings is generally performed by different companies than bearing manufacturers, although some bearing manufacturers have their own foundries.

22/ See, e.g., Post-Conference Brief of American NTN at 15-42.

23/ See, e.g., Post-Conference Brief of American NTN at 67-77.

Finally, several respondents also argued for a specific breakout for wheel hub units. The respondents note the obvious physical differences between a wheel hub unit and a bearing (visual inspection of a wheel hub unit does not reveal the presence of a bearing contained therein). Wheel hub units are specifically designed for incorporation into a particular automobile and are not interchangeable with a bearing. Manufacture of wheel hub units is technologically more complex than bearing manufacture, involving different machinery, equipment and employees. Only one U.S. manufacturer produces wheel hub units--New Departure Hyatt Corp., a subsidiary of General Motors--and all of its sales allegedly are for captive consumption by its parent.

d. Analysis

Given the breadth of these investigations, we note that the like product issues presented by the parties are extraordinarily complicated and pervade all the remaining issues. Moreover, limitations in the data available in these preliminary investigations make analysis of the condition of the industries and the effect of imports from the nine countries subject to these investigations on those industries extraordinarily difficult. The available data only allow for discussion of the condition of the domestic industries and the effect of imports at the level of production of all anti-friction bearings.

When the Commission has been faced with the problem of multiple like products based upon alleged distinctions among types of products, it has looked for clear dividing lines in terms of the characteristics and uses of the various products. If the Commission fails to find clear dividing lines, then it usually discusses the question in terms of a continuum and includes everything in one like product.

1) Differences by type of rolling element

The record in these investigations contains probative evidence of differences in physical characteristics and uses among the different types of bearings. The bearings which come within the scope of these investigations comprise bearings having clearly distinct differences in their physical appearance according to the type of rolling element employed: ball, spherical roller, cylindrical roller, needle roller, no rolling element (plain bearings), and "anti-friction" products that do not appear to be bearings (ball screws and linear guides, among others). Moreover, the type of rolling element generally dictates the use to which a particular bearing is put. 24/

For example, ball bearings allow for high speed applications, with little load carrying capability, and are generally used in the automotive, agricultural, mining, construction, and oil industries.

Cylindrical roller bearings have a moderate to high speed capability, but with moderate load applications. They are used in heavy equipment, mining, steel, construction, and aerospace industries.

Spherical roller bearings have a heavy load capability, but only moderate speed capability. They also have the ability to correct for misalignment and are used in particular applications in the heavy equipment, construction, and paper industries.

Needle roller bearings are capable of carrying high loads in combination with high speeds, but do not correct for misalignment. They are also capable

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24/ Report of the Commission (Report) at A-3-A-12.

of use in areas where there is little space. Further, they are almost exclusively used in the automotive industry and for home appliances.

Plain bearings have no rolling element and are capable of carrying heavy loads, but at low speeds. They are used in heavy equipment such as hydraulic cylinders.

Finally, other "anti-friction" products, such as ball screws and linear guides, differ from all other products in that they transform radial movement into linear movement (in the case of ball screws), or position parts in machine tools and fully automated equipment (in the case of linear guides). 25/

In general, the types of bearings are not functionally interchangeable. 26/ Even at the design stage, interchangeability among types of bearings appears to be limited. 27/ Further, even for those end users that use more than one type of bearing, the different types of bearings are generally used to perform different functions. The evidence of record indicates that these variations in characteristics and uses are underscored further by differences in manufacturing facilities and employees. Many companies rationalize their production of anti-friction bearings by type of

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25/ Should final investigations occur, we would seek further information regarding these and other products to determine whether they should be treated as a single product type (anti-friction product) or whether they require individual treatment.

26/ Report at A-6.

27/ Id. at A-9.

rolling element. 28/

2) Other distinctions by type

The record in these preliminary investigations is not sufficiently developed to allow breakouts by precision rating, size, and for housed and mounted bearing units so the Commission can make any settled "like product" conclusions. Regarding precision and super precision bearings, there is some evidence of a clear dividing line for bearings rated ABEC 5 and below (precision) and those rated ABEC 7 and above (super precision). 29/ Further, it appears that production of super precision bearings requires a separate "white room technology" and a separate workforce. 30/ Finally, cost and quality considerations appear to limit interchangeability between these two types of bearings. Should any final investigations arise, we would endeavor to develop additional information as to whether super precision bearings constitute a separate like product for each type of bearing. For the purposes of these preliminary investigations, we have determined not to treat super precision bearings separately.

With respect to breakouts by size, the record is not yet well developed and we have determined not to make like product distinctions by size at this stage of the investigations. We do not have information sufficient to determine whether there are clear dividing lines (i.e., miniature, regular,

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28/ Id. at A-11.

29/ Id. at A-11-A-12.

30/ Id. at A-12.

and large) or merely a size continuum. Further, we do not know to what extent domestic producers rationalize their production by size, nor do we have sufficient information regarding any differences in terms of end users or customer perceptions. Therefore, in any final investigations, we would seek information that would allow for thorough analysis of these questions.

Finally, regarding the treatment of housed and mounted bearing units, including wheel hub units, we are unable to conclude that such items constitute separate like products based upon the available information. Such bearing units typically have the same characteristics and uses as their unhoused and unmounted counterparts. 31/ The principal difference appears to be that they are ready for use in a particular position on a particular machine. Should any final investigations occur, we would seek additional information regarding the treatment of housed and mounted units, in particular whether wheel hub units should be treated separately from other types of housed and mounted units. For purposes of these preliminary investigations, we include housed and mounted bearings within the like product corresponding to the type of bearing incorporated within it.

3) Parts and components

The final like product problem is whether bearing parts and components should be treated differently than the finished bearings themselves. We have previously determined that a part need not necessarily be identical to the finished product in order to be deemed to be within the finished like

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31/ See Report at A-8.

product. 32/ There are four basic components in most anti-friction bearings: the outer ring, the inner ring, the cage or separator, and the rollers. The outer ring is the largest part of the assembly. Its inner surface is ground to conform to the angle of the roller assembly. The cage keeps the rollers equally distributed around the ring. The rollers and inner ring are joined together to form an assembly which, when joined with the outer ring forms an anti-friction bearing set. 33/

The differences in the essential characteristics of the final product and the unfinished parts or components appear, at first glance, to be significant. The essential characteristic of a finished roller bearing is its ability to reduce friction. Unfinished components, by contrast, require substantial finishing before they can serve as an antifriction device. In this regard, and in contrast with such investigations as 3.5 Inch Microdisks from Japan, 34/ there is no one component that embodies the essential characteristics of finished bearings. However, the parts of the bearing, when assembled, allow for friction reduction. Further, these investigations include all parts within its scope, not just one allegedly essential part as in Microdisks. The differences in the operations performed on the various unfinished parts and components are significant, but there are no other

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32/ See, e.g., Crankshafts, supra n.5; 64K DRAMs, supra n.5; Tapered Roller Bearings II, supra n.5; Cellular Mobile Telephones, supra n.7.

33/ Report at A-4-A-6.

34/ Inv. No. 731-TA-389 (Preliminary) USITC Pub. 2076 (April 1988).

materials of any significance added to the components when producing finished bearings. The operations consist principally of grinding, finishing and assembly. Finally, there appears to be no other independent use for unfinished components apart from their use in finished bearings. We therefore determine that parts and components do not constitute separate like products. Instead we include the parts and components within their respective finished bearing types for purposes of our like product determinations in these preliminary investigations.

4) Like product conclusions

For the purposes of these preliminary investigations, we find that there are six separate like products:

(1) ball bearings;

(2) spherical roller bearings;

(3) cylindrical roller bearings;

(4) needle roller bearings;

(5) plain bearings; and

(6) other "antifriction devices", such as ball screws and linear guides.

All of the above categories include part and components dedicated for use in the particular type of bearing, finished and unfinished bearings, and housed and mounted bearings containing the specified rolling element. We further conclude, for the purposes of these preliminary investigations, that there are six separate domestic industries corresponding to the six like products listed above.

While we will reexamine the like product issues should any final investigations occur, we note that the information regarding the inclusion of

parts and components within each type of bearing is relatively clear and well developed, as is the information regarding the propriety of like product distinctions based on the type of rolling element. 35/ In order to conclude that further breakouts are warranted, principally for precision rating, and secondarily by size or for mounted and housed bearing units and wheel hub units, additional evidence must be developed showing clear dividing lines, distinct methods of production, lack of substitution and different end user markets.

2. Product line analysis

The Commission collected information by questionnaire that asked for breakouts of certain kinds of data according to the following categories of anti-friction bearings: (1) ball bearings, (2) roller bearings, (3) other bearings, and (4) parts and components. Since we have determined that there are at least six like products and six domestic industries, for the purposes of these preliminary investigations, there is insufficient information to separately assess the condition of the various domestic industries producing those products. Accordingly, we analyze the condition of the domestic industries and the effect of imports on a product line basis. 36/

35/ Several respondents have suggested that it may be appropriate to consider spherical and cylindrical roller bearings as one product. We would be willing to examine the record in any final investigations to determine the propriety of such a conclusion.

36/ 19 U.S.C. § 1677(4)(D) provides:

> The effect of subsidized or dumped imports shall be assessed in relation to the United States production of a like product if

(Footnote continued on next page)

Financial and employment data were collected for the production of all anti-friction bearings and are not available at this time on a disaggregated basis. Therefore, following a product line analysis, the financial and employment data for each of the six domestic industries is the data for all anti-friction bearings. Regarding domestic capacity, production, capacity utilization, and shipments, there are disaggregated data for ball, roller, parts and other bearings. These data, however, do not correspond to the industry definitions. For example, the ball bearing industry includes finished bearings, parts, and housed and mounted bearings, while the data in the record, however, have been separated into ball, parts (for all types of bearings), and other bearings (including plain bearings and housed and mounted bearings of all types). Therefore, for the purposes of these preliminary investigations, the production and other related domestic data for each domestic industry are the data for all anti-friction bearings, as that is the narrowest level of production, that includes the like product, for which information is available at this time. We note that should any final investigations occur, we would seek information from the parties, producers

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available data permit the separate identification of production in terms of such criteria as the production process or the producer's profits. If the domestic production of the like product has no separate identity in terms of such criteria, then the effect of the subsidized or dumped imports shall be assessed by the examination of the production of the narrowest group or range of products, which includes a like product, for which the necessary information can be provided.

and importers that more closely corresponds to the like product distinctions that we have drawn and the like product distinctions that are still under consideration.

3. Related parties

During 1985-1987, there were eight foreign-owned domestic producers of anti-friction bearings: (1) NSK Corporation; (2) American NTN; (3) NIN-Bower; (4) SKF Industries; (5) New Hampshire Ball Bearings (NHBB); (6) FAG Bearings; (7) American Koyo; and (8) INA Bearing. 37/ Consequently, the question arises whether any of these companies should be excluded from the definition of the industry(ies) as a "related party" under the statute. The petitioner insists that these foreign-owned producers should be excluded from the domestic industry pursuant to section 771(4)(B) of the Act. 38/

Under section 771(4)(B), if a producer is related to exporters or importers of the product under investigation, or is itself an importer of that product, the Commission may exclude such producers from the domestic industry "in appropriate circumstances." Application of the related parties provision is within the Commission's discretion based on the facts presented in each case. 39/

37/ Report at A-19, Table 2.

38/ 19 U.S.C. § 1677(4)(B).

39/ Empire Plow Co. v. United States, 11 CIT ___, 675 F. Supp. 1348, 1352 (1987).

The Commission generally applies a two-step analysis for applying the related parties provision: The Commission considers (1) whether the company qualifies as a domestic producer or whether the firm is a "related party" within the meaning of section 771(4)(b); and (2) whether, in view of the producer's "related" status, there are appropriate circumstances for excluding the company in question from the definition of the domestic industry. 40/

After determining that the company in question is a domestic producer and is "related" within the meaning of the statute, the Commission has examined three factors in deciding whether appropriate circumstances exist to exclude related parties. Those factors are:

> (1) the percentage of domestic production attributable to the importing producer;
>
> (2) the reasons the the U.S. producer has decided to import the product subject to investigation, i.e., whether the firm benefits from the LTFV sales or subsidies 41/--or whether the firm must import in order to enable it to continue production and compete in the U.S. market, and
>
> (3) the position of the related producers vis-a-vis the rest of the industry, i.e., whether inclusion or exclusion of the related party will skew the data for the rest of the industry. 42/

40/ See, e.g., Color Television Receivers from the Republic of Korea and Taiwan, Inv. Nos. 731-TA-134 and 135 (Final) USITC Pub. 1514 at 17 (April 1984).

41/ Empire Plow, 675 F. Supp. at 1353-54.

42/ See, e.g., Rock Salt from Canada, Inv. No. 731-TA-239 (Final), USITC Pub. 1798 at 11 (Jan. 1986). If the exclusion of related producers would

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The Commission has also considered whether each company's books are kept separately from its "relations" and whether the primary interests of the related producers lie in domestic production or in importation. 43/ The Commission has stated previously that the related parties provision enables it to avoid any distortion in the aggregate data in the domestic industry that might result from including related parties whose operations are shielded from the effect of the imports. 44/

Application of the related parties provision in these investigations is further complicated by the various permutations and combinations presented to the Commission in defining the like product and the number of domestic industries. Because of the severe time constraints in these preliminary investigations, their broad scope, and the numerous alternative methods for

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necessarily exclude or distort economic data of considerable significance to or determinative of an accurate picture of the domestic industry as a whole, exclusion of the related producer would not be appropriate. See Certain Table Wine from France and Italy, Invs. Nos. 701-TA-210 and 211 and 731-TA-167 and 168 (Preliminary), USITC Pub. 1502 at 10-11 (March 1984); Color Television Receivers, supra n.40 at 9-10. See also Certain Forged Undercarriage Components from Italy, Inv. No. 701-TA-201 (Final) USITC Pub. 1465 at 5-6 (December 1983); Frozen Concentrated Orange Juice from Brazil, Inv. No. 751-TA-10, USITC Pub. 1623 (December 1984); Rock Salt from Canada, Inv. No. 731-TA-239 (Preliminary), USITC Pub. 1658 at 10-11 (March 1985).

43/ Rock Salt from Canada (Final), supra n.42 at 12.

44/ Granular Polytetrafluorethylene Resin from Italy and Japan, Invs. Nos. 731-TA-385 and 396 (Preliminary) USITC Pub. 2043 at 9 (December 1987); see also Erasable Programmable Read Only Memories from Japan, Inv. No. 731-TA-288 (Final), USITC Pub. 1927 (December 1986); Rock Salt from Canada (Final), supra n.42.

defining the parameters of the relevant domestic industries, there are insufficient data available to address the related parties issue for each of the six domestic industries, thus further discussion of the related parties issue will focus on all anti-friction bearings.

As a general matter each of the foreign-owned producers clearly qualifies as a related party, no matter how the like product issue is resolved. 45/ The data of record indicate that the eight producers are virtually 100% foreign-owned. 46/ The ratio of shipments of imported bearings to shipments of domestically-produced bearings varies widely for the eight related parties, but imports can be fairly characterized as substantial relative to domestic shipments for each. Aggregate shipments of imports by value for all related parties in 1987 were $243 million, compared to their shipments of U.S. produced bearings of $492 million in 1987, and compared to total shipments of all U.S. producers of $1.8 billion in 1987. 47/

It does not appear that the related parties are benefitting from the alleged LTFV or subsidized sales since their financial performance was

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45/ Respondents have argued that petitioner is also a related party since it imports both parts and finished bearings, and that they should be treated no differently than the petitioner. Since we do not invoke the related parties provision to exclude any domestic producers from the domestic industries, we do not need to discuss the differences, if any, between respondents and the petitioner in terms of the related parties provision. Such a distinction may be necessary in any final investigations if any related parties are excluded.

46/ Report at A-19, Table 2.

47/ See id. at A-20, Table 3, and A-29, Table 7.

significantly worse than the non-related U.S. producers. 48/ At the conference, several of the related parties stated that they import bearings merely to supplement their domestic production, enabling them to offer a full product line to their customers. Regarding the potential for skewing the data, the information of record indicates that inclusion of the related parties would not skew the data, although it would result in a relatively minor shift downward in the financial indicators. But it has no significant effect on the trends, which indicate increased profitability from 1985 to 1986 and stability from 1986 to 1987. Inclusion of the related parties has a modest effect on the other indicators of the condition of the domestic industries (capacity, production, utilization, and shipments), but again does not have a significant effect on overall trends.

Given the limited data available at this stage of the investigations, the indication that the related parties apparently are not shielded from the impact of the subject imports, and the fact that inclusion of the related parties does not significantly alter the condition of the domestic industry, we have not excluded any related parties for the purposes of these preliminary investigations. Should any final investigations occur, we would reconsider this issue in more detail, and on a product specific basis, to determine if particular producers should be excluded from particular industries based upon the information then available.

48/ See id. at A-37, Table 13.

4. Cumulation

The Commission is required to assess cumulatively the volume and effect of imports from two or more countries of like products subject to investigation if these imports compete with each other and with like products of the domestic industry in the United States market. 49/ Imports are to be cumulated if they meet three criteria: (1) they must compete with other imported products and the domestic like product; (2) they must be marketed within a reasonably coincidental period; (3) they must be subject to investigation. To determine if the criteria are met, the Commission has considered the following factors:

> (1) the degree of fungibility between imports from different countries and between imports and the domestic like product, including consideration of specific customer requirements and other quality related questions;
>
> (2) the presence of sales or offers to sell in the same geographical markets of imports from different countries and the domestic like product.
>
> (3) the existence of common or similar channels of distribution for imports from different countries and the domestic like product;
>
> (4) whether the imports are simultaneously present in the market.

While no single factor is determinative, and the list of factors is not exclusive, these factors are intended to provide the Commission with a

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49/ Section 612(a)(2)(A) of the Trade and Tariff Act of 1984, amending the Tariff Act of 1930, as section 771(7)(C)(iv), 19 U.S.C. § 1677(7)(C)(iv). Although Congress specifically rejected consideration by the Commission of whether the imports from a particular country are a contributing cause of injury, the decision to cumulate imports must be based upon more than the fact that several countries subject to investigation produce imports like the domestic product. H.R. Rep. No. 725, 98th Cong., 2d Sess. 36-37 (1984).

framework for determining whether the imports compete with each other and with the domestic like product.

Respondent NTN argues that the Commission should not cumulate imports from Japan. NTN argues that Japanese imports are of sufficient volume to warrant independent analysis. 50/ In support of its novel position, NTN argues that "Congress intended the provision requiring cumulation to apply only where imports from each of several countries account individually for a very small or insubstantial percentage of penetration." 51/ This position is contradicted by the legislative history, 52/ and is contrary to Commission precedent. 53/

FAG does not challenge the Commission's interpretation of the statute, but instead, argues that cumulation in this case "would present the Commission with an overwhelming and fruitless analytical task." 54/ Once, however, the Commission determines the like-product definition, cumulation of imports within each like-product is not only required where the statutory criteria are met, but it should be less onerous than FAG envisages.

In contrast to NTN's argument that Japanese imports are sufficiently voluminous to merit individual consideration, some respondents have argued

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50/ Post-Conference Brief of NTN at 92-95.

51/ Post-Conference Brief of NTN, at 94.

52/ H.R. Rep. 725, 98th Cong., 2d Sess. 37 (1984).

53/ See, e.g., Certain Cast-Iron Pipe Fittings from Brazil, the Republic of Korea, and Taiwan, Inv. Nos. 731-TA-278-280 (Final) USITC Pub. 1845 at 10, n.38 (May 1986)

54/ Post-Conference Brief of FAG, at 41-42.

that their individual volumes of imports are de minimis or relatively insignificant or are declining--and thus could not possibly be injuring a domestic industry. As indicated above, the Commission has stated previously that "[t]he volume and trend of imports on an individual country basis are not a consideration in determining whether or not to cumulate." 55/ We believe that this conclusion is sound and is mandated by the statute and legislative history. 56/

While the volume of imports varies from country to country in these investigations, cumulation is still appropriate. The imports in question are all marketed within a reasonably coincidental period and are clearly under investigation. Further, there is no indication that imports from the various

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55/ Welded Steel Wire Fabric for Concrete Reinforcement from Italy, Mexico, and Venezuela, Invs. Nos. 701-TA-261(A), 263(A), 264(A) and 731-TA-289(A)-291(A) (Preliminary), USITC Publication 1795 at 9, n.29 (January 1986), citing Certain Carbon Steel Products from Austria, Czechoslovakia, East Germany, Hungary, Norway, Poland, Romania, Sweden, and Venezuela, Investigations Nos. 701-TA-225-234 (Preliminary), USITC Publication 1642 (Feb. 1985). In Carbon Steel Products, the Commission adopted this rule after careful consideration of the cumulation amendment's legislative history:

> The report on the original House bill specifically eliminates the consideration of whether imports from a particular country are a "contributing cause" of the injury to the domestic industry. The Conference Committee adopted the House provision rather than the Senate provision. The Conference Committee adopted the House provision rather than the Senate provision. We interpret this as prohibiting the consideration of volume and trend of imports on an individual country basis in determining whether or not to cumulate. Thus, there can be no exception to the requirement of cumulation based on a notion of de minimis volumes of imports from any particular country.

56/ See H.R. Rep. No. 1156, 98th Cong., 2d Sess. 173 (1984).

countries are not readily substitutable for one another and for the domestic product. Finally, the various imports and the domestic product are marketed through the same channels of distribution.

Resolution of the cumulation issue, however, is complicated by our determination that there are at least six like products. A complete cumulation discussion would consider the issue separately as to imports of each type of like product from each country. Unfortunately, such disaggregated data are not available at this time. Should any final investigations occur, we would seek import data by product type in order to fully address this issue. In that event we would endeavor to determine if cumulation were appropriate for particular countries for particular products, given the possibility that there may be no imports of certain products from such countries as Singapore, Thailand, and Romania. We defer such a determination to any final investigations when we can make like product determinations with greater certainty and cumulation decisions based upon corresponding import data.

5. Condition of the domestic industries

In determining the condition of the domestic industries, the Commission considers, among other factors, domestic consumption, domestic production, capacity, capacity utilization, shipments, inventories, employment, and profitability. 57/ As noted previously, under a product line analysis, the

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57/ 19 U.S.C. § 1677(&)(C)(iii). For all factors other than profitability,
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data relating to the condition of the domestic industries is not available at the individual industry level. The narrowest range of products for which there are available data is the product line of all anti-friction bearings. Therefore, the discussion which follows is applicable to all six domestic industries.

Domestic consumption of anti-friction bearings (other than tapered roller bearings) decreased from $2.51 billion in 1985 to $2.43 billion in 1986, and then increased slightly to $2.48 billion in 1987. 58/ Domestic production of anti-friction bearings increased slightly from 651 million units in 1985 to 652 million units in 1986, but then decreased to 635 million units in 1987. 59/ Domestic capacity decreased from 895 million units in 1985 to 866 million units in 1986, and then increased to 870 million units in 1987. 60/ The fluctuations in capacity apparently are attributable, at least in part to a number of plant closings and openings throughout the period. Capacity utilization rates increased irregularly over the period of investigation, rising from 73.1 percent in 1985 to 75.6 percent in 1986, and then dropping to 73.2 percent in 1987. 61/

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the Commission received questionnaire responses from domestic producers accounting for approximately 70 percent of total U.S. shipments. Report at A-25. Financial data were provided by domestic producers accounting for approximately 61 percent of total U.S. shipments. Id. at A-33.

58/ Report at A-21-A-22.

59/ Id. at A-25-A-27, Table 6.

60/ Id.

61/ Id.

The value of domestic shipments of anti-friction bearings decreased from $1.96 billion in 1985 to $1.85 billion in 1986 and remained at that level in 1987. 62/ Domestic inventories generally increased over the period of investigation, although the overall trend was greatly influenced by an inventory build up of components and parts. 63/

Domestic employment dropped steadily from 21,410 workers in 1985 to 20,672 in 1986, and then to 19,830 in 1987. Hours worked followed a similar pattern. Wages, however, increased irregularly, increasing from $10.77 per hour in 1985 to $11.51 in 1986, before dropping to $11.28 in 1987. 64/

Financial trends for the domestic industry were generally upward throughout the period. 65/ Net sales dropped slightly from $1.585 billion in 1985 to $1.576 billion in 1986 before increasing to $1.669 billion in 1987. 66/ Operating income rose from $82.6 million in 1985 to $128.7 million in 1986, and then to $136.0 million in 1987. 67/ Finally, operating income as a percentage of net sales increased from 5.2 percent in 1985 to 8.2

62/ Id. at A-28, Table 7.

63/ Id. at A-31.

64/ Id. at A-32, Table 41.

65/ Although the financial data are available for approximately 61 percent of total U.S. shipments, the figures which follow do not include the response of New Departure Hyatt because of some unusual circumstances relating to the performance of that company during the period of investigation. See id. at A-32-A-34.

66/ Id. at A-33-A-35, Table 11.

67/ Id.

percent in 1986, before dropping slightly to 8.1 percent in 1987. 68/ The downward trends in production and employment lead us to conclude that there is a reasonable indication that the domestic industries producing anti-friction bearings are experiencing material injury.

6. Reasonable indication of material injury by reason of allegedly subsidized and LTFV imports

In determining whether there is a reasonable indication that the domestic industries are materially injured by reason of allegedly subsidized and LTFV imports, the Commission is required to consider a number of factors. These factors include the volume of imports of the merchandise subject to investigation, the effect of such imports on domestic prices, and the impact of such imports on the domestic industry. 69/ Evaluation of these factors involves a consideration of (1) whether the volume of imports or increase in volume is significant, (2) whether there has been significant price undercutting by the imported products, and (3) whether imports have otherwise depressed prices to a significant degree or prevented price increases. 70/

Import data are available for all anti-friction bearings and are also disaggregated for ball, roller, parts, and other bearings. Because these separate categories do not correspond to the domestic industry classifications stated previously, and because the domestic industry data have been analyzed

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68/ Id.

69/ 19 U.S.C. § 1677(7)(B).

70/ 19 U.S.C. § 1677(7)(C).

in terms of the "product line" of all anti-friction bearings, the following discussion will focus import volume and market share at the level of all anti-friction bearings as that is the "best information available" at this preliminary stage.

The volume of imported anti-friction bearings from the countries subject to investigation increased steadily from $470 million in 1985 to $508 million in 1986, and then to $542 million in 1987. 71/ Market share of imported anti-friction bearings, by value, also increased steadily, from 18.7 percent of U.S consumption in 1985 to 20.9 percent in 1986, and then to 21.9 percent in 1987. 72/

The pricing information available in these preliminary investigations is both limited and inconclusive. Pricing data were requested for six separate product numbers, but those products represent less than one percent of all shipments. 73/ 74/ 75/ Prices for all of these products generally fell

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71/ Report at A-55-A-57, Table 28.

72/ Id. at A-58-A-60, Table 29.

73/ Id. at A-62-A-63.

74/ Vice Chairman Brunsdale considers the underselling and overselling evidence to be of limited use to the Commission in these investigations because the small percentage of all bearing products that could be surveyed in this case will most likely yield the Commission evidence that will not be probative on the issue of causation.

75/ Vice Chairman Brunsdale also notes that the alleged margins of dumping and subsidization are high in these investigations, with dumping margins ranging as high as 230 percent. See id. at A-17. She considers petitioner's

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throughout the period, both in the OEM and distributor markets. 76/ Discussion of the trends for products from particular countries is limited because of the confidential nature of the information. Patterns of underselling or overselling varied widely depending on the product, the market, and the country involved. 77/ Based on these indicators, we find a reasonable indication that the subject imports are a cause of the material injury being suffered by the respective domestic industries.

Conclusion

While the Commission differs on the method of analyzing the data of record, 78/ we do agree that there is a reasonable indication of material injury to the domestic industries producing all anti-friction bearings. We also agree that application of the "reasonable indication" standard traditionally followed in preliminary investigations and approved by the Federal Circuit in American Lamb Co. v. United States, 785 F.2d 994 (Fed. Cir. 1986) supports an affirmative determination at this stage of the proceedings. There is no clear and convincing evidence of the lack of material injury to

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margin allegations (which she assumes were made in good faith) to be the best information now available on the size of the margins in this case. These allegations are, in her opinion, further evidence of a reasonable indication of material injury by reason of the subject imports.

76/ Id. at A-63-A-64, Table 30.

77/ Id. at A-67-A-74.

78/ See Digital Readout Systems, supra n.6, (Views of Chairman Liebeler, Vice Chairman Brunsdale, and Commissioner Cass) (Views of Commissioner Eckes, Commissioner Lodwick, and Commissioner Rohr).

the domestic industries by reason of the subject imports and a likelihood exists that information demonstrating material injury by reason of those imports could be developed in any final investigations. 79/

79/ Chairman Liebeler and Vice Chairman Brunsdale would seek to obtain additional data in any final investigations for each category or subcategory of bearings regarding the market share of the foreign manufacturers in their home market, the market share of the fairly traded imports in the U.S. market, the elasticities of supply and demand, the capacity utilization rates of the domestic and foreign manufacturers, the length of contracts for supply in the domestic industry, and the availability of price information to purchasers. Because the record does not contain clear and convincing evidence that these imports have not materially injured or threatened to materially injure the domestic industries, they concur with the affirmative preliminary determination of the Commission.

ADDITIONAL VIEWS OF COMMISSIONER RONALD A. CASS

Antifriction Bearings (Other than Tapered Bearings) and Parts Thereof from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand and the United Kingdom
Investigations Nos. 303-TA-19 and 731-TA-391-399 (Preliminary)

I concur with the Commission's affirmative determination in this preliminary investigation. As the Commission's opinion indicates, my views concerning the manner in which certain issues of the kind raised in this proceeding should be analyzed are different from those of certain other members of the Commission. These views are summarized elsewhere1/ and no purpose would be served by describing them at length here.

The Commission's opinion correctly observes that the pricing and other data that we have so far been able to collect and analyze are limited and, in certain respects, inconclusive. Certain data needed to analyze properly the

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1/ See 3.5 inch Microdisks from Japan, Inv. No. 731-TA-389 (Preliminary) (Additional Views of Commissioner Cass); Certain Bimetallic Cylinders from Japan, Inv. No. 731-TA-383 (Final) (Additional Views of Commissioner Cass); Digital Readout Systems, Inv. No. 731-TA-390 (Preliminary) (Views of Chairman Liebeler, Vice Chairman Brunsdale and Commissioner Cass).

impact of alleged LTFV antifriction bearings on the various domestic industries - e.g., importer market share data2/ -- is simply not available in disaggregated form at the present time. Moreover, other important data -- e.g., data on estimated dumping margins3/ -- vary over a wide range for the countries that are the subject of this investigation, with at least some of the data suggesting bases for concluding that domestic industries may have been materially harmed by LTFV imports. Finally, other evidence now on the record does not provide clear support for a contrary conclusion, although some of the evidence casts doubt on the existence of material injury from LTFV imports. Accordingly, based upon the record before us and in light of the standard applicable to preliminary investigations under Title VII, I must find that there is a reasonable indication of material injury to the domestic industries in question.

2/ Report at A-60.

3/ Report at A-17.

INFORMATION OBTAINED IN THE INVESTIGATIONS

Introduction

On March 31, 1988, petitions were filed with the U.S. International Trade Commission and the U.S. Department of Commerce by counsel on behalf of the Torrington Co., Torrington, CT. The petitions allege that imports of antifriction bearings (other than tapered roller bearings) and parts thereof 1/ from Singapore and Thailand are being subsidized by the Governments of Singapore and Thailand, that imports of antifriction bearings (other than tapered roller bearings) and parts thereof from the Federal Republic of Germany (West Germany), France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom (UK) are being sold in the United States at less than fair value (LTFV), and that an industry in the United States is materially injured and threatened with material injury by reason of such imports.

Accordingly, effective March 31, 1988, the Commission instituted the following preliminary countervailing duty 2/ and antidumping investigations under the applicable provisions 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 of such merchandise into the United States:

Country	Countervailing duty investigation No.	Antidumping investigation No.
West Germany	1/	731-TA-391 (Preliminary)
France	1/	731-TA-392 (Preliminary)
Italy	1/	731-TA-393 (Preliminary)
Japan	1/	731-TA-394 (Preliminary)
Romania	1/	731-TA-395 (Preliminary)
Singapore	303-TA-19 (Preliminary)	731-TA-396 (Preliminary)
Sweden	1/	731-TA-397 (Preliminary)
Thailand	303-TA-20 (Preliminary)	731-TA-398 (Preliminary)
UK	1/	731-TA-399 (Preliminary)

1/ Not applicable.

Notice of the institution of the Commission's investigations and of a public conference to be held in connection therewith was given by posting

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1/ Included within the scope of the petition are ball bearings, cylindrical roller bearings, spherical roller bearings, spherical plain bearings, needle roller bearings, thrust bearings, tappet bearings, and all mounted bearings such as set screw housed units, bushings, pillow block units, flange, cartridge and take-up units; and parts including balls, rollers, cages or retainers, cups, shields, and seals. See app. A for Commerce's notice of institution and a detailed description of the scope of investigation.

2/ Singapore and Thailand are not signatories of the General Agreement on Tariffs and Trade (GATT) subsidies code and thus are not "under the Agreement" pursuant to sec. 701(b) of the Act. However, these countries have been accorded an injury investigation under sec. 303 of the Act for those articles that are duty free under the Generalized System of Preferences (GSP).

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 April 11, 1988 (53 FR 11917). 1/ The conference was held in Washington, DC, on April 21, 1988. 2/ The Commission voted on these investigations on May 10, 1988, and transmitted its determinations to the U.S. Department of Commerce on May 16, 1988.

Previous and Related Investigations

Antifriction bearings, including tapered roller bearings, have been the subject of a number of investigations by the Commission and other U.S. Government agencies since the early 1970's. A listing of the Commission's investigations is presented in table 1.

Table 1
Antifriction bearings: Previous and related investigations, and outstanding dumping/ countervailing duty orders, 1974-87

Item	Weighted-average margins	Investigation No.	Date of issue	Report No.
Antifriction bearings.....	1/	TEA-I-27	1973	TC 597
Antifriction bearings.....	1/	TEA-I-27(s)	1974	TC 649
Antifriction bearings.....	1/	TEA-F-56	1974	TC 636
Tapered roller bearings.....	1/	AA1921-142	9-4-74	1/
Tapered roller bearings:				
Japan.....	1/	AD-143	1975	USITC 714
Spherical roller bearings.....	1/	337-TA-179	1-4-84	1/
Tapered roller bearings:				
West Germany.....	Negative prelim.	731-TA-121	1984	1/
Italy.....	Negative final	731-TA-122	1984	USITC 1497
Japan.....	Negative final	731-TA-120	1984	USITC 1497
U.S. ball & roller bearing industry.....	1/	332-211	1986	USITC 1797
Tapered roller bearings:				
Hungary.....	7.42	731-TA-341	1987	USITC 1983
Italy.....	124.75	731-TA-342	1987	USITC 1999
Japan:				
Koyo Seiko Co., Ltd.....	70.44			
NTN Toyo Bearing Co.....	47.05			
All others.....	47.57			
People's Republic of China..	0.97	731-TA-344	1987	USITC 1983
Romania.....	8.70	731-TA-345	1987	USITC 1983
Yugoslavia.....	33.61	731-TA-346	1987	USITC 1999
U.S. automotive parts industry.....	1/	332-232	1987	USITC 2037

1/ Not applicable.

Source: Various Commission publications.

1/ Copies of the Commission's and Commerce's notices are presented in app. A.
2/ A list of witnesses appearing at the conference is presented in app. B.

Commerce investigations.--In addition to the subject investigations, Commerce is currently conducting a section 232 investigation on the effects of imports of antifriction bearings on the national security. The investigation was instituted in response to a petition filed by the Antifriction Bearing Manufacturers Association (AFBMA). Commerce is expected to make a report and recommendation to the President for action or inaction regarding an adjustment of imports of antifriction bearings by July 17, 1988.

Department of Defense investigations.--In response to a request from Congress in 1985, the Joint Logistics Commanders (JLC) conducted a study of the antifriction bearing industry. The JLC prepared recommendations, and the Department of Defense (DOD) developed a "Bearing Action Plan" of proposed solutions to problems identified in the report, which was sent to Congress in March 1987. Congress indicated that DOD should implement the plan expeditiously. A proposed Federal acquistion regulation (FAR) to restrict the procurement of all antifriction bearings for DOD use over the next 3 years to domestic sources is currently under review by DOD. 1/ 2/

The Products

Description and uses

Product description.--The petitions underlying these investigations state that "The merchandise covered by this petition consists of all ground antifriction bearings and all parts thereof both finished and unfinished with the exception of tapered roller bearings. Included within the scope of the petition are ball bearings, cylindrical roller bearings, spherical roller bearings, spherical plain bearings, needle roller bearings, thrust bearings, tappet bearings, and all mounted bearings such as set screw housed units, bushings, pillow block units, flange, cartridge and take-up units; and parts including balls, rollers, cages or retainers, cups, shields and seals."

Virtually every industry that manufactures machines uses bearings. For example, the transportation, mining, construction, manufacturing, and defense-related industries all use bearings extensively. 3/ Worldwide production of antifriction bearings involves approximately 200,000 part numbers; such bearings range in diameter from one-eighth of an inch to 16 feet.

Clarification of scope.--During the course of these preliminary investigations, counsel for the petitioner offered some clarifications as to the scope of the merchandise subject to investigation. The following articles have been addressed:

(1) Within the two basket categories of articles, the products therein that are subject to investigation include, but are not limited to, spherical plain bearings entered under Tariff Schedule of the United States Annotated

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1/ Federal Register notice, 53 FR 10129, Mar. 29, 1988.
2/ A FAR concerning ball bearings with an outside diameter of less than 30 mm. has been in effect since 1971.
3/ An automobile will use 40 to 50 bearings in each vehicle.

(TSUSA) item 681.3900 and wheel hub units entered under TSUSA item 692.3295. 1/ 2/

(2) Green machined (machined but not heat treated) components and parts such as "green rings" are excluded from the scope of investigation. 3/

(3) Antifriction bearings where the elements are composed of material other than iron or steel are included in the petitioner's product definition, including, but not limited to, ceramic bearings. 4/

(4) Ball screws and linear precision guides are included in the petitioner's product definition. 5/

Physical characteristics.--The function of an antifriction bearing is to reduce friction between moving and fixed parts and thereby enable easier, faster motion. Bearings consist of a few major components: an outer ring or outer race, an inner ring or inner race, a series of balls or roller elements that fit into the opening in a separator cage, and a separator or cage which keeps the balls or rollers equally distributed around the races. The inner ring and outer ring rotate with respect to each other, separated by the rolling elements, which support the load. Bearings normally are equipped with one of two types of rolling elements--balls or rollers. Figure 1 provides a graphic presentation of the different types of antifriction bearings.

Ball bearings.--Ball bearings are often preferred over roller bearings when speed is a more important factor than load-carrying capacity. Ball bearings can withstand fairly high speeds because there is less contact between the rolling balls and the inner and outer rings than there would be with a roller bearing. Ball bearings are designed to carry radial or thrust loads, or a combination of the two. Radial loads are applied perpendicularly to the shaft axis, whereas thrust loads are applied parallel to this axis. Ball bearings can also be classified by a number of geometric configurations, including single row, double row, self-aligning, and angular contact.

Roller bearings.--Roller bearings are preferred over ball bearings when load-carrying capacity is more important than speed, since roller bearings have a greater rolling surface area in contact with the inner and outer rings. Roller bearings are also able to absorb both radial and thrust loads. Roller bearings are classified according to the shape of the roller used, the most common types being cylindrical, spherical, needle, and tapered.

Other bearings.--Other bearings include spherical plain bearings and mounted bearing units. Spherical plain bearings have no separate rolling —

1/ Transcript of the conference (TR), p. 76.
2/ Customs has classified the wheel hub unit as an automotive part (SKF post-conference brief, exh. 12), whereas the U.S. Patent Office recognizes it as an "antifriction bearing with multiple piece race" (U.S. Patent 4,179,167, Dec. 1979; May 5, 1988 submission by * * *).
3/ TR, p. 76.
4/ Ibid., p. 86.
5/ Apr. 27, 1988, letter from Eugene Stewart, special counsel for the petitioner.

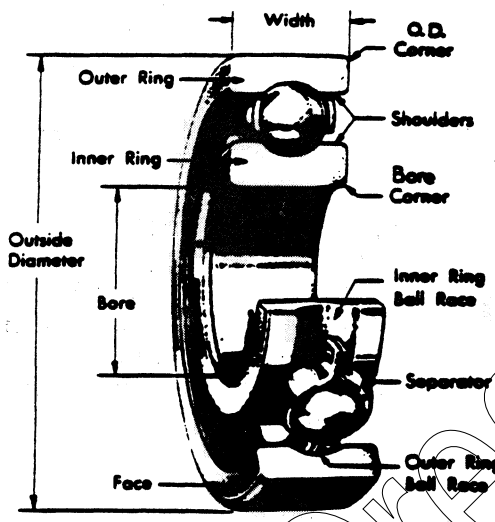
Bearing Parts and Their Names

Figure 1.

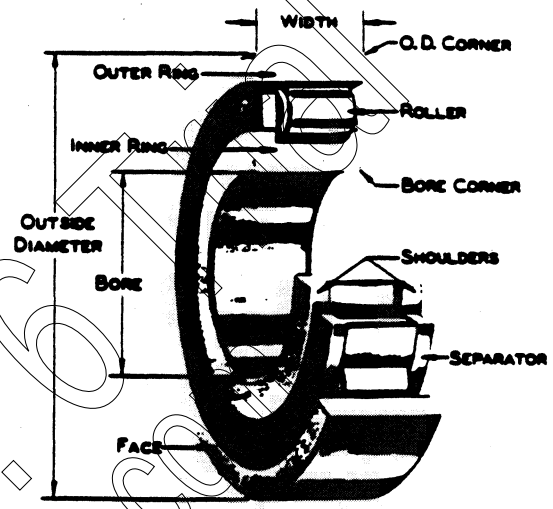
The parts common to all standard ball and roller bearings have, for the purpose of this manual, been given names as shown below.

Basically all anti-friction bearings consist of two hardened steel rings, the hardened balls or rollers and separator. A number of variations of these types are in use. Some types, such as Needle roller bearings may be used without an inner ring, the rollers fitting directly upon the hardened shaft. Needle bearings have no separator.

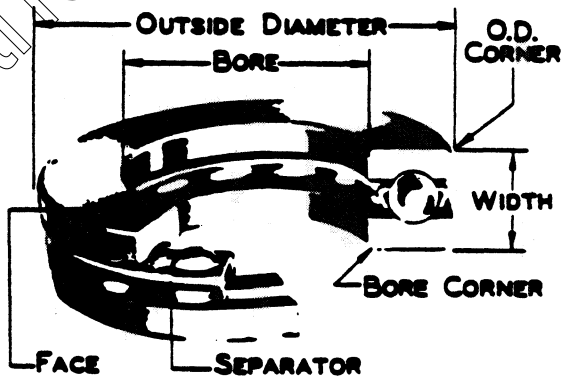
Ball Bearing



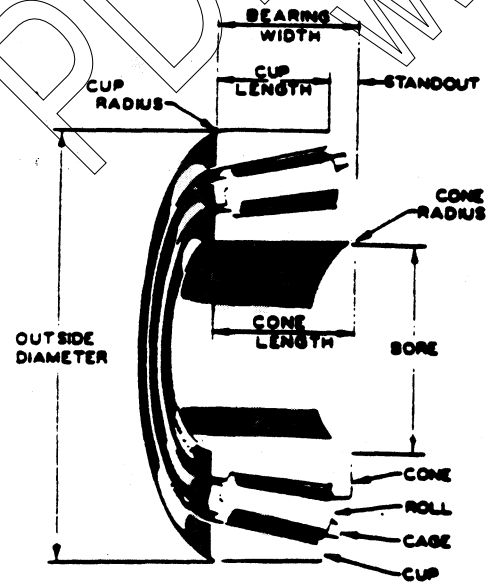
Straight Roller Bearing



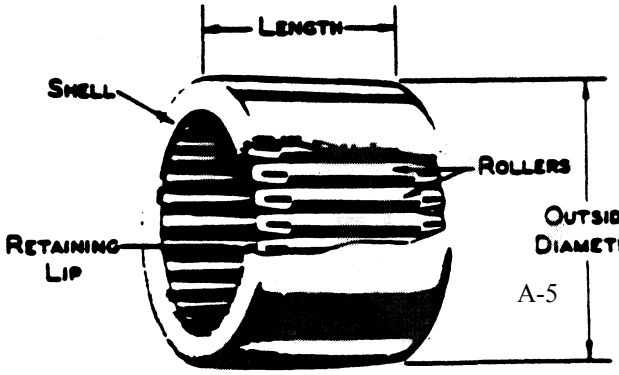
Ball Thrust Bearing



Tapered Roller Bearing



Needle Roller Bearing



element. The inner and outer rings roll against each other. These bearings can withstand very heavy loads. Mounted bearing units covered in these investigations are flange, cartridge, and take-up units. These assemblies are premounted bearings and may incorporate ball bearings, tapered roller bearings, or other types of antifriction bearings. Mounted bearing units consist of a bearing element that is set and sealed into a housing, which is then mounted onto a machine frame. Mounted bearing units allow the movement of a shaft through the housing itself, with flange, take-up, and cartridge units each providing for a different positioning of a shaft within or on a machine frame. A typical application of such units is in the wheel hub system of an automobile.

Wheel hub units are prelubricated, preset, deep-groove ball bearings that have been sealed into a cast or forged, flanged housing with bolt holes for direct mounting onto the wheel hub, in which the flanged housing performs as the outer race of the bearing. As determined in the tapered roller bearing investigations, cartridge bearing units incorporating ball bearings are directly substitutable with tapered roller cartridge units for certain part numbers at the initial design stage of the automobile. 1/

Components and parts.--Finished bearing components are rollers, cages, rings, and miscellaneous small parts (e.g., spacers and seals) that typically have been completely machined, heat treated, ground, possibly honed, and are ready for final assembly into a bearing. Unfinished bearing components are balls, rollers, cages, cups, shields, and seals that have been green machined and heat treated, but which require final finishing before they can be assembled into a bearing and thus act as an antifriction device.

Characteristics and applications

All of the various types of ball and roller bearings have specific characteristics associated with them, and, in general, are not functionally interchangeable. However, the original determination of which type of bearing to use is sometimes an engineering choice at the initial design phase of the product incorporating the bearing. The following tabulation lists the characteristics and applications associated with the various types of bearings:

	Characteristics	Applications
Ball bearings.....	High-speed and light-load capabilities; low friction; carry radial and thrust loads.	Used in the automotive, agricultural, mining construction, and oil industries.

1/ Tapered Roller Bearings and Parts thereof, and Certain Housings Incorporating Tapered Rollers from Hungary, the People's Republic of China, and Romania, USITC 1983, p. 7.

	Characteristics	Applications
Roller bearings:		
Cylindrical.....	Moderate-load and moderate- to high-speed capability; no correction for misalignment; do not carry thrust loads.	Used in heavy equipment, mining, steel, construction, and aerospace industries.
Spherical.....	Heavy-load and moderate-speed capability; correct misalignment; have a higher amount of friction than ball bearings; withstand radial as well as thrust loads.	Used in heavy equipment industries, construction, paper, rudder stock, etc.
Needle.....	High-load and fairly high-speed capability; do not correct misalignment; can be used in areas where there is little space; needle thrust bearings carry thrust loads and needle radial bearings carry radial loads.	Used in automotive, machine tool, and home appliance industries. Also used in outboard engines.
Tappets.....	Moderate-load and low speed capability; all tappets are of similar size and configuration.	Have exclusive functions in the automotive industry.
Tapered.....	Heavy-load and moderate-speed capability. Do not correct misalignment; carry radial and thrust loads.	Used in the automotive, steel, construction, and mining industries. Normally not used in smaller equipment.
Plain bearings:		
Spherical plain bearings.....	Heavy-load and low-speed capabilities; correct misalignment.	Used in heavy equipment, such as hydraulic cylinders and construction.

	Characteristics	Applications
Housed bearing units:		
Ball bearing units..	Light-load and high-speed capabilities.	Used in lighter industrial and agricultural equipment.
Spherical bearing units............	Heavy-load and moderate-speed capability; correct misalignment.	Used in heavy industrial equipment.
Tapered roller bearing units.....	Heavy-load capacity; for moderate-speeds; cannot correct misalignment.	Used in heavy industrial equipment.
Cylindrical roller bearing units.....	Heavy-load and moderate- to high-speed capability; not able to correct misalignment; these units are not very common.	Used in the mining and heavy manufacturing industries.
Wheel hub units.....	Housed in either ball or tapered roller bearings (more frequently ball); speed and load capability determined by size and type of bearing.	Primarily used in automotive industry; also farm equipment, transportation equipment, power transmission applications, and defense applications.

Interchangeability

The petitioner argues that at the design stage there is a certain degree of interchangeability among the different bearings. According to the petitioner, engineers will calculate the dynamic or static capacity of a bearing with an NLD ratio (i.e., number, length, and diameter of rolling elements), which is then cross-checked against load and speed factors. The same solution can be provided by different types of bearings having the same dynamic capacity. 1/ Examples of such interchangeability include substitution between deep-groove ball bearing and tapered roller bearing wheel hub units, as they both are capable of radial, axial, or combined loads. 2/ In addition, the

1/ TR, p. 16.
2/ Petition, p. 139.

petitioner cites its 1985 competition with Koyo Seiko of Japan for bearings in Ford rear axles; Torrington offered a needle roller bearing product, but Ford selected Koyo's offer of tapered roller bearings. 1/ The degree to which different bearing types are interchangeable appears to be limited in applications (not necessarily volume), occurring most often in automotive applications, and involving ball bearings and tapered roller bearings.

Manufacturing process

There are four major steps in the production of bearings: green machining, heat treating, finishing, and assembly and inspection. Special bearing-grade alloy steel in the form of 12- to 15-foot seamless tubing is the raw material utilized in the production of most outer and inner rings, and alloy wire, in the form of coils, is the base material for roller manufacture. There is a generally accepted minimum industry standard for the steel utilized in bearing production; however, the raw material used by most bearing manufacturers exceeds this standard in quality.

Green machining.--Green machining is an industry term that relates to the machining operations performed on the raw material prior to heat treatment for outer and inner rings and rollers. For outer and inner rings, the steel tubing is machined on single or multiple screw machines. When the desired contour and shape is achieved, the outer or inner ring is sheared off the end of the tube. Green machining the inner ring, however, involves more steps because of the complexity of the design and function of this component. These components are then inspected and electronically gauged to ensure adherence to the prescribed specifications. The green machining of rollers begins with coil wire drawn into a cold header machine where the rollers are sheared in rapid succession and are "headed" or butted in a die to form the desired shape.

Heat treatment.--The bearing components are then heat treated to ensure durability, hardness, and shock resistance. Some bearings, such as tapered roller bearings, have components made from a carburizing-grade steel that is soft in the middle. The initial heat treatment stage for these components begins with carburization. During this process the green-machined components are heated in a carbon rich atmosphere to impregnate carbon into the surface of the product. After quenching (emersion in an oil bath), the high-carbon case becomes very hard, whereas the lower carbon core remains comparatively soft. The high carbon of the outer layer ensures that the roller contact surfaces will be hard and wear resistant, while the "softer" core enables the bearing to absorb shocks more easily.

The next stage of heat treatment is applicable in the manufacture of all steel bearing parts, with the exception of cages. The parts are placed in a hardening furnace and heated to very high temperatures (about 1550 °F) for an extended period of time. These components are then placed in a stamping die to reshape them, as the heating process distorts their size, and then quenched in an oil bath.

1/ Ibid; confirmed by counsel for Koyo Seiko at the preliminary conference (TR, p. 199).

Finishing.--The third phase of production is finishing. This process consists of either just grinding or grinding and honing. The steps involved in the grinding operation differ depending on the type of component. Grinding inner and outer rings is done in the following steps:

Grinding steps	Inner ring	Outer ring
1st	Width grind	Width grind
2nd	Bore grind (inside of inner ring)	Outside-diameter grind
3rd	Outside diameter grind	Bore grind (inside side of ring)

Honing involves polishing the inside diameter of the outer ring and the outside diameter of the inner ring. This process is often performed only on smaller bearings. A honing machine utilizing a very fine grade of sandpaper performs these operations.

Rollers are finished somewhat differently than inner and outer rings. The basic steps involve rough grinding the roller body, grinding the roller end, finish grinding the roller body, and roller honing. Rollers initially pass through a number of grinding machines that remove steel from their outside diameter in order to obtain a specified size. During end grinding, steel is removed from the large end of the roller, leaving a slightly convex shape. Final grinding and honing then take place, and the rollers are inspected, gauged, and packaged in their sequential order of production to minimize the variance of a complement of rollers in an inner ring assembly.

Cages are often produced from cold-rolled strip steel. The steel is fed into a "cut and carry press" that performs the blanking, bottoming, perforation, and winging operations that produce a finished cage. The cut and carry press has multiple stations within it, and an internal conveyor that moves the material along through the various processes. Blanking involves forming the strip steel into a dish shape; bottoming involves punching out the bottom of the cage. The cage is then perforated with holes around its diameter. A winging operation removes any sharp corners on the perforations and spreads the large end of the cage for installation of the rolling elements. Cages are then annealed to relieve any stresses. Annealing involves heating a cage to a specific temperature for a specified time and then cooling the cage to increase its hardness. This is followed by shot blasting to remove scale on the cage and to improve the finish.

Assembly.--In the assembly stage, cages are mounted on an assembly nest and the balls or rollers are placed in the openings or pockets of the cage. The inner ring is then inserted into the middle of the cage. The inner and outer ring assemblies are then demagnetized, inspected, slushed with a protective anti-rust solution, and packaged for shipment. This process is often automated for the smaller bearings.

Certain bearing components, such as inner and outer rings, may be green machined only or green machined and heat treated, and then sent to another bearing producer to be finished. U.S. producers sometimes purchase these unfinished components from foreign manufacturers and then finish and assemble them here.

Machinery and equipment

Bearing production involves a high degree of mechanization because, in large part, of the very close tolerances required of the products. Computer-aided manufacturing, microprocessors, laser-gauging equipment, and highly automated material-handling equipment are often employed in the production of bearings. Employees perform very little of the actual production; they are primarily machine operators and quality control inspectors. Each worker is responsible for the product coming out of his or her station; consequently, there is a high percentage of gauging and inspection. All components are tested several times throughout the production process.

The components of several different types of bearings may be manufactured using the same green machining equipment. The two key factors that determine the type of machine to be used are size and form of the raw material, not the type of bearing. For example, the machinery used to machine bar stock is normally not the same machinery used to machine steel tubing. Likewise, the machinery used in heat treatment does not differ between various types of bearings, with the exception of tapered roller bearings. The components used in the manufacture of a tapered roller bearing undergo carburization, which is an additional heat treatment process. In grinding, however, most machines are specifically designed for one or two types of bearings, although certain machines can be used to grind a wider variety of bearing types.

Manufacturing facitilites

Many companies rationalize their production by size, precision, and/or type of rolling element. Bearings come in a wide variety of sizes from approximately one-eighth of an inch in diameter to over 16 feet in diameter. These items also vary according to the precision of their dimensions and the load tolerances they can hold. Strict standards for these measures are developed by the Annular Bearing Engineers Committee (ABEC) and the Roller Bearing Engineers Committee (RBEC) of the Anti-Friction Bearing Manufacturers Association, Inc. (AFBMA).

The petitioner argues that the different types of bearings are manufactured at common manufacturing facilities, often on identical or similar machinery and equipment, employing labor skills that are often interchangeable. In a postconference submission, Torrington provided a list of each of its manufacturing facilities with respect to the product(s) produced, the applications of those products, and the principal customers for those products. A chart presenting Torrington's rationalization of production by plant is presented in appendix C. 1/

In addition to size and type of bearing, U.S. producers have segregated production on the basis of level of precision, i.e., precision bearings (ABEC/RBEC 1 through 5) and superprecision bearings (ABEC/RBEC 7 and up). The JLC study has noted that the production of superprecision bearings "requires specialized manufacturing equipment, specialty material, and a highly skilled

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1/ The petitioner does in fact produce a number of different bearing types * * *. Based on staff visits to 2 Torrington plants, testimony at the preliminary conference, and postconference submissions, * * *.

workforce." 1/ The process of manufacturing superprecision bearings requires "white room technology" to control the environment, because even variations of 1 degree in temperature may cause metal to shrink or expand. 2/ Manufacturing superprecision bearings requires grinding to extremely tight tolerances (allowable variations in specifications), measured in hundreds of thousandths of an inch. A number of U.S. producers have specialized, exclusively, in the manufacture of superprecision bearings, having retreated from the commercial market. 3/

Evidence gathered during these preliminary investigations is mixed as to which firms are manufacturers and which are finishing and assembly operations. Membership in AFBMA is limited to manufacturers of antifriction bearings, but the association considers grinding operations manufacturing, and excludes only "clearing houses." 4/

Like product considerations

Petitioner's arguments.--The petitioner argues that there is a single like product and a single industry producing all bearings (excluding tapered roller bearings), on the basis of the following considerations:

(1) Common physical characteristics--the reduction of friction between moving parts, and containing four basic components: an outer ring (race), an inner ring (race), the cage or separator, and the roller element (except for a spherical ball bushing, where there is no separate rolling element);
(2) Interchangeable uses at the design stage;
(3) Common channels of distribution to OEMs and distributors; and
(4) Common manufacturing facilities.

Respondents' arguments.--Respondents have universally raised questions as to the broad scope of the investigations. At the staff conference and in postconference submissions, counsels for respondents have argued that antifriction bearings should be divided into several separate like products and the industries producing these like products. These arguments are discussed below.

Counsel for the Japanese producer NTN Toyo Bearing Co. has proposed the following seven categories of antifriction bearings, each of which counsel claims constitutes a separate like product and industry: 5/

1/ JLC Bearing Study, June 18, 1986, p. 4.
2/ Apr. 20, 1988, interview with * * *.
3/ May 2, 1988, telephone interview with * * *.
4/ May 2, 1988, telephone interview with Michael Payne, President, AFBMA.
5/ NTN Toyo postconference brief, p. 4.

Ball bearings
Cylindrical and spherical roller bearings
Needle roller bearings
Mounted bearing units
Bearing components
Certain plain bearings
Automotive parts (including wheel hub units)

Counsel for the Japanese producer Nippon Seiko (NSK) proposes the following eight product categories: 1/

Machine parts
Automobile parts
Ball bearings
Roller bearings:
  Needle roller bearings
  Spherical roller bearings
  Cylindrical roller bearings
  Other roller bearings
Bearing components and parts

Counsel for the West German producer FAG proposes four alternatives for selecting like products, including: 2/

I. Seven products suggested by the Japanese producer Koyo Seiko, at the preliminary conference--
   Cylindrical roller bearings
   Spherical roller bearings
   Needle roller bearings
   Housed bearings
   Spherical plain bearings
   Parts
II. Nine headings of the petition--
   Ball bearings
   Roller bearings
     Cylindrical roller bearings
     Spherical roller bearings
     Needle roller bearings
     Tappets
   Spherical plain bearings
   Housed bearing units
   Components and parts

1/ NSK postconference brief, p. 3.
2/ FAG postconference brief, p. 34.

III. Alternative six categories--
- Ball bearings
- Roller bearings
  - Barrel roller bearings
  - Needle roller bearings
  - Tapered roller bearings
- Plain bearings
  - With four subdivisions--
    - Commercial grade vs. custom made
    - Thru/case hardened vs. high-tempered/nonmetallic
    - Miniature vs. large
    - Retainer metal (steel, plastic, aluminum or brass)

IV. Five industry segments according to the extent of manufacturing--
- Unmounted ball bearings
- Tapered roller bearings
- Unmounted roller bearings:
  - Cylindrical roller bearings
  - Spherical roller bearings
  - Needle roller bearings
- Mounted bearings
- Parts

In all cases, respondents argue that, on the basis of the Commission's traditional standards (physical appearance and uses, interchangeability among products, channels of distribution, customer perception of the articles, and production facilities and employees), there are distinct dividing lines between antifriction bearing categories.

U.S. tariff treatment

Antifriction bearings (other than tapered roller bearings) and parts thereof, and whether finished or unfinished, are classified in schedule 6 of the Tariff Schedules of the United States Annotated (TSUSA), as follows (see app. D for a complete nomenclature of the tariff schedule and harmonized tariff schedule that cover the subject products):

TSUSA item number	HTS item number	Description	Rates of duty Col. 1	Special	Col. 2
			(Percent ad valorem)		
680.30		Antifriction balls and rollers:	4.9	Free	45
680.3025	8482.91.00108	Alloy steel antifriction balls			
680.3030	91.00206	AF balls of other than alloy steel			
680.3040	91.00402	Antifriction rollers			
	91.00607				
680.3300	10.10006	Ball bearings with integral shafts	4.2	Free	35

TSUSA item number	HTS item number	Description	Rates of duty Col. 1	Special	Col. 2
			(Percent ad valorem)		
680.37		Ball bearings, and parts thereof:	11	Free	67
680.3704	10.50105	Radial ball bearings, outside diameter under 9 mm		5.5	
680.3708	10.50203	9 mm and over but not over 30 mm			
680.3712	10.50301	Over 30 mm but not over 52 mm			
680.3717	10.50409	Over 52 mm but not over 100 mm			
680.3718	10.50506	Over 100 mm			
680.3722	10.50908	Ball bearings, other than radial			
680.3727	99.10108	Parts of ball bearings, inner races and other races of integral shaft bearings			
680.3728	99.10509	Other parts			
680.39		Spherical roller bearings and parts:	6.5	Free	67
680.3952	30.00004	Spherical roller bearings			
680.3956	99.50001	Parts			
680.3960	40.00002	Other roller bearings (including			
	50.00009	combination roller and ball			
	80.00003	bearings) and parts			
	99.70007				
681.04		Pillow blocks and parts thereof:	5.7	Free	45
		Ball or roller bearing type--			
681.0410	8483.20.80400	Pillow block units			
	20.80801				
681.0430	30.80202	Parts			
	30.80408				
	30.80603				
	30.80809				
	90.30004				
	90.70005				
681.10		Flange, take-up, cartridge, and hanger units, and parts thereof:	5.7	Free	45
		Ball or roller bearing type--			
681.1010	20.40409	Complete units			
	20.40800				
681.1030	30.40407	Parts			
	30.40808				
	90.20006				
	90.30004				
681.3900	8485.90.00008	Machinery parts not containing electrical features and not specially provided for	5.7	Free	45
692.32		Chassis, bodies (including cabs), and parts of the foregoing motor vehicles:	3.1	Free	25
692.3295	8708.99.50900	Other motor vehicle parts			

The Nature and Extent of Alleged Subsidies and Alleged Sales at Less Than Fair Value

The allegations of unfair trade practices as made by the petitioner are summarized below.

Alleged subsidies

Singapore.--The petitioner alleges that producers or exporters of antifriction bearings (other than tapered roller bearings) in Singapore receive benefits that constitute subsidies within the meaning of the countervailing duty law. The Department of Commerce has reviewed the petitioner's allegations and has initiated an investigation on the following alleged programs:

Economic Expansion Incentives Act--
- Pioneer Industries
- Expansion of Established Enterprises
- Production for Export
- International Trade Incentives
- Investment Allowances
- Warehousing and Servicing Incentives

Singapore Monetary Authority--favorable financing for exports

New Programs--
- Capital Assistance Scheme
- Skills Development Fund
- Initiatives in New Technology
- Jurong Town Corp.
- Product Development Assistance Scheme
- Additional R & D Incentives

Although Singapore is not a "country under the agreement" pursuant to section 701(b) of the Act, the Commission is conducting a countervailing duty investigation on those antifriction bearings from Singapore that are duty free under the GSP, pursuant to section 303 of the Act. The subject bearings include ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing; machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for; and parts of motor vehicles containing any of the foregoing bearings and not specially provided for.

Thailand.--The petitioner alleges that producers or exporters of antifriction bearings (other than tapered roller bearings) in Thailand receive benefits that constitute subsidies within the meaning of the countervailing duty law. The Department of Commerce has reviewed the petitioner's allegations and has initiated an investigation on the following alleged programs:

Investment Promotion Act (Income Tax Exemption)
Reduced Business Tax for Producers of Intermediate Goods for Export Industries
Export Packing Credits
Tax Certificates for Exports
Rediscount of Industrial Bills
Electricity Discounts for Exporters
Investment Promotion Act (Double Deduction of Foreign Marketing Expenses and Foreign Taxes

Although Thailand is not a "country under the agreement" pursuant to section 701(b) of the Act, the Commission is conducting a countervailing duty investigation on those antifriction bearings from Thailand that are duty free under GSP, pursuant to section 303 of the Act. These subject bearings include ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing; machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for; and parts of motor vehicles containing any of the foregoing bearings and not specially provided for.

Alleged sales at LTFV

For each of the countries covered by these investigations, the petitioner has calculated LTFV margins by comparing the United States price for particular sales with adjusted home market prices (except as noted). The following tabulation provides estimated dumping margins (in percent) for each of the foreign countries subject to these investigations:

Country/products	Estimated dumping margins: Low	Estimated dumping margins: High
Federal Republic of Germany:		
Ball bearings	41.6	84.9
Spherical roller bearings	54.5	64.4
Needle roller bearings	2.9	17.8
France:		
Ball bearings	47.8	161.7
Needle roller bearings	6.9	11.4
Italy	5.9	118.1
Japan:		
Ball bearings	84.7	106.6
Spherical roller bearings	27.0	27.0
Needle roller bearings	98.5	129.9
Tappets * * *	***	***
Romania:		
Italy as surrogate	85.3	132.2
Portugal as surrogate	87.0	107.0
Singapore	4.3	83.9
Sweden	3.4	179.8
Thailand 1/	79.4	220.0
United Kingdom	81.5	231.4

1/ Thailand home-market price based on constructed value.

The U.S. Market

U.S. producers

The petition has listed 95 known manufacturers of anitifriction bearings (other than tapered roller bearings) in the United States. Of these, eight firms are owned by foreign producers of antifriction bearings.

The Commission sent questionnaires to 50 of these producers and received completed responses from 21 firms. These 21 firms are believed to have accounted for 70 percent of total domestic shipments by U.S. producers in 1987. Table 2 presents shipment levels in 1987 and the share of shipments by product type for each of the antifriction bearing producers that responded to the Commission's questionnaire.

Related parties.--Petitioner has argued that the eight U.S. producers of antifriction bearings that are foreign owned should be excluded from the definition of the "U.S. industry." Table 2 indicates that (on the basis of value) the foreign-owned firms accounted for 26.6 percent of aggregate domestic shipments of all antifriction bearings (excluding tapered roller bearings) by U.S. producers in 1987. In order to facilitate consideration of the related parties issue, this report will provide data separately for the two categories of producers, foreign-owned and non foreign-owned, to the extent that such information is available.

Character of the U.S. market

The antifriction bearing industry in the United States can be described as dynamic. To one degree or another, most producers of antifriction bearings in the United States appear to have "restructured" and/or "rationalized" their operations during the period of investigation.

Major occurrences in the industry.--In response to the Commission's questionnaire the producers of antifriction bearings reported the following changes in operations during the period of investigation:

Date	Firm	Occurrence
*	*	*
*	*	*
*	*	*

Discussions with industry sources as to the condition of the antifriction bearings industry have identified the following plant closings that occurred during the period of investigation: 1/

Firm	Product	Plant location
*	*	*
*	*	*
*	*	*

1/ Apr. 20, 1988, interview with * * *.

Table 2
Antifriction bearings (other than tapered roller bearings): U.S. producers' share of the value of domestic shipments, 1987 1/

Firm	Location	Establishments	Foreign ownership	Share of shipments				
				Ball	Roller	Other	Parts	Total
				Percent				
In support of petition:								
* * * *		*	*	*		*	*	
Subtotal		***		***	***	***	***	***
In opposition:								
* * * *		*	*	*		*	*	
Subtotal		***		24.7	35.6	20.5	7.5	26.6
Do not wish to take a position:								
* * * *		*	*	*		*	*	
Subtotal		***		***	***	***	***	***
Total all firms				100.0	100.0	100.0	100.0	100.0

1/ Domestic shipments are U.S. firms' shipments of antifriction bearings produced in their U.S. establishments.

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

Note: Totals may not add due to rounding.

The dynamic situation of the antifriction bearing industry is typified by the experience of Hoover Ball in the closing of its plant in Charleston, NC. The plant was opened in 1980 as a state-of-the-art manufacturing facility of steel balls, * * *. In 1985 the plant was closed. 1/

U.S. importers

Information identifying importers of antifriction bearings was provided by counsel for the petitioner, and was verified against files provided by the U.S. Customs Service. The Commission sent questionnaires to 75 importers, which included all the known major importers of antifriction bearings (other than tapered roller bearings). The 75 importers are believed to account for approximately 75 percent of total imports of antifriction bearings (other than tapered roller bearings) from the countries subject to these investigations.

1/ Ibid, and May 6, 1988, telephone interview with * * *.

The principal importers of antifriction bearings in the United States are the domestic bearing manufacturers and/or their affiliated firms. U.S. producers of antifriction bearings (other than tapered roller bearings) accounted for increasing shares of total imports; 37.5 percent in 1985, 47.4 percent in 1986, and 53.1 percent in 1987. Original-equipment manufacturers (OEMs) accounted for 5.6 percent of total imports in 1985, 5.4 percent in 1986, and 5.9 percent in 1987. The remaining share of imports was accounted for by U.S. distributors of antifriction bearings, and importers that did not respond to the Commission's questionnaire (approximately 32.3 percent of total imports in 1987).

Table 3 presents information on the U.S. producers that import the subject products, and the ratio of imports to domestic shipments of the firm's U.S. production.

Table 3
Antifriction bearings (other than tapered roller bearings): U.S. producers' imports and ratio of imports to domestic shipments of U.S.-produced merchandise, by firms, 1985-87

Item	Value			Share of shipments		
	1985	1986	1987	1985	1986	1987
	(1,000 dollars)			(In percent)		
Firms in support of petition:						
*	*	*	*	*	*	*
Subtotal.....	***	***	***	***	***	***
Firms opposed:						
*	*	*	*	*	*	*
Subtotal.....	149,913	204,820	243,075	33.3	47.3	51.7
Neutral:						
*	*	*	*	*	*	*
Subtotal.....	***	***	***	***	***	***
Total.....	176,274	240,796	287,754	10.1	14.9	17.8

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

Apparent U.S. consumption

The data on apparent U.S. consumption of antifriction bearings (other than tapered roller bearings) presented in table 4 are composed of the sum of domestic shipments of U.S.-produced antifriction bearings by U.S. producers, as reported in response to the Commission's questionnaires, 1/ and imports of antifriction bearings (other than tapered roller bearings) as reported in official import statistics. 2/

Trends in apparent consumption.--Apparent consumption of all antifriction bearings (other than tapered roller bearings) decreased from $2.5 billion in 1985 to $2.4 billion in 1986, or by 3.1 percent, and then increased to $2.5 billion in 1987, or by 1.8 percent.

In terms of product categories, apparent consumption of ball bearings and "other" bearings decreased over the period of investigation, while apparent consumption of roller bearings and components and parts increased. Trends in total apparent consumption are heavily influenced by activity in the ball and roller bearing categories, as they represented 83 percent of total apparent consumption (based on value) in 1987.

U.S. producers' share of apparent consumption.--The U.S. producers' share of total apparent consumption of all antifriction bearings and parts thereof (based on value) decreased from 78.1 percent in 1985 to 75.9 percent in 1986, and continued to decrease to 74.6 percent in 1987. In terms of product categories, the U.S. producers' share of apparent consumption of all product categories for which data were gathered declined consistently during the period of investigation.

Channels of distribution

As was found in the competitive assessment of the ball and roller bearing industry, 3/ the major channel of distribution for antifriction bearings continues to be OEMs (table 5). Import competition reportedly occurred initially in the high-volume OEM market, and has, likewise, increased in the distributor/aftermarket channel. The OEM users of antifriction bearings cover almost all manufacturing segments, and those bearings are destined in large part for the motor-vehicle market.

In response to Commission questionnaires, 22 U.S. producers (accounting for 74.1 percent of total domestic shipments in 1987) and 33 importers (accounting for 45.2 percent of total imports from the subject countries in 1987) provided information on shipments of antifriction bearings.

1/ Questionnaire responses have been used for domestic shipments because data for 1987 are not available from secondary sources. Domestic shipments are, therefore, understated.
2/ Import statistics used in apparent consumption calculations do not include bearing articles imported under the basket categories of machinery and automotive parts. Import levels are, therefore, understated.
3/ Competitive Assessment of the Ball and Roller Bearing Industry, USITC 1797, p. 98.

Table 4
Antifriction bearings (other than tapered roller bearings): U.S. producers' shipments, imports for consumption, and apparent U.S. consumption, by products, 1985-87

Item	Value			Share of total		
	1985	1986	1987	1985	1986	1987
	(1,000 dollars)			(Percent)		
Ball bearings						
U.S. producers' shipments	1,081,322	1,001,340	976,507	43.1	41.2	39.4
Imports:						
Alleged unfair imports	292,056	311,579	317,283	11.6	12.8	12.8
Other imports	49,402	49,466	53,891	2.0	2.0	2.2
Total	341,458	361,045	371,174	13.6	14.8	15.0
Apparent U.S. consumption	1,422,780	1,362,385	1,347,681	56.7	56.0	54.4
Roller bearings						
U.S. producers' shipments	525,851	515,819	536,750	21.0	21.2	21.7
Imports:						
Alleged unfair imports	116,767	127,231	146,264	4.7	5.2	5.9
Other imports	16,873	15,723	18,803	0.7	0.6	0.8
Total	133,640	142,954	165,067	5.3	5.9	6.7
Apparent U.S. consumption	666,480	665,153	708,057	26.3	27.1	28.3
Other bearings						
U.S. producers' shipments	260,310	244,730	252,959	10.4	10.1	10.2
Imports:						
Alleged unfair imports	8,232	8,654	8,563	0.3	0.4	0.3
Other imports	2,663	2,701	3,958	0.1	0.1	0.2
Total	10,895	11,355	12,521	0.4	0.5	0.5
Apparent U.S. consumption	271,205	256,085	265,480	10.8	10.5	10.7
Components and parts						
U.S. producers' shipments	91,041	85,365	80,841	3.6	3.5	3.3
Imports:						
Alleged unfair imports	52,974	60,331	69,749	2.1	2.5	2.8
Other imports	11,652	9,261	10,408	0.5	0.4	0.4
Total	64,626	69,592	80,157	2.6	2.9	3.2
Apparent U.S. consumption	148,678	148,577	154,758	6.2	6.4	6.5
All products combined						
U.S. producers' shipments	1,958,524	1,847,254	1,847,057	78.1	75.9	74.6
Imports:						
Alleged unfair imports	470,029	507,795	541,859	18.7	20.9	21.9
Other imports	80,590	77,151	87,060	3.2	3.2	3.5
Total	550,619	584,946	628,919	21.9	24.1	25.4
Apparent U.S. consumption	2,509,143	2,432,200	2,475,976	100.0	100.0	100.0

Source: Shipments, compiled from data submitted in response to questionnaires of the U.S. International Trade Commission; imports, compiled from official statistics of the U.S. Department of Commerce.

Table 5
Antifriction bearings (other than tapered roller bearings): Channels of distribution, by products, 1985-87

Item	Value 1985	Value 1986	Value 1987	Share of total 1985	Share of total 1986	Share of total 1987
	-------(1,000 dollars)-------			---(In percent)--		
U.S. producers' shipments:						
Ball bearings:						
OEM-related...........	410,795	365,389	342,255			
OEM-unrelated..........	428,333	431,396	433,791			
Total OEM...........	839,128	796,785	776,046	43.6	43.4	42.4
Distributor-related....	6,865	5,868	6,904			
Distributor-unrelated..	208,237	191,325	185,009			
Total distributor....	215,102	197,193	191,913	11.2	10.7	10.5
Total.............	1,054,230	993,978	967,959	54.8	54.2	52.9
Roller bearings:						
OEM-related...........	39,888	35,694	30,639			
OEM-unrelated..........	340,340	354,859	381,320			
Total OEM...........	380,228	390,553	411,959	19.8	21.3	22.5
Distributor-related....	22,863	23,172	23,915			
Distributor-unrelated..	143,578	125,420	125,896			
Total distributor....	166,441	148,592	149,811	8.6	8.1	8.2
Total.............	546,669	539,145	561,770	28.4	29.4	30.7
Other bearings:						
OEM-related...........	2,612	2,118	2,533			
OEM-unrelated..........	121,083	102,938	108,520			
Total OEM...........	123,695	105,056	111,053	6.4	5.7	6.1
Distributor-related....	4,704	3,857	4,372			
Distributor-unrelated..	119,856	119,661	116,910			
Total distributor....	124,255	123,518	121,282	6.5	6.7	6.6
Total.............	248,255	228,574	232,335	12.9	12.4	12.7
Components and parts:						
OEM-related...........	6,221	3,412	2,566			
OEM-unrelated..........	63,489	64,475	61,793			
Total OEM...........	69,710	67,887	64,359	3.6	3.7	3.5
Distributor-related....	0	0	2			
Distributor-unrelated..	6,115	5,582	4,779			
Total distributor....	6,115	5,582	4,781	0.3	0.3	0.3
Total.............	75,825	73,469	69,140	3.9	4.0	3.8
All products combined:						
OEM-related...........	459,516	406,574	377,993			
OEM-unrelated..........	953,245	953,668	985,424			
Total OEM...........	1,412,761	1,360,281	1,363,417	73.4	74.1	74.5
Distributor-related....	34,432	32,897	35,193			
Distributor-unrelated..	477,786	441,988	432,594			
Total distributor....	512,218	474,885	467,787	26.6	25.9	25.5
Total.............	1,924,979	1,835,166	1,831,204	100.0	100.0	100.0

continued on next page

Table 5
Antifriction bearings (other than tapered roller bearings): Channels of distribution, by products, 1985-87--Continued

Item	Value 1985	Value 1986	Value 1987	Share of total 1985	Share of total 1986	Share of total 1987
	-------(1,000 dollars)-------			---(In percent)--		
U.S. imports:						
Ball bearings:						
OEM-related...........	0	0	465			
OEM-unrelated..........	152,400	148,486	173,623			
Total OEM...........	152,400	148,486	173,623	48.0	46.0	44.7
Distributor-related....	4,299	3,208	3,108			
Distributor-unrelated..	69,356	70,201	89,201			
Total distributor....	73,655	73,409	92,309	23.2	22.7	23.8
Total.............	226,055	221,895	266,397	71.2	68.7	68.5
Roller bearings:						
OEM-related...........	0	0	0			
OEM-unrelated..........	31,974	34,787	38,779			
Total OEM...........	31,974	34,787	38,779	10.1	10.8	10.0
Distributor-related....	1,055	1,232	1,495			
Distributor-unrelated..	28,516	29,117	40,996			
Total distributor....	29,571	30,349	42,491	9.3	9.4	10.9
Total.............	61,545	65,136	81,270	19.4	20.2	20.9
Other bearings:						
OEM-related...........	0	0	0			
OEM-unrelated.........	18,312	23,348	24,902			
Total OEM...........	18,312	23,348	24,902	5.8	7.2	6.4
Distributor-related....	58	99	169			
Distributor-unrelated..	5,951	6,477	6,326			
Total distributor....	6,009	6,576	6,495	1.9	2.0	1.7
Total.............	24,321	29,924	31,397	7.7	9.2	8.1
Components and parts:						
OEM-related...........	0	0	0			
OEM-unrelated..........	5,008	5,579	7,143			
Total OEM...........	5,008	5,579	7,143	1.6	1.7	1.8
Distributor-related....	16	17	17			
Distributor-unrelated..	587	451	2,696			
Total distributor....	603	474	2,713	0.2	0.1	0.7
Total.............	5,611	6,047	9,856	1.8	1.8	2.5
All products combined:						
OEM-related...........	0	0	0			
OEM-unrelated..........	207,695	212,200	244,447			
Total OEM...........	207,695	212,200	244,447	65.4	65.7	62.9
Distributor-related....	5,428	4,556	4,789			
Distributor-unrelated..	104,410	106,252	139,219			
Total distributor....	109,838	110,808	144,008	34.6	34.3	37.1
Total.............	317,532	323,008	388,455	100.0	100.0	100.0

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

Such information indicates that the principal OEM markets for both U.S. producers and importers of antifriction bearings are automotive, industrial equipment, and other applications. These markets accounted for approximately 90 percent of total shipments of antifriction bearings. Information on shipments of antifriction bearings by type of finishing indicates that approximately 70 percent of all bearings are of commercial quality, for both U.S. producers and U.S. importers. (See additional tables presented in app. D that provide shipment data by type of market (by end use of OEM equipment), and by type of finishing (commercial quality or custom designed))).

Consideration of Alleged Material Injury

The information in this section of the report was compiled from responses to questionnaires of the U.S. International Trade Commission. The 22 producers that provided questionnaire responses are believed to account for approximately 70 percent of total U.S. shipments of antifriction bearings (other than tapered roller bearings) in 1986.

U.S. production, capacity, and capacity utilization

Data on reported U.S. production, end-of-period capacity, and capacity utilization in connection with operations on antifriction bearings (other than tapered roller bearings) are presented in table 6. Production of all finished antifriction bearings (other than tapered roller bearings, and excluding components and parts) increased slightly from 651 million units in 1985 to 652 million units in 1986, or by 0.2 percent, but then decreased to 635 million units in 1987, or by 2.7 percent. The decrease in production was due in part to New Departure Hyatt's 1987 sale of its commercial assets to the petitioner.

Capacity to produce all finished antifriction bearings (other than tapered roller bearings) decreased from 895 million units in 1985 to 866 million units in 1986, or by 3.2 percent, and then increased to 870 million units in 1987, or by 0.5 percent. Capacity levels were influenced by the number of plant closings and openings that occurred during the period of investigation.

Utilization of capacity to produce all finished antifriction bearings (other than tapered roller bearings) increased irregularly over the period of investigation, with foreign-owned firms operating at higher levels of capacity utilization in all product categories in 1986 and 1987. Capacity utilization for U.S. producers in manufacturing all finished bearings increased from 73.1 percent in 1985 to 75.6 percent in 1986, but then decreased to 73.2 percent in 1987. These ratios appear to contradict the general impression of strained capacity that increased backlog orders seem to indicate (see section of the report entitled "Financial experience of U.S. producers", at A-38).

Table 6
Antifriction bearings (other than tapered roller bearings): U.S. capacity, production, and capacity utilization, by products, 1985-87 1/

(Quantity in 1,000 units)

Item	1985	1986	1987
Ball bearings:			
U.S.-owned producers:			
Capacity	141,925	118,809	110,101
Production	87,371	81,341	69,694
Capacity utilization	60.8	67.4	61.9
Foreign-owned producers:			
Capacity	134,563	124,713	119,744
Production	101,318	101,672	107,492
Capacity utilization	75.3	81.5	89.8
Total, all producers:			
Capacity	276,488	243,522	229,845
Production	188,689	183,013	177,186
Capacity utilization	67.8	74.7	76.4
Roller bearings:			
U.S.-owned producers:			
Capacity	438,859	441,299	428,277
Production	310,428	303,186	286,345
Capacity utilization	70.7	68.7	66.9
Foreign-owned producers:			
Capacity	141,639	139,525	162,790
Production	117,749	133,665	136,916
Capacity utilization	83.1	95.8	84.1
Total, all producers:			
Capacity	580,498	580,824	591,067
Production	428,177	436,851	423,261
Capacity utilization	73.8	75.2	71.6
Other bearings:			
U.S.-owned producers:			
Capacity	22,468	22,651	22,668
Production	13,551	12,499	12,951
Capacity utilization	77.6	70.8	73.3
Foreign-owned producers:			
Capacity	15,053	18,631	26,727
Production	20,531	19,737	21,393
Capacity utilization	136.4	105.9	80.0
Total, all producers:			
Capacity	37,521	41,282	49,395
Production	34,082	32,236	34,344
Capacity utilization	104.8	88.8	77.4

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Table 6
Antifriction bearings (other than tapered roller bearings: U.S.capacity, production, and capacity utilization, by products, 1985-87--Continued

(Quantity in 1,000 units)

Item	1985	1986	1987
Components and parts:			
U.S.-owned producers:			
Capacity	5,008,250	5,015,340	5,030,288
Production	3,901,139	2,996,398	2,628,397
Capacity utilization	77.8	59.7	52.2
Foreign-owned producers:			
Capacity	3,842,608	3,573,816	4,035,934
Production	2,694,008	2,742,204	2,978,293
Capacity utilization	70.1	76.7	73.8
Total, all producers:			
Capacity	8,805,858	8,589,156	9,066,222
Production	6,595,147	5,738,602	5,606,690
Capacity utilization	74.5	66.8	61.8
Total bearings, complete: 2/			
U.S.-owned producers:			
Capacity	603,252	582,759	561,046
Production	411,350	397,026	368,990
Capacity utilization	68.6	68.5	66.1
Foreign-owned producers:			
Capacity	291,255	282,869	309,261
Production	239,598	255,074	265,801
Capacity utilization	82.3	90.2	85.9
Total, all producers:			
Capacity	894,507	865,627	870,307
Production	650,948	652,100	634,791
Capacity utilization	73.1	75.6	73.2

1/ Capacity utilization ratios are based on data for those firms that provided figures for both capacity and production; therefore, ratios based on capacity and production figures as presented may not reconcile.
2/ Comprised of finished bearings, excluding components and parts.

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

Note--because of rounding, data may not add to the totals shown.

U.S. producers' domestic shipments

Data on U.S. producers' domestic shipments of antifriction bearings (other than tapered roller bearings) are presented in table 7. From 1985 to 1986, the value of U.S. producers' shipments of such bearings and parts thereof decreased from $1.96 billion in 1985 to $1.85 billion in 1986, or by 5.7 percent. The value of shipments changed only slightly in 1987.

As shown in table 7, the trend in the value of shipments by U.S.-owned firms differed notably from the trend in the value of shipments by foreign-owned firms. From 1985 to 1987, the value of the U.S.-owned producers' aggregate domestic shipments of antifriction bearings (other than tapered roller bearings) and parts thereof fell by 10.2 percent. In contrast, the value of such shipments by the foreign-owned U.S. producers rose by 9.3 percent.

Calculations of unit values for U.S. producers' domestic shipments were not attempted, as they would not have been meaningful in the broad product categories for which the Commission's questionnaire requested data.

Table 7
Antifriction bearings (other than tapered roller bearings): U.S. producers' domestic shipments, by products, 1985-87

Item	1985	1986	1987
	Quantity (1,000 units)		
Ball bearings:			
U.S.owned producers	88,851	69,186	66,310
Foreign-owned producers	99,066	98,127	104,933
Total	187,917	167,313	171,243
Roller bearings:			
U.S.-owned producers	257,341	241,299	242,216
Foreign-owned producers	111,210	124,639	128,471
Total	368,551	365,938	370,687
Other bearings:			
U.S.-owned producers	9,184	8,584	10,054
Foreign-owned producers	20,489	19,733	21,454
Total	29,673	28,317	31,508
Components and parts:			
U.S.-owned producers	3,864,299	3,058,692	2,702,459
Foreign-owned prodcuers	2,279,357	1,879,465	2,204,093
Total	6,143,656	4,938,157	4,906,552
All products combined:			
U.S.-owned producers	4,219,675	3,377,069	3,021,039
Foreign-owned producers	2,510,122	2,121,964	2,458,951
Total	6,729,797	5,499,725	5,479,990
	Value (1,000 dollars)		
Ball bearings:			
U.S.-owned producers	846,383	775,916	735,005
Foreign-owned producers	234,939	225,424	241,502
Total	1,081,321	1,001,340	976,507
Roller bearings:			
U.S.-owned producers	379,696	348,076	349,737
Foreign-owned producers	146,155	167,743	187,013
Total	525,851	515,819	536,750
Other bearings:			
U.S.-owned producers	205,759	194,232	201,282
Foreign-owned producers	54,551	50,498	51,677
Total	260,310	244,730	252,959
Components and parts:			
U.S.-owned producers	76,360	71,365	69,005
Foreign-owned producers	14,681	14,000	11,836
Total	91,041	85,365	80,841
All products combined:			
U.S.-owned producers	1,508,198	1,389,589	1,355,029
Foreign-owned producers	450,326	457,665	492,028
Total	1,958,524	1,847,254	1,847,057

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

U.S. exports

Information on U.S. exports of antifriction bearings (other than tapered roller bearings) is based on official export statistics; the data are presented in table 8. The value of U.S. exports of all antifriction bearings and parts thereof decreased from $224.7 million in 1985 to $220.8 million in 1986, or by 1.7 percent, and then increased to $240.7 million in 1987, or by 9.0 percent. It is not clear to what extent exports involved intracompany transfers of U.S. producers with foreign subsidiaries or affiliates.

Table 8
Antifriction bearings (other than tapered roller bearings): U.S. exports, by product types, 1985-87

Item	Value (1,000 dollars) 1985	1986	1987
Ball bearings:			
Europe	27,140	24,898	26,819
Asia	7,480	6,902	6,920
All other	35,224	34,374	35,875
Total	69,844	66,173	69,613
Roller bearings:			
Europe	22,135	19,997	24,143
Asia	9,025	13,439	10,614
All other	46,147	47,168	47,336
Total	77,307	80,604	82,093
Other bearings:			
Europe	14,032	11,292	12,585
Asia	6,640	7,730	8,495
All other	36,800	29,209	42,701
Total	57,472	48,231	63,781
Components and parts:			
Europe	6,155	9,610	7,144
Asia	3,114	3,622	4,454
All other	10,826	12,587	13,564
Total	20,095	25,819	25,163
All products combined:			
Europe	69,462	65,797	70,691
Asia	26,259	31,693	30,483
All other	128,997	123,337	139,476
Total	224,718	220,827	240,650

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note--because of rounding, data may not add to the totals shown.

U.S. producers' inventories

U.S. producers' inventories of antifriction bearings generally increased over the period of investigation (table 9). However, this overall increase was influenced mainly by inventory buildup in components and parts. As a share of U.S. producers' total domestic shipments of components and parts during the preceding year, inventories of components and parts increased from 19.3 percent as of December 31, 1985, to 28.5 percent as of December 31, 1986, and increased further to 36.0 percent at yearend 1987. As a share of U.S. producers' total domestic shipments of all finished bearings during the preceding year, inventories increased from 11.7 percent as of December 31, 1985, to 24.2 percent as of December 31, 1986, and decreased to 19.5 percent at yearend 1987.

Table 9
Antifriction bearings (other than tapered roller bearings): U.S. producers' yearend inventories, by products, 1985-87

Item	1985	1986	1987
	Quantity (1,000 units)		
Inventories:			
Ball bearings	24,708	28,365	25,169
Roller bearings 1/	299,020	543,749	499,073
Other bearings	4,858	5,406	4,895
Total bearings	328,586	577,520	529,137
Components and parts	868,148	1,020,759	1,128,383
Inventories as a share of domestic shipments:	Percent		
Ball bearings	13.1	17.0	14.7
Roller bearings	11.5	24.8	19.9
Other bearings	19.0	22.2	18.4
Total bearings	11.7	24.2	19.5
Component and parts	19.3	28.5	36.0

1/ This category is overstated, as needles for needle roller bearings were incorrectly reported by one firm as finished roller bearings. The components and parts category is correspondingly understated.

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

U.S. producers' employment and wages

The average number of production and related workers producing antifriction bearings (other than tapered roller bearings) for the 22 producers that provided employment data decreased regularly over the period of investigation. The number of such employees decreased from 21,410 in 1985 to 20,672 in 1986, or by 3.4 percent, and decreased to 19,830 in 1987, or by an additional 4.1 percent (table 10). The average hourly wage for production and related workers producing all antifriction bearings increased from $10.77 in 1985 to $11.51 in 1986, and then decreased slightly to $11.28 in 1987.

Table 10
Antifriction bearings (other than tapered roller bearings): Average number of production and related workers, and hours worked by and average hourly wages paid to such employees, 1985-87

Item	1985	1986	1987
U.S.-owned producers:			
Production and related workers	15,600	14,966	14,312
Hours worked (1,000)	34,147	32,052	31,346
Hourly wages	$10.82	$11.51	$11.13
Foreign-owned producers:			
Production and related workers	5,810	5,706	5,518
Hours worked (1,000)	11,483	11,827	11,305
Hourly wages	$10.64	$11.52	$11.68
Total, all producers			
Production and related workers	21,410	20,672	19,830
Hours worked (1,000)	45,630	43,879	42,651
Hourly wages	$10.77	$11.51	$11.28

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

Financial experience of U.S. producers

Eighteen producers, accounting for approximately 61 percent of estimated U.S. shipments of antifriction bearings and parts in 1986, supplied income-and-loss data for both the overall operations of their establishments in which antifriction bearings and parts are produced and, separately, for their operations in producing such products.

Overall establishment operations.--The overall establishment operations of the petitioner and largest domestic producer, the Torrington Company, as well as most U.S. producers, are primarily devoted to producing antifriction bearings and parts. The remaining products Torrington produces are * * *. The three largest producers are * * *. Net sales for these producers in 1987 are shown in the tabulation below:

Company	Net sales		Antifriction bearings' share of establishment sales
	Antifriction bearings	Overall establishment	
	1,000 dollars		Percent
*	*	*	*

Operations on antifriction bearings and parts.--During the period of investigation several firms restructured their operations, either internally and/or through acquisitions. The companies that supplied financial data encompassed all types of bearing manufacturers. As a result, operating results of the firms were mixed. However, most of the firms were profitable in 1987, and compared with 1985 the overall trend was favorable without the inclusion of * * *.

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

Because of the circumstances that affected the operating results of this company and their distorting effect on the aggregate industry, the income-and-loss analysis of the industry will exclude its results. However, the income-and-loss experience of the complete U.S. industry, * * *, is presented in appendix E.

The income-and-loss experience of the responding U.S. producers on their operations on antifriction bearings and parts (other than tapered roller bearings) is presented in table 11. An additional income-and-loss summary that is segregated by U.S.-owned and foreign-owned producers is presented in a subsequent section. Aggregate net sales declined by less than 1 percent from $1.585 billion in 1985 to $1.577 billion in 1986. Sales rose to $1.670 billion

Table 11
Income-and-loss experience of U.S. producers on their operations producing antifriction bearings (other than tapered roller bearings), accounting years 1985-87 and interim periods ended December 31, 1986, and December 31, 1987 1/

Item	1985	1986	1987	Interim period ended December 31-- 1986	1987
	Value (1,000 dollars)				
Net sales	1,585,218	1,576,547	1,669,654	119,516	139,329
Cost of goods sold	1,279,542	1,243,203	1,326,620	107,215	124,325
Gross profit	305,676	333,344	343,034	12,301	15,004
General, selling, and administrative expenses	223,047	204,631	206,976	15,952	16,271
Operating income or (loss)	82,629	128,713	136,058	(3,651)	(1,267)
Startup or shutdown expense	5,394	3,967	1,200	0	0
Interest expense	31,380	34,408	35,498	3,433	2,280
Other expense, net	916	19,432	39,187	117	29
Net income or (loss) before income taxes	44,939	70,906	60,173	(7,201)	(3,576)
Depreciation and amortization included above	64,807	65,348	68,685	6,406	6,682
Cash flow 2/	109,746	136,254	128,858	(795)	3,106
	Share of net sales (percent)				
Cost of goods sold	80.7	78.9	79.5	89.7	89.2
Gross profit	19.3	21.1	20.5	10.3	10.8
General, selling, and administrative expenses	14.1	13.0	12.4	13.3	11.7
Operating income or (loss)	5.2	8.2	8.1	(3.1)	(0.9)
Net income or (loss) before income taxes	2.8	4.5	3.6	(6.0)	(2.6)
	Number of firms reporting				
Operating losses	5	5	4	3	2
Net losses	5	5	5	4	3
Data	17	17	17	7	7

1/ The reporting U.S. producers' fiscal years were as follows: 1 firm's year ends on Mar. 31; 1 on Apr. 30; 2 on June 30; 1 on Sept. 30; 2 on Oct. 31; 1 on Nov. 30; and 9 on Dec. 31.
2/ Cash flow is defined as net income or loss plus depreciation and amortization.

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

in 1987, an increase of 5.9 percent over sales in 1986. Overall operating income was $82.6 million in 1985, $128.7 million in 1986, and $136.1 million in 1987. Operating income margins, as a percent of sales, were 5.2, 8.2, and 8.1 in 1985, 1986, and 1987, respectively. Five firms reported operating losses in 1985 and 1986 and four firms reported such losses in 1987. Interim 1987 sales were $139.3 million, an increase of 16.6 percent from 1986 interim sales of $119.5 million. An operating loss of $1.3 million was incurred in interim 1987, compared with an operating loss of $3.7 million in interim 1986. Three firms reported operating losses in interim 1986, compared with two firms in interim 1987.

Operations of the Torrington Co.--The income-and-loss experience of the Torrington Co. is presented in table 12. * * *.

*   *   *   *   *   *

Table 12
Income-and-loss experience of the Torrington Co. on its operations producing antifriction bearings (other than tapered roller bearings), accounting years 1985-87 ended December 31

*   *   *   *   *   *

Excerpts from Ingersoll-Rand's Annual Reports.--The 1985 Annual report of Ingersoll-Rand, Torrington's parent, discussed the Fafnir acquisition:

> "Bearings and Components Group - In the fourth quarter, we acquired the Fafnir Bearing Division of Textron Inc. This makes Ingersoll-Rand the largest broad-line bearing manufacturer in the United States and the fifth largest in the world. Fafnir is a market leader in the manufacture of precision ball bearings for aerospace, machine tools, farm machinery and industrial distribution. Fafnir has more than 4,000 employees and seven plants. Its 1984 sales were $229 million. Our combined bearings operations now employs nearly 13,000 people in 29 plants in North and South America, Europe, Asia, and Australia." 1/2/

The 1986 annual report of Ingersoll-Rand discussed the integration of Fafnir into its total bearing product line:

> "The acquisition of Fafnir in late 1985 extended our participation in industrial bearings markets and in aerospace applications. Last year, we completed the integration of sales and distribution of our expanded bearing product lines. Customer service has been improved, and we are able to operate with greater efficiency." 3/

1/ 1985 Annual Report of Ingersoll-Rand, p. 13.
2/ Additional corporate financial data, including the operating results of Ingersoll-Rand's Business segment that includes bearings, are presented in app. E.
3/ 1986 Annual Report of Ingersoll Rand, p. 2.

The company also indicated that imported cars are affecting its bearing business:

> "The company's short-term outlook varies with the industries we serve. Domestic automobile producers, a key market for our bearings, will continue to feel pressure from importation of cars from Asia and Europe. On the other hand, the rising value of the yen and key European currencies against the dollar should begin to restore the competitive cost position of U.S. manufacturers." 1/

In 1987 Torrington acquired the commercial bearing assets of the New Departure-Hyatt Division of General Motors Corporation. The company is combining these assets into the Fafnir Bearings Division of Torrington as stated in the 1987 annual report:

> "In addition, we acquired the commercial bearing assets of New Departure Hyatt, a division of General Motors Corporation. These assets included inventory and equipment for the production of commercial ball bearings and industrial roller bearings. The primary market for these products is through industrial distribution. We are merging the acquired assets into the Fafnir Bearings Division of Torrington. The transfer of production machinery from New Departure Hyatt facilities to Torrington plants in South Carolina, Georgia, and Tennessee is under way and should be complete by late 1988. This acquisition will strengthen our Bearings and Components Group by expanding our base for aftermarket bearing sales while adding respected products to our general bearing lines." 2/

Related party issues.--The domestic producers of antifriction bearings and parts thereof can be classified as either U.S.-owned (unaffiliated) or foreign-owned. Selected income and loss data for these two groups of producers are presented separately in table 13. These data indicate that the U.S.-owned producers are considerably more profitable than the foreign-owned producers. * * *. The companies in the industry with lower profit margins are overshadowed by the stronger companies.

The foreign-owned producers' sales increased by 15.8 percent from 1985 to 1987, whereas the U.S.-owned companies' sales were stagnant during this period. This increase was primarily due to * * *. While profit margins for the foreign-owned group were substantially lower than those of the U.S.-owned group, they showed an upward trend from 1985 to 1987. Interim period data for both groups indicate a favorable trend. The interim data are somewhat distorted by * * *.

1/ Ibid.
2/ 1987 Annual Report of Ingersoll Rand, p. 10.

Table 13
Income-and-loss experience of U.S. producers on their operations producing antifriction bearings and parts (other than tapered roller bearings), by producer category, accounting years 1985-87, and interim periods ended December 31, 1986, and December 31, 1987

Item	1985	1986	1987	Interim period ended Dec. 31-- 1986	1987
	Value (1,000 dollars)				
Net sales:					
U.S.-owned firms:					
Torrington	***	***	***	***	***
Other producers	***	***	***	***	***
Subtotal	1,047,916	1,021,543	1,047,721	***	***
Foreign-owned firms	537,302	555,004	621,933	***	***
Total, all producers	1,585,218	1,576,547	1,669,654	119,516	139,949
Operating income or (loss):					
U.S.-owned firms:					
Torrington	***	***	***	***	***
Other producers	***	***	***	***	***
Subtotal	117,046	125,518	125,675	***	***
Foreign-owned firms	(34,417)	3,195	10,383	***	***
Total, all producers	82,629	128,713	136,058	(3,651)	(1,267)
	Percent of net sales				
Operating income or (loss):					
U.S.-owned firms					
Torrington	***	***	***	***	***
Other producers	***	***	***	***	***
Subtotal	11.2	12.3	12.0	***	***
Foreign-owned firms	(6.4)	0.6	1.7	***	***
Total, all producers	5.2	8.2	8.1	(3.1)	(0.9)

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

Several companies submitted annual and section 10K reports along with their questionnaires. Shown below are some general impressions of these 1987 reports and some excerpts.

Comments from the annual reports were mixed but generally favorable.

Barden Corp.-- "Our core bearing business continued on a strong note, both in the United States and in the United Kingdom." 1/

McGill Corp.--"During 1987, the bearing division continued to face difficult markets. Sales were approximately the same as in 1986 and 4% less than in 1985." 2/

Generally, companies indicated that either their bearing backlog or backlog for the industry group that manufactures bearings had increased, although there were exceptions. Some comments are indicated below. 3/

Lipe-Rollway Corp.--"The backlog of sales orders at the end of 1987 was $12.7 million which represents an increase of $2.1, or 19.9% compared to 1986. Generally speaking this increase in backlog is attributable primarily to increased orders from the aerospace market for this bearing division. 4/

MPB Corp.--"The company's backlog was approximately $88.2 million on December 31, 1987 and $90.2 million on December 31, 1986." 5/

Several companies discussed industry competition. The statement of Lipe-Rollway Corp. discussed competition and the difficulty in assessing the competitive state of the bearing industry. "The bearing markets served are highly competitive. The company faces competition from a number of companies which are substantially larger and more diversified in the manufacture of bearings in the United States, including Ingersoll-Rand Co., NTN Corporation and SKF. The industry is also faced with foreign competition in the world bearing market in which the company is engaged. The company further believes that the size and nature of the bearing industry makes it difficult to provide an accurate estimate of the Company's competitive position." 6/

Investment in productive facilities.-- The value of property, plant, and equipment for the responding U.S producers of antifriction bearings and parts is shown in table 14.

1/ Barden Corp. 1987 annual report, p. 3.
2/ McGill Corp. 1987 annual report, p. 2.
3/ The petitioner's 10K report for 1987, p. 3, indicated that the bearings, locks, and tools segment had a backlog of $454 million on Dec. 31, 1987, compared with a backlog of $344 million on Dec. 31, 1986. This segment includes the subject products.
4/ Lipe-Rollway Corp. 1987 annual report, p. 2.
5/ MPB Corp. Form S-1 registration statement, dated Feb. 20, 1988, p. 30.
6/ Lipe-Rollway Corp. 1987 form 10K, p. 3.

Table 14
Antifriction bearings (other than tapered roller bearings): Value of property, plant, and equipment of U.S. producers, accounting years 1985-87 and interim periods ended December 31, 1986, and December 31, 1987 1/

(In thousands of dollars)

Item	As of end of accounting year-- 1985	1986	1987	As of December 31-- 1986	1987
All products of establishments:					
Original cost	1,173,708	1,149,269	1,206,625	260,402	291,046
Book value	528,880	557,724	594,663	103,291	130,541
Antifriction bearings:					
Original cost	1,065,680	1,080,275	1,116,668	248,430	273,325
Book value	476,748	527,030	554,627	96,232	118,295

1/ Due to the nature of the industry and the various organizational changes that have occurred during the period of investigation, the calculation of a suitable rate of return would not be feasible.

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

Capital expenditures.--The capital expenditures reported by the firms responding to the Commission's questionnaires are shown in table 15. The large increase in outlays in 1986 was primarily attributable to * * *. The petitioner's capital expenditures were * * *.

Research and development expenses.--Company outlays for research and development are shown in table 16. The petitioner's expenses were * * *.

Capital and investment.-- The Commission requested U.S. producers to describe any actual or potential negative effects of imports of antifriction bearings and parts from the specified countries on their firm's growth, investment, and ability to raise capital. The responses of the producers are shown in appendix E. Torrington's response (paragraph 3) indicated that the company * * *. These data are shown in the following tabulations:

(In thousands of dollars, except as noted)

Item	Torrington proposal 1988	1989	1990	1991	1992	Total

* * * * * *

The petitioner felt that, based on its calculations, the return for the * * * would be * * *. Torrington also provided copies of an "overhead" presentation in 1988. These data are also presented in appendix E.

Table 15
Antifriction bearings (other than tapered roller bearings): Capital expenditures by U.S. producers, accounting years 1985-87 and interim periods ended December 31, 1986, and December 31, 1987

(In thousands of dollars)

Item	1985	1986	1987	Interim period ended Dec. 31--1986	Interim period ended Dec. 31--1987
All products of establishments:					
Land and land improvements	693	1,872	567	***	***
Building and leasehold improvements	10,075	7,503	8,388	***	***
Machinery, equipment, and fixtures	78,737	110,118	121,111	***	***
Total	89,505	119,493	130,066	***	***
Antifriction bearings:					
Land and land improvements	693	1,868	557	***	***
Building and leasehold improvements	9,756	7,305	7,868	***	***
Machinery, equipment, and fixtures	71,630	106,871	108,297	***	***
Total	82,079	116,044	116,722	***	***

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

Table 16
Antifriction bearings (other than tapered roller bearings): Research and development expenses by U.S. producers, accounting years 1985-87 and interim periods ended December 31, 1986, and December 31, 1987

(In thousands of dollars)

Item	1985	1986	1987	Interim period ended Dec. 31--1986	Interim period ended Dec. 31--1987
All products of establishments	20,534	20,362	17,757	***	***
Antifriction bearings	18,680	18,814	16,856	***	***

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

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

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

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

---

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

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

Information on the volume, U.S. market penetration, and pricing of imports of the subject merchandise (items (III) and (IV) above) is presented in the section entitled "Consideration of the Causal Relationship Between Imports of the Subject Products and the Alleged Injury." The potential for "product-shifting" (item VIII) is an issue in these investigations since tapered roller bearings from Italy, Japan, and Romania are subject to final antidumping orders and use production facilities that might be shifted to produce the antifriction bearings that are the subject of these investigations. The available data on foreign producers' operations (items (II) and (VI) above) and information on U.S. inventories of the subject product (item (V)) follow.

Information in this section of the report was received by the Commission from data provided by counsels for respondents, foreign embassies in Washington, and from U.S. embassies in the subject countries.

The world market

This section of the report has been prepared in order to provide a perspective on the globalization of the market for antifriction bearings. The companies and countries that are the subject of these investigations account for approximately 75 percent of the western world's supply of antifriction bearings.

World production.--International demand for bearings is dependent on the level of business activity in their end-use markets, which are primarily in manufacturing, construction, mining, transportation, agriculture, and defense-related industries. World production dropped approximately 7 percent during the world-wide recession of 1982, but since then has grown during each year through 1986 as the world economy recovered and industrial production increased. The following tabulation shows production levels in the United States, the countries named in these investigations, and total world production during 1981-86:

(In millions of dollars)

Country	1981	1982	1983	1984	1985	1986
United States........	2,956	2,361	2,386	2,832	2,804	2,660
Japan................	1,653	1,661	1,725	1,910	1,996	1,990
West Germany.........	1,446	1,394	1,501	1,493	1,584	1,630
United Kingdom.......	685	734	767	751	797	813
France...............	509	440	513	497	495	507
Italy................	511	442	484	480	480	507
Romania..............	173	195	202	204	211	216
Sweden...............	167	182	187	194	202	202
Singapore............	94	98	98	99	103	105
All other............	2,576	2,503	2,612	2,681	2,736	2,814
Total............	10,770	10,010	10,475	11,141	11,408	11,444

Source: Based on Torrington Company estimates from official U.S. publications, MA-350, The Antifriction Bearings Industry, and Competitive Assessment of the U.S. Ball and Roller Bearing Industry.

Note: Parts and mounted bearing categories were removed from data for the United States to reduce, to an extent, double counting of bearings and parts. This was not done with respect to the countries under investigation.

During this period, the United States, Japan, and West Germany were the three largest world producers of antifriction bearings. These three countries accounted for 55 percent of total world production in 1986. U.S. production of bearings declined in value by 10 percent from approximately $3.0 billion in 1981 to $2.7 billion in 1986, whereas Japan's production increased by 20 percent from $1.7 billion in 1981 to $2.0 billion in 1986. The surge in the production of Japanese automobiles, computers, and other machinery increased the demand for bearings. West Germany's production of bearings increased by 13 percent from $1.4 billion in 1981 to $1.6 billion in 1986.

World imports.--Total world imports of bearings and parts fell from $3.7 billion in 1981 to $2.9 billion in 1983 but then rose annually to $4.4 billion in 1986, or 19 percent greater than imports in 1981 (table 17). The United States was the largest importer of bearings throughout the period; U.S. imports rose from $497 million in 1981 to $683 million in 1986, or by 38 percent.

Table 17
Bearings and parts: Imports, by major countries, 1981-86

(In thousands of dollars)

Country	1981	1982	1983	1984	1985	1986
United States........	496,821	477,729	443,938	654,020	660,295	683,135
West Germany.........	366,107	346,541	333,236	363,910	417,090	587,135
Italy................	269,202	185,992	189,744	220,671	249,474	354,374
France...............	263,393	244,266	211,236	210,738	227,027	304,571
Canada...............	211,827	164,771	169,058	225,433	219,690	242,885
United Kingdom.......	176,290	176,282	159,731	186,531	212,764	248,903
Sweden...............	114,446	105,144	99,621	104,663	111,955	145,998
Japan................	65,559	69,003	68,876	111,952	122,825	145,549
Singapore............	96,996	88,970	79,935	95,863	93,184	136,575
Brazil...............	135,680	89,639	55,148	69,350	105,797	129,699
Thailand.............	32,651	24,743	28,320	33,061	62,573	60,758
All other............	1,489,893	1,280,894	1,044,231	1,091,463	1,138,492	1,380,263
Total...........	3,718,865	3,253,974	2,883,074	3,367,655	3,621,166	4,419,845

Source: Compiled from official statistics of the United Nations. Data on Romania were not available.

World exports.--World exports of bearings and parts rose from $3.2 billion in 1981 to $4.0 billion in 1986 (table 18). With the exception of the United States, exports from all major exporting countries increased during 1981-86; West Germany and Japan were the leading exporters during this period.

Table 18
Bearings and parts: Exports, by major countries, 1981-86

(In thousands of dollars)

Country	1981	1982	1983	1984	1985	1986
West Germany.........	781,029	694,312	644,613	698,852	782,989	1,056,224
Japan................	590,131	497,100	511,626	658,122	650,773	806,216
United States........	381,892	310,317	253,136	330,579	304,846	282,922
France...............	318,086	247,023	219,257	242,822	284,072	382,691
Italy................	205,341	188,211	168,228	195,927	235,334	325,537
United Kingdom.......	223,133	186,139	153,754	167,817	194,693	241,956
Sweden...............	195,188	166,444	151,428	165,036	180,596	239,018
Singapore............	104,951	111,441	112,458	134,799	138,071	153,967
Canada...............	66,662	56,604	62,946	70,379	68,394	75,433
Austria..............	76,722	73,780	62,353	65,077	73,228	99,864
Thailand.............	39	593	7,892	37,208	64,352	64,777
All other............	221,500	195,896	202,932	222,322	240,337	310,771
Total...........	3,164,674	2,727,860	2,550,623	2,988,940	3,217,685	4,039,376

Source: Compiled from official statistics of the United Nations. Data on Romania was unavailable.

Major world producers.--There are five dominant producers in the world: SKF (Sweden), FAG (West Germany), NSK (Japan), NTN (Japan), and Koyo (Japan). These five firms 1/ accounted for 83 percent of world sales of bearings in 1986. The three Japanese-owned companies accounted for approximately 80 percent of Japanese sales of bearings in 1986; SKF and FAG accounted for approximately 60 percent of European sales in 1986.

Foreign production, capacity, and capacity utilization

Federal Republic of Germany.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for two major West German producers/exporters was provided by counsels for the respondents. 2/ The data are presented in table 19. Exports by the two firms to the United States accounted for *** percent of the value of their total shipments of antifriction bearings (other than tapered roller bearings) and parts thereof in 1985; this share increased to *** percent in 1986, and then decreased to *** percent in 1987. The two responding West Germany producers reported operating at levels * * * capacity during most of the period of investigation, with increasing levels of inventory.

Table 19
Antifriction bearings (other than tapered roller bearings: West German capacity, production, inventories, capacity utilization, and exports to the United States, 1985-87

* * * * * *

France.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for the major French producers/exporters was provided by counsel for the respondents and the French embassy in Washington. 3/ The data are presented in table 20. Exports of antifriction bearings (other than tapered roller bearings) and parts thereof to the United States by the three firms accounted for 3.6 percent of the total value of their shipments of such merchandise in 1985, increasing to 3.7 percent in 1986, and continuing to increase to 4.3 percent in 1987. French producers reported operating at close to full capacity during the period of investigation, with increasing levels of inventories.

1/ As noted earlier in the financial section, the 1985 Annual Report of Ingersoll-Rand stated that the acquistion of the Fafnir Bearing Division makes Ingersoll-Rand "the largest broad-line bearing manufacturer in the United States and the fifth largest in the world."
2/ The 2 West German respondents, FAG and SKF (West Germany), accounted for approximately *** percent of total imports of antifriction bearings from the Federal Republic of Germany.
3/ The 3 French firms providing data were SNR, SNFA, and SKF Clamart. Exports by these firms accounted for approximately 65 percent of total U.S. imports of antifriction bearings from France.

Table 20
Antifriction bearings (other than tapered roller bearings): French capacity, production, inventories, capacity utilization, and exports to the United States, 1985-87

(Quantity in 1,000 units)

Item	1985	1986	1987
Ball bearings:			
* * * * * *			
Roller bearings:			
* * * * * *			
Other bearings:			
* * * * * *			
Components and parts:			
* * * * * *			
All products combined:			
Capacity 1/	***	***	***
Production 1/	***	***	***
Inventories 1/	***	***	***
Exports to U.S--quantity 1/	***	***	***
--value (1,000 dollars)	8,603	12,175	17,891
Ratios (in percent):			
Capacity utilization 1/	***	***	***
Inventories/shipments	***	***	***
Exports to U.S. as a share of total shipments based on--			
Quantity	***	***	***
Value	3.6	3.7	4.3

1/ Excludes components and parts.

Source: Compiled from data submitted by counsels for the respondents, and the French embassy in Washington.

Italy.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for a major Italian producer/exporter was provided by counsel for the respondent, SKF Italiana. 1/ The data are presented in table 21. Italian exports of antifriction bearings (other than tapered roller bearings) to the United States accounted for *** percent of the respondent's total shipments of such bearings in 1985, increasing to *** percent in 1986, and then decreasing to *** percent in 1987. Data on SKF's Italian capacity and inventories were not provided.

Table 21
Antifriction bearings (other than tapered roller bearings): Italian production and exports to the United States, 1985-87

* * * * * *

Japan.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for four major Japanese producers/exporters, was provided by counsels for the respondents. 2/ The data are presented in table 22. Exports to the United States accounted for 6.4 percent of the four firms' total shipments of antifriction bearings (other than tapered roller bearings) and parts thereof in 1985, decreasing to 5.7 percent in 1986, and remaining the same in 1987. The four responding firms operated at close to full capacity during the period of investigation, with increasing inventories. Exports of components and parts to the United States accounted for the highest ratios to total shipments; approximately 37 percent of shipments based on quantity, and 15 percent of shipments based on value, in 1987.

1/ Exports by SKF accounted for *** imports (as reported in official statistics of the U.S. Department of Commerce) of antifriction bearings (other than tapered roller bearings) and parts thereof from Italy in 1987.
2/ The 4 firms providing information include Koyo Seiko, Nachi-Fujikoshi, Nippon Seiko, and NTN Toyo; they accounted for 63.2 percent of total U.S. imports of antifriction bearings from Japan in 1987.

Table 22
Antifriction bearings (other than tapered roller bearings): Japanese capacity, production, inventories, capacity utilization, and exports to the United States, 1985-87

(Quantity in 1,000 units, except as noted)

Item	1985	1986	1987
Ball bearings:			
Capacity	1,280,343	1,299,345	1,356,968
Production	1,331,227	1,277,889	1,384,328
Inventories	376,668	379,331	434,911
Exports to U.S--quantity	52,837	522,267	58,842
--value (1,000 dollars)	61,397	65,535	79,623
Ratios (in percent):			
Capacity utilization	104.0	98.4	102.2
Inventories/shipments	30.0	30.6	32.9
Exports to U.S. as a share of total shipments based on--			
Quantity	5.9	5.7	5.9
Value	6.9	5.7	5.8
Roller bearings:			
Capacity	1,483,989	1,694,026	1,719,025
Production	1,449,560	1,505,241	1,650,968
Inventories	593,689	662,280	846,235
Exports to U.S--quantity	5,092	7,753	9,574
--value (1,000 dollars)	10,890	14,021	16,218
Ratios (in percent):			
Capacity utilization	97.7	88.9	96.0
Inventories/shipments	45.3	46.2	55.6
Exports to U.S. as a share of total shipments based on--			
Quantity	0.4	0.5	0.6
Value	2.5	2.5	2.5
Other bearings:			
Capacity	23,666	23,628	23,508
Production	24,747	22,397	22,940
Inventories	5,458	4,219	3,269
Exports to U.S--quantity	3,452	3,732	2,361
--value (1,000 dollars)	8,578	9,307	7,098
Ratios (in percent):			
Capacity utilization	104.5	94.8	97.6
Inventories/shipments	21.9	18.7	14.3
Exports to U.S. as a share of total shipments based on--			
Quantity	13.9	16.6	10.4
Value	10.4	9.7	6.4

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Table 22
Antifriction bearings (other than tapered roller bearings): Japanese capacity, production, inventories, capacity utilization, and exports to the United States, 1985-87--Continued

(Quantity in 1,000 units, except as noted)

Item	1985	1986	1987
Components and parts:			
Exports to U.S--quantity	1,296,305	1,505,999	1,339,347
--value (1,000 dollars)	16,850	24,346	28,470
Ratios (in percent):			
Exports to U.S. as a share of total shipments based on-			
Quantity	41.7	45.0	37.1
Value	13.9	15.3	15.1
All products combined:			
Capacity 1/	2,787,998	3,016,999	3,099,501
Production 1/	2,805,534	2,805,527	3,058,236
Inventories 1/	975,815	1,045,830	1,284,415
Exports to U.S--quantity 1/	61,381	533,752	70,777
--value (1,000 dollars)	97,715	113,209	131,409
Ratios (in percent):			
Capacity utilization 1/	100.6	93.0	98.7
Inventories/shipments	17.3	17.4	20.0
Exports to U.S. as a share of total shipments based on-			
Quantity	24.2	26.3	22.1
Value	6.4	5.7	5.7

1/ Excludes components and parts.

Source: Compiled from data submitted by counsels for the respondents.

Outstanding dumping orders.--On June 24, 1985, the Commission of the European Community imposed the following antidumping duties for manufacturers and exporters of ball bearings from Japan (in percent ad valorem): 1/

	Duty
NTN Toyo Bearing, Ltd.	3.00
Koyo Seiko Co., Ltd.	5.52
Nippon Seiko KK Tokyo	16.71
Nachi Fujikoshi Corp.	13.91
FKC Bearing Co., Ltd.	1.21
Fujino Iron Works Co., Ltd.	7.97
Izumoto Seiko Co., Ltd.	21.75
Nankai Seiko Co., Ltd.	4.23
Sapporo Precision, Inc.	1.86
Wada Seiko Co., Ltc.	10.73

Romania.--Foreign producers/exporters were not represented by counsel during the preliminary phase of these investigations, so data on Romanian capacity, production, and shipments of antifriction bearings were not provided. Moreover, the U.S. embassy in Bucharest has not responded to the Commission's request of April 13, 1988, for information on the antifriction bearing industry in Romania.

Singapore.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for two major producers/exporters in Singapore was provided by the respondents. 2/ The data are presented in table 23. Exports from Singapore to the United States accounted for about *** percent of total reported shipments of antifriction bearings (other than tapered roller bearings) and parts thereof during 1985-87. The two firms manufacture and export principally * * *. The firms operated at approximately *** percent or less of capacity during the period of investigation. Inventories were * * * but increasing.

Table 23
Antifriction bearings (other than tapered roller bearings): Singapore's capacity, production, inventories, capacity utilization, and exports to the United States, 1985-87

* * * * * *

1/ Competitive Assessment of the U.S. Ball and Roller Bearing Industry, USITC 1797, January 1986, p. 17.
2/ The 2 firms providing data were NMB Singapore and Pelmec Singapore; they accounted for approximately *** percent of total U.S. imports of antifriction bearings from that country in 1987.

Sweden.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for the major producer/exporter in Sweden was provided by counsel for the respondent, SKF. 1/ The data are presented in table 24. SKF's exports of antifriction bearings (other than tapered roller bearings) and parts thereof from Sweden to the United States accounted for *** percent of the value of the firm's total shipments of such merchandise in 1985, increasing to *** percent in 1986 and *** percent in 1987. SKF operated * * * reported capacity for most of the period of investigation.

Table 24
Antifriction bearings (other than tapered roller bearings): Sweden's capacity, production, inventories, capacity utilization, and exports to the United States, 1985-87

* * * * * *

Thailand.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for two major producers/exporters in Thailand was provided by the respondents. 2/ The data are presented in table 25. Exports by the two firms of antifriction bearings (other than tapered roller bearings) and parts thereof from Thailand to the United States accounted for *** percent of the total value of their shipments of such products in 1985, increased to *** percent in 1986, and decreased to *** percent in 1987. The two responding firms manufacture and export principally * * *. Data on capacity and inventories were not provided.

Table 25
Antifriction bearings (other than tapered roller bearings): Thailand's production and exports to the United States, 1985-87

* * * * * *

1/ On the basis of value, SKF accounted for *** percent of total U.S. imports of antifriction bearings from Sweden in 1987.
2/ The 2 firms providing data were NMB Thailand and Pelmec Thailand; they accounted for approximately *** percent of total U.S. imports of antifriction bearings from Thailand in 1987.

United Kingdom.--Information on capacity and shipments of antifriction bearings (other than tapered roller bearings) for two major producers/exporters in the United Kingdom was provided by the respondent RHP and by counsel for the respondent SKF UK. 1/ The data are presented in table 26. Exports from the United Kingdom to the United States accounted for *** percent of the total value of shipments of antifriction bearings (other than tapered roller bearings) and parts by the respondents in 1987, increasing to *** percent in 1986 and *** percent in 1987. The two firms operated * * * capacity during the period of investigation, with declining inventories.

Table 26
Antifriction bearings (other than tapered roller bearings): U.K. capacity, production, inventories, capacity utilization, and exports to the United States, 1985-87

* * * * * *

Importers' inventories

The available data on U.S. importers' inventories of antifriction bearings (other than tapered roller bearings) from the subject countries, as reported by 33 importers (accounting for 75 percent of total imports in 1987) in response to the Commission's questionnaires, are presented in table 27.

U.S importers' reported inventories of finished antifriction bearings (excluding components and parts) increased from 72 million units on December 31, 1985, to 112 million units on December 31, 1986, or by 57 percent, and then declined to 100 million units on December 31, 1987, or by 11 percent.

1/ The 2 firms accounted for approximately *** percent of total U.S. imports of antifriction bearings and parts thereof from the United Kingdom in 1987.

Table 27
Antifriction bearings (other than tapered roller bearings): End-of-period U.S. inventories of imports, by sources, 1985-87

Item	Quantity			Share of total 1/		
	1985	1986	1987	1985	1986	1987
	(1,000 units)			(In percent)		
Ball bearings:						
West Germany....	5,937	6,509	6,029	3.6	3.9	6.5
France.....	***	***	***	***	***	***
Italy.....	***	***	***	***	***	***
Japan.....	34,249	35,900	28,607	6.6	5.6	4.0
Romania.....	***	***	***	***	***	***
Singapore.....	***	***	***	***	***	***
Sweden.....	***	***	***	***	***	***
Thailand.....	***	***	***	***	***	***
United Kingdom..	***	***	***	***	***	***
Total subject countries...	50,406	89,630	79,124	6.6	9.6	7.9
Roller bearings:						
West Germany....	***	***	***	***	***	***
France.....	***	***	***	***	***	***
Italy.....	***	***	***	***	***	***
Japan.....	***	***	***	***	***	***
Romania.....	***	***	***	***	***	***
Singapore.....	***	***	***	***	***	***
Sweden.....	***	***	***	***	***	***
Thailand.....	***	***	***	***	***	***
United Kingdom..	***	***	***	***	***	***
Total subject countries...	8,401	8,800	9,911	1.1	0.9	1.0
Other bearings:						
West Germany....	***	***	***	***	***	***
France.....	***	***	***	***	***	***
Italy.....	***	***	***	***	***	***
Japan.....	***	***	***	***	***	***
Romania.....	***	***	***	***	***	***
Singapore.....	***	***	***	***	***	***
Sweden.....	***	***	***	***	***	***
Thailand.....	***	***	***	***	***	***
United Kingdom..	***	***	***	***	***	***
Total subject countries...	12,725	13,949	10,955	1.7	1.5	1.1

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Table 27
Antifriction bearings (other than tapered roller bearings): End-of-period U.S. inventories of imports, by sources, 1985-87--Continued

Item	Quantity			Share of total 1/		
	1985	1986	1987	1985	1986	1987
	(1,000 units)			(In percent)		
Components and parts:						
West Germany....	***	***	***	***	***	***
France.....	***	***	***	***	***	***
Italy.....	***	***	***	***	***	***
Japan.....	130,999	165,712	254,108	24.6	25.1	35.9
Romania.....	***	***	***	***	***	***
Singapore.....	***	***	***	***	***	***
Sweden.....	***	***	***	***	***	***
Thailand.....	***	***	***	***	***	***
United Kingdom..	***	***	***	***	***	***
Total subject countries.....	218,667	260,781	303,055	28.2	27.6	30.3
Total: 3/						
West Germany.....	100,284	107,783	60,997	60.8	64.2	65.3
France.....	***	***	***	***	***	***
Italy.....	***	***	***	***	***	***
Japan.....	169,536	207,107	287,307	32.6	32.3	40.4
Romania.....	***	***	***	***	***	***
Singapore.....	***	***	***	***	***	***
Sweden.....	***	***	***	***	***	***
Thailand.....	***	***	***	***	***	***
United Kingdom..	***	***	***	***	***	***
Total subject countries.....	283,587	365,996	397,368	37.1	39.3	39.5

1/ Shares of total for individual countries relate to the ratio of inventories to total imports from that country. Shares of total for subtotals relate to total imports from any subject country.
2/ Less than 0.05 percent.
3/ Includes components and parts.

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

Consideration of the Causal Relationship Between Imports of the Subject Products and the Alleged Injury

Imports

U.S. imports of all antifriction bearings (other than tapered roller bearings) and parts thereof from the nine countries subject to these investigations increased from $470 million in 1985 to $508 million in 1986, or by 8.0 percent (table 28). Imports increased to $542 million in 1987, which represented a further increase in value of 6.7 percent.

The Federal Republic of Germany.--Imports of antifriction bearings from West Germany were generally the second largest share of total imports during the period of investigation. In 1985, total imports of antifriction bearings from West Germany accounted for 18.2 percent of all imports based on value; such imports increased steadily to a level of 21.4 percent in 1987.

France.--Imports of antifriction bearings from France were principally ball bearings. In 1985, total imports of antifriction bearings from France accounted for 3.2 percent of all imports based on value; such imports increased steadily to a level of 4.2 percent in 1987.

Italy.--Imports of antifriction bearings from Italy were principally ball bearings. In 1985, total imports of antifriction bearings from Italy accounted for 5.3 percent of all imports based on value; such imports decreased irregularly to a level of 5.0 percent in 1987.

Japan.--Imports of antifriction bearings from Japan, the largest foreign supplier of such merchandise to the United States, were principally ball bearings. In 1985, total imports of antifriction bearings from Japan accounted for 42.4 percent of all imports based on value; such imports decreased steadily to a level of 37.7 percent in 1987.

Romania.--Imports of antifriction bearings from Romania were principally ball bearings. In 1985, total imports of antifriction bearings from Romania accounted for 2.4 percent of all imports based on value; such imports increased irregularly to a level of 2.5 percent in 1987.

Singapore.--Imports of antifriction bearings from Singapore were principally ball bearings. In 1985, total imports of antifriction bearings from Singapore accounted for 7.4 percent of all imports based on value; such imports decreased steadily to a level of 5.8 percent in 1987.

Sweden.--Imports of antifriction bearings from Sweden were principally ball and roller bearings. In 1985, total imports of antifriction bearings from Sweden accounted for 3.2 percent of all imports based on value; such imports increased steadily to a level of 4.0 percent in 1987.

Thailand.--Imports of antifriction bearings from Thailand consisted entirely of ball bearings and components and parts. In 1985, total imports of antifriction bearings from Thailand accounted for 1.7 percent of all imports based on value; such imports increased steadily to a level of 2.9 percent in 1987.

Table 28
Antifriction bearings (other than tapered roller bearings): U.S. imports for consumption, 1985-87

Item	Value 1/			Share of total		
	1985	1986	1987	1985	1986	1987
	(1,000 dollars)			(In percent)		
Ball bearings:						
West Germany	43,548	52,931	61,612	8.9	10.0	11.0
France	10,139	13,442	15,149	2.1	2.5	2.7
Italy	22,035	32,555	21,056	4.5	6.2	3.8
Japan	160,048	149,339	148,249	32.8	28.3	26.5
Romania	9,597	8,644	10,677	2.0	1.6	1.9
Singapore	21,324	20,678	21,807	4.4	3.9	3.9
Sweden	6,851	8,610	10,863	1.4	1.6	1.9
Thailand	8,193	14,253	16,240	1.7	2.7	2.9
United Kingdom	10,321	11,127	11,630	2.1	2.1	2.1
Subtotal	292,056	311,579	317,283	59.8	59.1	56.7
All other	49,402	49,466	53,891	10.1	9.4	9.6
Total	341,458	361,046	371,174	69.9	68.5	66.3
Roller bearings:						
West Germany	44,042	47,423	55,952	9.0	9.0	10.0
France	5,109	5,309	8,260	1.0	1.0	1.5
Italy	3,582	4,675	5,251	0.7	0.9	0.9
Japan	26,856	32,596	34,520	5.5	6.2	6.2
Romania	2,032	1,589	3,308	0.4	0.3	0.6
Singapore	14,838	11,974	10,746	3.0	2.3	1.9
Sweden	8,368	9,127	11,457	1.7	1.7	2.0
Thailand	0	0	0	0.0	0.0	0.0
United Kingdom	11,941	14,537	16,769	2.4	2.8	3.0
Subtotal	116,767	127,231	146,264	23.9	24.1	26.1
All other	16,873	15,723	18,803	0.5	0.5	0.4
Total	133,641	142,955	165,065	24.4	24.7	26.5
Other bearings:						
West Germany	568	936	1,968	0.1	0.2	0.4
France	5	154	6	0.0	0.0	0.0
Italy	2	150	469	0.0	0.0	0.1
Japan	6,568	5,360	5,419	1.3	1.0	1.0
Romania	11	21	0	0.0	0.0	0.0
Singapore	10	7	4	0.0	0.0	0.0
Sweden	69	2	26	0.0	0.0	0.0
Thailand	0	0	0	0.0	0.0	0.0
United Kingdom	1,000	2,024	672	0.2	0.4	0.1
Subtotal	8,232	8,654	8,563	1.7	1.6	1.5
All other	2,663	2,701	3,958	0.5	0.5	0.7
Total	10,895	11,355	12,521	2.2	2.2	2.2

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Table 28
Antifriction bearings (other than tapered roller bearings): U.S. imports for consumption, 1985-87--Continued

Item	Value 1/ 1985	1986	1987	Share of total 1985	1986	1987
	-------(1,000 dollars)------			------(In percent)------		
Components and parts:						
West Germany......	9,136	9,233	10,043	0.1	0.1	0.1
France...........	1,558	2,611	4,180	0.1	0.0	0.0
Italy............	736	2,136	1,681	0.1	0.3	0.2
Japan............	38,389	43,287	49,527	2.8	3.8	4.1
Romania..........	195	359	171	0.0	0.0	0.0
Singapore........	245	128	274	0.0	0.0	0.0
Sweden...........	338	693	787	0.0	0.0	0.0
Thailand.........	16	57	96	0.0	0.0	0.0
United Kingdom....	2,361	1,827	2,990	0.0	0.0	0.0
Subtotal........	52,974	60,331	69,749	3.1	4.4	4.5
All other.........	11,652	9,261	10,408	0.3	0.4	0.4
Total.........	64,625	69,592	80,157	3.4	4.7	4.9
All products combined:						
West Germany......	97,294	110,524	129,574	18.2	19.3	21.4
France...........	16,810	21,516	27,595	3.2	3.6	4.2
Italy............	26,354	39,517	28,458	5.3	7.4	5.0
Japan............	231,862	230,581	237,715	42.4	39.3	37.7
Romania..........	11,835	10,614	14,156	2.4	2.0	2.5
Singapore........	36,417	32,788	32,831	7.4	6.2	5.8
Sweden...........	15,625	18,432	23,133	3.2	3.4	4.0
Thailand.........	8,209	14,310	16,336	1.7	2.7	2.9
United Kingdom....	25,623	29,515	32,061	4.8	5.3	5.2
Subtotal........	470,029	507,796	541,859	88.5	89.2	88.9
All other........	80,590	77,152	87,060	11.5	10.8	11.1
Total........	550,619	584,948	628,919	100.0	100.0	100.0

1/ C.I.F. duty paid.

Source: Compiled from official statistics of the U.S. Department of Commerce.

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

United Kingdom.--Imports of antifriction bearings from the United Kingdom were principally ball and roller bearings. In 1985 total imports of antifriction bearings from the United Kingdom accounted for 4.8 percent of all imports based on value; such imports increased irregularly to a level of 5.2 percent in 1987.

Market penetration of imports

Shares of apparent U.S. consumption accounted for by imports of antifriction bearings (other than tapered roller bearings) are presented in table 29. On the basis of value, imports of such antifriction bearings and parts thereof from the subject countries were 18.7 percent of apparent consumption in 1985, 20.9 percent in 1986, and 21.9 percent in 1987.

The Federal Republic of Germany.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from the Federal Republic of Germany were 3.9 percent of apparent consumption in 1985; such imports then increased to 4.5 percent in 1986 and rose to 5.2 percent in 1987.

France.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from France were 0.7 percent of apparent consumption in 1985; they increased to 0.9 percent in 1986, and rose to 1.1 percent in 1987.

Italy.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from Italy were 1.1 percent of apparent consumption in 1985, 1.6 percent in 1986, and 1.1 percent in 1987.

Japan.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from Japan were 9.2 percent of apparent consumption in 1985; such imports increased to 9.5 percent in 1986, and registered a further slight increase to 9.6 percent in 1987.

Romania.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from Romania amounted to 0.5 percent of apparent consumption in 1985, slipped to 0.4 percent in 1986, and then rose to 0.6 percent in 1987.

Singapore.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from Singapore were 1.5 percent of apparent consumption in 1985; they then decreased to 1.3 percent in 1986, and remained stable in 1987.

Sweden.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from Sweden increased from 0.6 percent of apparent consumption in 1985 to 0.8 percent in 1986 and 0.9 percent in 1987.

Thailand.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from Thailand were 0.3 percent of apparent consumption in 1985; such imports rose to 0.6 percent in 1986, and reached 0.7 percent in 1987.

Table 29
Antifriction bearings (other than tapered roller bearings): Shares of apparent U.S. consumption held by imports and by U.S. producers' shipments, based on value, 1985-87

(In percent)

Item	1985	1986	1987
Ball bearings:			
West Germany	1.7	2.2	2.5
France	0.4	0.6	0.6
Italy	0.9	1.3	0.9
Japan	6.4	6.1	6.0
Romania	0.4	0.4	0.4
Singapore	0.8	0.9	0.9
Sweden	0.3	0.4	0.4
Thailand	0.3	0.6	0.7
United Kingdom	0.4	0.5	0.5
Subtotal	11.6	12.8	12.8
All other	2.0	2.0	2.2
Total imports	13.6	14.8	15.0
U.S. producers' shipments	43.1	41.2	39.4
Apparent U.S.consumption	56.7	56.0	54.4
Roller bearings:			
West Germany	1.8	1.9	2.3
France	0.2	0.2	0.3
Italy	0.1	0.2	0.2
Japan	1.1	1.3	1.4
Romania	0.1	0.1	0.1
Singapore	0.6	0.5	0.4
Sweden	0.3	0.4	0.5
United Kingdom	0.5	0.6	0.7
Subtotal	4.7	5.2	5.9
All other	0.7	0.6	0.8
Total imports	5.3	5.9	6.7
U.S. producers' shipments	21.0	21.2	21.7
Apparent U.S. consumption	26.3	27.1	28.3
Other bearings:			
West Germany	0.0	0.0	0.1
France	0.0	0.0	0.0
Italy	0.0	0.0	0.0
Japan	0.3	0.2	0.2
Romania	0.0	0.0	0.0
Singapore	0.0	0.0	0.0
Sweden	0.0	0.0	0.0
United Kingdom	0.0	0.1	0.0
Subtotal	0.3	0.4	0.3
All other	0.1	0.1	0.2
Total imports	0.4	0.5	0.5
U.S. producers' shipments	10.4	10.1	10.2
Apparent U.S. consumption	10.8	10.5	10.7

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29
Friction bearings (other than tapered roller bearings): Shares of apparent U.S. consumption held by imports and by U.S. producers' shipments, based on value, 1985-87--Continued

(In percent)

Item	1985	1986	1987
Components and parts:			
West Germany	0.4	0.4	0.4
France	0.1	0.1	0.2
Italy	0.0	0.1	0.1
Japan	1.5	1.8	2.0
Romania	0.0	0.0	0.0
Singapore	0.0	0.0	0.0
Sweden	0.0	0.0	0.0
Thailand	0.0	0.0	0.0
United Kingdom	0.1	0.1	0.1
Subtotal	2.1	2.5	2.8
All other countries	0.5	0.4	0.4
Total	2.6	2.9	3.2
U.S. producers' shipments	3.6	3.5	3.3
Apparent U.S. consumption	6.2	6.4	6.5
All products combined:			
West Germany	3.9	4.5	5.2
France	0.7	0.9	1.1
Italy	1.1	1.6	1.1
Japan	9.2	9.5	9.6
Romania	0.5	0.4	0.6
Singapore	1.5	1.3	1.3
Sweden	0.6	0.8	0.9
Thailand	0.3	0.6	0.7
United Kingdom	1.0	1.2	1.3
Subtotal	18.7	20.9	21.9
All other countries	3.2	3.2	3.5
Total	21.9	24.1	25.4
U.S. producers' shipments	78.1	75.9	74.6
Apparent U.S. consumption	100.0	100.0	100.0

Source: Compiled from data submitted in response to questionnaires of the U.S. International Trade Commission and from official statistics of the U.S. Department of Commerce.

The United Kingdom.--On the basis of value, imports of antifriction bearings (other than tapered roller bearings) from the United Kingdom were 1.0 percent of apparent consumption in 1985, 1.2 percent in 1986, and 1.3 percent in 1987.

Prices

Market characteristics.--The prices of different antifriction bearings vary according to differences in product specifications, including tolerance levels. Bearings from many sources may meet a set of product specifications and give satisfactory service in a given use. In general, imported and U.S. bearings meeting a given set of specifications are viewed as similar in quality. 1/

Many purchasers, especially OEMs, buy bearings only from their approved vendors. Approving new vendors is a lengthy process for the buyer and may not be cost effective for relatively small differences in prices between suppliers. 2/ In addition, many large purchasers buy bearings on a contract basis. In this industry, contracts often run for periods of 12 months but may cover several years. Based on questionnaire responses of U.S. producers and importers, contracts typically specify 1) a fixed price for the term of the contract, 2) extent of technical support, 3) freight and payment terms, 4) shipping locations, 5) stocking requirements for just-in-time delivery, and 6) anticipated quantities and shipment dates, with actual quantities and shipment dates subject to release orders issued by the purchaser. The reporting firms indicated that although OEMs and large distributors purchase their bearing requirements on a contract basis, small OEMs and small distributors more often purchase their bearings on a spot basis.

Buying power of the purchaser dictates how sales prices are determined. OEMs generally negotiate prices for both U.S.-produced and imported bearings and distributors purchase from price lists. 3/ Reporting U.S. producers and importers indicated in their questionnaire responses that price lists are generally adhered to and tend to be greater than negotiated prices. The latter prices reflect lower production and selling costs, as well as a more competitive milieu. Price lists of U.S. producers and importers usually show discounts based on the volume purchased. Both U.S. producers and importers typically quote prices f.o.b. their U.S. plants and/or warehouses and offer similar payment terms; net 30 days to OEMs and 1-2 percent/10 net 30 days to distributors.

1/ All of the 19 U.S. producers and most of the 18 importers responding to this section of the questionnaire reported that domestic and imported bearings were similar in quality. But the following exceptions are noted. Four U.S. importers indicated that Japanese bearings, especially ball bearings, were quieter, lasted longer, and had fewer defects than domestic bearings. One importer reported similarly for West German bearings. Another importer reported that Romanian bearings were poorer in quality than domestic bearings.

2/ * * *.

3/ Some smaller OEMs may purchase domestic and imported bearings from price lists, and some larger bearing distributors may negotiate the price they will pay.

Questionnaire price data.--The Commission requested net U.S. f.o.b. selling prices and quantities for six specific antifriction bearing products of commercial quality from U.S. producers and importers of the subject bearings. 1/ If the responding firm did not produce or import the requested products, it was asked to provide the price data for commercial quality bearing products most similar to those specified and to attach a description of the reported products. U.S. producers and importers were also requested to report the f.o.b. price data separately for sales of products 1-5 to OEMs and to distributors. Prices of product 6 were requested only for sales to OEMs, as product 6 is sold almost exclusively to OEMs. The price data were requested for the largest sale and for total sales of the products reported, by quarters, during January 1985-December 1987. The six products for which price data were requested are shown below.

PRODUCT 1: RADIAL BALL BEARINGS--Generic Part No. 6203ZZ. **Bearing description:** Ball bearing, single row, deep groove radial. **Bearing specification:** 17mm bore, 40mm OD, 11mm width with two shields. ABEC 1 tolerances.

PRODUCT 2: RADIAL BALL BEARINGS--Generic Part No. DG19452RS. **Bearing description:** Ball bearing, single row, deep groove radial. **Bearing specification:** 0.7505 inch bore, 1.7805 inch OD, 0.610 inch width with two seals. ABEC 1 tolerances.

PRODUCT 3: WIDE INNER-RING BALL BEARINGS--Generic Part No. RA100-2RS. **Bearing description:** Ball bearing, single row, deep groove radial with eccentric locking collar, narrow overall width. **Bearing specification:** 1 inch bore, 52mm spherical OD, 1-7/32 inch overall width with two seals. ABEC 1 tolerances.

PRODUCT 4: BALL BEARING PILLOW BLOCK--Generic Part No. GAPL1100B. **Part description:** Pillow block unit with radial ball bearing insert. **Housing specification:** Grey cast iron, two bolt hole, with grease fitting base-to-centerline height 1-5/16 inch, bolt hole spacing 4-1/8 inch. **Bearing insert specification:** Ball bearing, single row, deep groove radial, with eccentric locking collar, wide overall width, 1 inch bore, 52mm spherical OD, 1-3/4 inch overall width with two seals.

1/ The petitioner, Torrington, identified about 20 specific bearing products for which it reportedly encounters significant import competition from the subject foreign countries. Torrington also characterized these products as representative of the U.S. bearing market. With the help of the petitioner, the Commission staff selected 6 of these products to request pricing data. Torrington representatives indicated that the latter are large volume products representative of the subject bearings and parts imported from the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom.

PRODUCT 5: SPHERICAL ROLLER BEARINGS--Generic Part No. 22222. **Bearing description:** Spherical roller bearing, two row. **Bearing specification:** 110mm bore, 200mm OD, 53mm width with outer ring groove and relubrication hole. ABEC 1 tolerances.

PRODUCT 6: NEEDLE BEARINGS--Generic Part No. BH-1812. **Bearing description:** Drawn cup full complement needle roller bearing ANSI/AFBMA standard 18.2, table 3.1. **Bearing specification:** Designed to operate on a 1.1250/1.1245 inch diameter shaft when pressed into a 1.4995/1.5005 inch steel housing. Width is .750/.740 inch.

Ten U.S. producers of bearings and 12 U.S. importers of the subject foreign bearings reported the requested price data, but not necessarily for every product or period. 1/ No price data were reported for any of the requested bearings imported from France, Singapore, and Thailand.

Price trends.--Price trends for the domestic and subject imported bearings and parts are based on indexes of the reported quarterly weighted-average net f.o.b. selling prices to OEMs and distributors during January 1985-December 1987. The net selling prices were based on total sales of the specified products to OEMs and on total sales to distributors. Indexes of these prices are shown in table 30 for U.S.-produced bearings and tables 31-33 for bearings imported from Italy, Japan, and Romania, respectively. Trends in prices of bearings imported from the Federal Republic of Germany, Sweden, and the United Kingdom are based on very limited data. Indexes of these latter prices are discussed below but not shown in the tables.

United States--Based on indexes of the weighted-average net U.S. f.o.b. prices of U.S. producers, quarterly selling prices of the specified domestic bearing products generally fell during January 1985-December 1987 with the exception of product 5 sold to distributors and product 6 sold to OEMs (table 30). Selling prices of the domestic ball bearing products 1-4 fluctuated but fell during January 1985-December 1987, and were generally below their initial period values. Prices of products 1-4 sold to OEMs fell from 7 to 31 percent during this period, while prices of these products sold to distributors fell from 6 to 10 percent. Selling prices of domestic spherical roller bearing product 5 sold to OEMs and distributors fluctuated during January 1985-December 1987 but were generally above their initial period values. Although prices of product 5 sold to OEMs ended the period 5 percent below the initial period value, prices of product 5 sold to distributors rose by 20 percent. Prices of domestic needle bearing product 6 sold to OEMs * * * during January 1985-December 1987.

1/ The 10 U.S. producers reporting the requested price data accounted for approximately 75 percent of the total reported value of U.S. producers' domestic shipments of the subject antifriction bearings in 1987. During the same period, the 12 responding U.S. importers accounted for about 77 percent of the total reported value of U.S. imports of the subject bearings from the Federal Republic of Germany, 79 percent from Italy, 80 percent from Japan, 77 percent from Romania, 100 percent from Sweden, and 78 percent from the United Kingdom.

Table 30
Antifriction bearings: Indexes of weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings, by specified products, by type of customer, and by quarters, January 1985-December 1987 1/

Period	Products 1	2	3	4	5	6
	Sales to OEMs					
1985:						
Jan.-Mar.....	100	***	100	100	100	***
Apr.-June.....	99	***	97	95	103	***
July-Sept.....	93	***	99	104	100	***
Oct.-Dec.....	115	***	93	95	97	***
1986:						
Jan.-Mar.....	68	***	77	96	101	***
Apr.-June.....	93	***	78	117	113	***
July-Sept.....	93	***	84	93	111	***
Oct.-Dec.....	91	***	85	94	106	***
1987:						
Jan.-Mar.....	93	***	86	74	96	***
Apr.-June.....	91	***	81	62	113	***
July-Sept.....	90	***	82	95	101	***
Oct.-Dec.....	93	***	89	69	95	***
	Sales to distributors					
1985:						
Jan.-Mar.....	100	***	100	100	100	2/
Apr.-June.....	97	***	97	102	104	2/
July-Sept.....	114	***	110	102	96	2/
Oct.-Dec.....	89	***	94	101	107	2/
1986:						
Jan.-Mar.....	101	***	91	96	119	2/
Apr.-June.....	85	***	84	96	113	2/
July-Sept.....	105	***	86	99	113	2/
Oct.-Dec.....	91	***	90	99	113	2/
1987:						
Jan.-Mar.....	160	***	76	97	115	2/
Apr.-June.....	99	***	79	95	120	2/
July-Sept.....	99	***	84	92	119	2/
Oct.-Dec.....	91	***	93	94	120	2/

1/ The price indexes were based on total sales of these products to OEMs and total sales to distributors.
2/ No price data were requested for sales of product 6 to distributors; product 6 (needle bearing) is sold primarily to OEMs.

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

Note: January-March 1985=100, unless otherwise specified.

Federal Republic of Germany--U.S. importers reported the requested price data for imported West German ball bearing product 1 sold to OEMs and spherical roller bearing product 5 sold to distributors. No other pricing data were reported for the West German products. The limited reported pricing data are not shown in tables but are discussed below. Based on indexes of the weighted-average net U.S. f.o.b. prices of the imported West German products, quarterly selling prices of ball bearing product 1 sold to OEMs * * * by about *** percent during the period reported, January 1985-March 1987. Selling prices of the imported spherical roller bearing product 5 sold to distributors * * * during the period reported, January-December 1987.

Italy--U.S. importers reported the requested price data for imported Italian ball bearing product 1 sold to OEMs and distributors during January 1985-December 1987 and roller bearing product 5 sold to distributors during July 1985-December 1987 (table 31). No other pricing data were reported for the imported Italian products. Based on indexes of the weighted-average net U.S. f.o.b. prices, quarterly selling prices of imported ball bearing product 1 sold to OEMs generally * * * during January 1985-December 1987 but ended * * *. But prices of the imported ball bearing product 1 sold to distributors * * * during January 1985-December 1987. Prices of imported spherical roller bearing product 5 sold to distributors * * * during July 1985-December 1987 but ended * * * from the initial period value.

Table 31
Antifriction bearings: Indexes of weighted-average net U.S. f.o.b. selling prices of antifriction bearings imported from Italy, by type of customer, by specified products, and by quarters, January 1985-December 1987

* * * * * *

Japan--Indexes of the weighted-average net U.S. f.o.b. prices of U.S. importers showed mixed trends in quarterly selling prices of the specified imported Japanese bearing products 1-6 during January 1985-December 1987 (table 32). Prices of imported bearing products 1 and 3-5 sold to OEMs fell during the period under investigation, but prices of imported bearing products 2 and 6 rose. During this period prices of products 1-5 sold to distributors rose. Prices of product 6 sold to distributors were not requested.

Based on sales to OEMs, quarterly selling prices of imported Japanese ball bearing products 1 and 2 fluctuated during January 1985-December 1987, but prices of product 1 ended 3 percent below the initial period value and prices of product 2 ended * * * the initial period value. Prices of imported ball bearing products 3 and 4 sold to OEMs generally * * * during this period, * * *, respectively, while prices of the imported spherical roller bearing product 5 fluctuated but fell by 8 percent. Prices of imported needle bearing product 6 sold to OEMs * * * during much of the period reported, April 1986-December 1987, but * * * in the last quarter to end * * * its initial period value.

Table 32
Antifriction bearings: Indexes of weighted-average net U.S. f.o.b. selling prices of antifriction bearings imported from **Japan**, by specified products, by type of customer, and by quarters, January 1985-December 1987 1/

Period	Products 1	2	3	4	5	6
	Sales to OEMs					
1985:						
Jan.-Mar.....	100	***	***	***	100	2/
Apr.-June.....	100	***	***	***	98	2/
July-Sept.....	102	***	***	***	99	2/
Oct.-Dec.....	99	***	***	***	98	2/
1986:						
Jan.-Mar.....	96	***	***	***	57	2/
Apr.-June.....	190	***	***	***	97	***
July-Sept.....	94	***	***	***	102	***
Oct.-Dec.....	94	***	***	***	98	***
1987:						
Jan.-Mar.....	96	***	***	***	104	***
Apr.-June.....	99	***	***	***	126	***
July-Sept.....	102	***	***	***	96	***
Oct.-Dec.....	97	***	***	***	92	***
	Sales to distributors					
1985:						
Jan.-Mar.....	***	***	100	***	100	3/
Apr.-June.....	***	***	87	***	116	3/
July-Sept.....	***	***	85	***	106	3/
Oct.-Dec.....	***	***	90	***	113	3/
1986:						
Jan.-Mar.....	208	***	88	***	122	3/
Apr.-June.....	224	***	88	***	117	3/
July-Sept.....	192	***	97	***	128	3/
Oct.-Dec.....	204	***	97	***	115	3/
1987:						
Jan.-Mar.....	206	***	100	***	114	3/
Apr.-June.....	170	***	106	***	113	3/
July-Sept.....	170	***	107	***	127	3/
Oct.-Dec.....	168	***	107	***	125	3/

1/ The price indexes were based on total sales of these products to OEMs and distributors.
2/ No price data were reported for this period.
3/ No price data were requested for sales of product 6 to distributors; product 6 (needle bearing) is sold primarily to OEMs.

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

Note: January-March 1985=100, unless otherwise specified.

Quarterly selling prices of the imported Japanese ball bearing products 1-4 sold to distributors generally rose during January 1985-December 1987, ranging from 7 to 68 percent. Selling prices of the imported spherical roller bearing product 5 sold to distributors rose by 25 percent during this period.

Romania--U.S. importers reported the requested price data for imported Romanian ball bearing products 1-3 sold to OEMs and distributors during January 1985-December 1987 (table 33). No other pricing data were reported for the imported Romanian products. Based on indexes of the weighted-average net U.S. f.o.b. prices, quarterly selling prices of imported ball bearing products 1-3 sold to OEMs and to distributors generally increased during January 1985-December 1987. On sales to OEMs, prices of imported products 1 and 2 * * *, respectively, while prices of product 3 * * *. On sales to distributors during this period, selling prices of imported product 1 were generally * * * the initial period value but ended the period * * * the beginning period value as prices * * * during 1987. Prices of imported products 2 and 3 sold to distributors * * * during the period under investigation, * * *, respectively.

Table 33
Antifriction bearings: Indexes of weighted-average net U.S. f.o.b. selling prices of antifriction bearings imported from **Romania**, by type of customer, by specified products, and by quarters, January 1985-December 1987

* * * * * *

Sweden--U.S. importers reported the requested price data for imported Swedish spherical roller bearing product 5 sold to OEMs during four quarters covering the period, January 1985-December 1986, and for this product sold to distributors during a single quarter, October-December 1985. No other pricing data were reported for the imported Swedish products. The limited pricing data are not shown in a table. Based on indexes of the weighted-average net U.S. f.o.b. prices, quarterly selling prices of imported product 5 sold to OEMs fluctuated * * * during January 1985-December 1986.

United Kingdom--U.S. importers reported the requested price data for imported British ball bearing product 2 sold to distributors for four quarters during January 1985-September 1987. No other pricing data were reported for the specified bearing products imported from the United Kingdom. The limited pricing data are not shown in a table. Based on indexes of the weighted-average net U.S. f.o.b. prices, quarterly selling prices of the imported product 2 sold to distributors * * * during January 1985-September 1987.

Price comparisons.--Price comparisons between the U.S.-produced and imported subject bearings are based on the quarterly weighted-average net f.o.b. selling prices to OEMs and distributors during January 1985-December 1987. The net selling prices were based on total reported sales of the specified products to OEMs and to distributors. Comparisons of f.o.b. prices may be appropriate in these investigations, as U.S. freight costs of both

may be appropriate in these investigations, as U.S. freight costs of both domestic and imported bearings were reported to be less than 3 percent of the f.o.b. prices. Appendix tables F-1 through F-6 show the weighted-average selling prices of the six domestic and imported bearing products and the absolute price differences between the domestic and foreign products. Tables 34-38 show the percentage differences in these prices.

As shown in Appendix F tables and in tables 34-38, the degree of any underselling of the domestic ball bearing products 1-4 by the imported products tended to be less on sales to OEMs than on sales to distributors. When imported ball bearing products 1-4 were priced above the domestic products, such differences were generally greater on sales to OEMs than to distributors.

Federal Republic of Germany--Based on questionnaire responses of U.S. producers and importers, the reported net U.S. f.o.b. selling price data resulted in 11 quarterly price comparisons between domestic and imported West German bearing products 1 and 5 (table 34). Seven quarterly price comparisons involved ball bearing product 1 sold to OEMs during January 1985-March 1987, and four price comparisons involved spherical bearing product 5 sold to distributors during January-December 1987. Three of the seven quarterly price comparisons for product 1 sold to OEMs showed that the imported product was priced less than the domestic product during January-June 1985 and July-September 1986. Prices of the imported product ranged from * * * percent below prices of the U.S. product during these quarters. Three of the four quarterly price comparisons for product 5 sold to distributors showed that the imported product was priced less than the domestic product during April-December 1987. Prices of the imported product 5 ranged from * * * percent below prices of the U.S. product during these quarters.

Table 34
Antifriction bearings: Margins of under/(over) selling (in percentage terms) between the weighted-average net U.S. f.o.b. selling prices of **U.S.**-produced bearings and bearings imported from the **Federal Republic of Germany**, by type of customer, by specified products, and by quarters, January 1985-December 1987

* * * * * *

Italy--Based on questionnaire responses of U.S. producers and importers, the reported net U.S. f.o.b. selling price data resulted in 34 quarterly price comparisons between domestic and imported Italian bearing products 1 and 5 (table 35). Thirty-two of the 34 price comparisons showed that the imported Italian products were priced less than the U.S.-produced products. Twenty-four quarterly price comparisons involved ball bearing product 1 sold to OEMs and to distributors during January 1985-December 1987, and 10 price comparisons involved spherical roller bearing product 5 sold to distributors during July 1985-December 1987.

Ten of the 12 quarterly price comparisons for product 1 sold to OEMs and all 12 price comparisons involving product 1 sold to distributors showed that the imported product was priced less than the domestic product. Based on sales

to OEMs, prices of the imported product ranged from * * * percent below prices of the U.S. product. On sales to distributors, the imported product was priced from * * * percent lower than the domestic product.

All 10 quarterly price comparisons for product 5 sold to distributors showed that the imported product was priced less than the domestic product. Prices of the imported product ranged from * * * percent below prices of the domestic product.

Table 35
Antifriction bearings: Margins of under/(over) selling (in percentage terms) between the weighted-average net U.S. f.o.b. selling prices of U.S.-produced bearings and bearings imported from Italy, by type of customer, by specified products, and by quarters, January 1985-December 1987

* * * * * * *

Japan--Based on questionnaire responses of U.S. producers and importers, the reported net U.S. f.o.b. selling price data resulted in 127 quarterly price comparisons between domestic and imported Japanes bearing products 1-6 (table 36). One-hundred-and-two of the 127 price comparisons showed that the imported Japanese products were priced less than the U.S.-produced products. Ninety-six of the quarterly price comparisons involved the ball bearing products 1-4 sold to OEMs and to distributors during January 1985-December 1987, 24 price comparisons involved spherical roller bearing product 5 sold to OEMs and to distributors during this period, and 7 price comparisons involved needle bearing product 6 sold to OEMs during April 1986-December 1987.

Thirty-two of the 48 quarterly price comparisons for ball bearing products 1-4 sold to OEMs and 40 of the 48 price comparisons involving these products sold to distributors showed that the imported products were priced less than the domestic products. Based on the 32 price comparisons involving sales to OEMs, prices of the imported products ranged from * * * percent below prices of the U.S. products. On the 40 price comparisons involving sales to distributors, the imported products were priced from * * * percent lower than the domestic products.

Eleven of the 12 quarterly price comparisons for spherical bearing product 5 sold to OEMs and all 12 price comparisons involving product 5 sold to distributors showed that the imported product was priced less than the domestic product. For the 11 price comparisons involving sales to OEMs, prices of the imported product ranged from 1.1 to 48.2 percent below prices of the domestic product. Prices of the imported product sold to distributors ranged from 5.9 to 21.7 percent below the prices of the domestic product.

All seven quarterly price comparisons for needle bearing product 6 sold to OEMs showed that the imported product was priced less than the domestic product. Prices of the imported product ranged from * * * percent below prices of the domestic product.

Table 36
Antifriction bearings: Margins of under/(over) selling (in percentage terms) between the weighted-average net U.S. f.o.b. selling prices of U.S.-produced bearings and bearings imported from Japan, 1/ by specified products, by type of customer, and by quarters, January 1985-December 1987 2/

Period	Products 1	2	3	4	5	6
	Sales to OEMs					
	Percent					
1985:						
Jan.-Mar.....	1.6	***	***	***	8.1	3/
Apr.-June.....	0.3	***	***	***	12.5	3/
July-Sept.....	(7.1)	***	***	***	9.3	3/
Oct.-Dec.....	15.3	***	***	***	7.5	3/
1986:						
Jan.-Mar.....	(40.0)	***	***	***	48.2	3/
Apr.-June.....	(103.1)	***	***	***	21.5	***
July-Sept.....	(0.7)	***	***	***	16.2	***
Oct.-Dec.....	(1.2)	***	***	***	15.2	***
1987:						
Jan.-Mar.....	(1.9)	***	***	***	1.1	***
Apr.-June.....	(6.3)	***	***	***	(3.1)	***
July-Sept.....	(10.0)	***	***	***	12.3	***
Oct.-Dec.....	(2.8)	***	***	***	11.5	***
	Sales to distributors					
1985:						
Jan.-Mar.....	***	***	23.3	***	17.0	4/
Apr.-June.....	***	***	31.8	***	7.9	4/
July-Sept.....	***	***	41.0	***	8.0	4/
Oct.-Dec.....	***	***	26.2	***	11.6	4/
1986:						
Jan.-Mar.....	26.0	***	26.0	***	14.5	4/
Apr.-June.....	5.6	***	19.7	***	14.3	4/
July-Sept.....	34.8	***	13.2	***	5.9	4/
Oct.-Dec.....	20.9	***	17.2	***	15.5	4/

Continued on next page

Table 36
Antifriction bearings: Margins of under/(over) selling (in percentage terms) between the weighted-average net U.S. f.o.b. selling prices of U.S.-produced bearings and bearings imported from Japan, 1/ by specified products, by type of customer, and by quarters, January 1985-December 1987 2/--Continued

Period	Products 1	2	3	4	5	6
	Sales to distributors					
1987:						
Jan.-Mar.....	54.0	***	(0.4)	***	17.8	4/
Apr.-June.....	38.5	***	(2.7)	***	21.7	4/
July-Sept.....	38.2	***	3.0	***	11.2	4/
Oct.-Dec.....	34.0	***	11.9	***	14.1	4/

1/ Any figures in parenthesis indicate that the price of the domestic product was less than the price of the imported Japanese product. Price differences between the U.S. and imported Japanese products were calculated as ratios of the U.S. producers' prices.
2/ The selling prices were based on total sales of the specified products to OEMs and distributors.
3/ No price data were reported for the imported Japanese product during this period.
4/ No price data were requested for sales of product 6 to distributors; product 6 (needle bearing) is sold primarily to OEMs.

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

Romania--Based on questionnaire responses of U.S. producers and importers, the reported net U.S. f.o.b. selling price data resulted in 72 quarterly price comparisons between domestic and imported Romanian ball bearing products 1-3 sold to OEMs and distributors during January 1985-December 1987 (table 37). Forty-four of the 72 price comparisons showed that the imported Romanian products were priced less than the U.S.-produced products.

Eight of the 36 quarterly price comparisons for ball bearing products 1-3 sold to OEMs and all 36 of the price comparisons involving these products sold to distributors showed that the imported products were priced less than the domestic products. Based on the eight price comparisons involving sales to OEMs, prices of the imported products ranged from * * * percent below prices of the U.S. products. Based on the 36 price comparisons involving sales to distributors, the imported products were priced from * * * percent lower than the domestic products.

Table 37
Antifriction bearings: Margins of under/(over) selling (in percentage terms) between the weighted-average net U.S. f.o.b. selling prices of **U.S.**-produced bearings and bearings imported from **Romania**, by type of customer, by specified products, and by quarters, January 1985-December 1987

* * * * * * *

Sweden--Based on questionnaire responses of U.S. producers and importers, the reported net U.S. f.o.b. selling price data resulted in eight quarterly price comparisons between domestic and imported Swedish spherical bearing product 5 sold to OEMs during January 1985-December 1986, and one price comparison of this product sold to distributors during October-December 1985 (table 38). All nine price comparisons showed the Swedish product to be priced above the domestic product.

The United Kingdom--Based on questionnaire responses of U.S. producers and importers, the reported net U.S. f.o.b. selling price data resulted in four quarterly price comparisons between the domestic and imported British ball bearing product 2 sold to distributors during January-June 1985, October-December 1986, and July-September 1987 (table 38). All four price comparisons showed the British product to be priced above the domestic product.

Table 38
Antifriction bearings: Margins of under/(over) selling (in percentage terms) between the weighted-average net U.S. f.o.b. selling prices of **U.S.**-produced antifriction bearings and bearings from **Sweden** and the **United Kingdom**, by type of customer, by specified products, and by quarters, January 1985-September 1987

* * * * * * *

Transportation factors

U.S. producers and importers reported in their questionnaire responses that domestic and imported antifriction bearings are generally shipped by truck to their U.S. customers, 1/ with U.S. freight costs typically averaging less than 3 percent of the f.o.b. selling prices. Most of the 19 U.S. producers and 20 importers responding to this part of the questionnaire indicated that the transportation costs did not significantly affect price competition between the U.S.-produced and subject imported antifriction bearings. A majority of these firms also reported that they arrange freight to their customers, although the proportion of domestic producers doing so was less than the proportion of importing firms. In addition, questionnaire responses suggest that, in comparison with U.S. importers, U.S. producers sell a higher proportion of their bearings to customers located more than 100 miles from the supplying firms' U.S. selling locations.

Exchange rates

Quarterly data reported by the International Monetary Fund indicate that, except for Romania, values of currencies of the other eight foreign countries subject to these investigations generally appreciated in nominal and real terms relative to the U.S. dollar during January 1985-December 1987 (table 39). 2/ Market values of the Romanian lei are not readily known because the Romanian Government administratively sets the lei exchange rate and limits the convertibility of the lei with other currencies. Exchange rate changes for the other eight countries are discussed below.

Federal Republic of Germany.--The nominal value of the West German mark appreciated relative to the U.S. dollar by approximately 91 percent during January 1985-December 1987. An approximately 5-percent deflation rate in West Germany compared with about 1 percent inflation in the United States during this period, however, resulted in less appreciation of the West German mark in real terms compared with nominal terms. In real terms, the West German mark appreciated against the U.S. dollar during January 1985-December 1987 by approximately 81 percent, or 10 percentage points less than the appreciation in nominal terms.

France.--The nominal value of the French franc appreciated steadily relative to the U.S. dollar during January 1985-June 1987, rising by approximately 65 percent, and then fluctuated before ending the period in December 1987 about 73 percent above its initial period value. Similar rates of deflation in France and the United States during January 1985-June 1987--the latest period for which comparable producer price data were available--resulted in about the same appreciation of the French franc in real terms compared with

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1/ Antifriction bearings were also reported shipped by air freight as the second most popular mode of transportation, although much more limited than by truck.
2/ International Financial Statistics, March 1988.

Table 39
Exchange rates: 1/ Indexes of the nominal and real exchange rates between the U.S. dollar and currencies of eight specified countries, and indexes of producer prices in the foreign countries and the United States, 2/ by quarters, January 1985-December 1987

Period	Federal Republic of Germany Nominal exchange rate index	Federal Republic of Germany Producer price index	Federal Republic of Germany Real exchange rate index 3/	France Nominal exchange rate index	France Producer price index	France Real exchange rate index 3/	Italy Nominal exchange rate index	Italy Producer price index	Italy Real exchange rate index 3/	U.S. Producer price index
1985:										
Jan.-Mar...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Apr.-June..	105.5	100.4	105.8	105.9	101.5	107.4	102.5	102.2	104.7	100.1
July-Sept..	114.3	100.4	115.5	114.6	101.6	117.2	106.6	102.1	109.5	99.4
Oct.-Dec...	126.0	100.2	126.3	126.3	100.2	126.5	115.5	103.0	119.0	100.0
1986:										
Jan.-Mar...	138.8	99.3	139.8	138.1	99.5	139.6	126.5	102.5	131.6	98.5
Apr.-June..	145.0	97.8	146.7	139.3	98.2	141.6	131.3	100.7	136.9	96.6
July-Sept..	156.1	96.8	157.1	146.9	97.4	148.9	140.8	99.9	146.2	96.2
Oct.-Dec...	162.2	95.4	160.3	151.6	96.8	152.0	145.4	100.6	151.5	96.5
1987:										
Jan.-Mar...	177.0	95.1	172.5	162.5	97.4	162.1	154.7	102.1	161.8	97.7
Apr.-June..	180.4	94.8	172.4	165.3	97.9	163.1	155.5	103.1	161.6	99.2
July-Sept..	177.0	95.2	168.0	162.4	4/	4/	152.0	103.9	157.4	100.3
Oct.-Dec...	190.9	95.4	180.8	173.1	4/	4/	161.9	104.9 5/	168.5 5/	100.8

Period	Japan Nominal exchange rate index	Japan Producer price index	Japan Real exchange rate index 3/	Singapore Nominal exchange rate index	Singapore Producer price index	Singapore Real exchange rate index 3/	Sweden Nominal exchange rate index	Sweden Producer price index	Sweden Real exchange rate index 3/	U.S. Producer price index
1985:										
Jan.-Mar...	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Apr.-June..	102.8	98.8	101.5	100.7	97.8	98.5	103.6	100.0	103.5	100.1
July-Sept..	108.0	97.5	106.0	100.9	96.2	97.7	110.4	100.0	111.0	99.4
Oct.-Dec...	124.4	94.7	117.8	105.5	94.5	99.7	118.6	100.0	118.6	100.0
1986:										
Jan.-Mar...	137.2	92.8	129.2	104.5	87.3	92.5	125.1	98.7	125.3	98.5
Apr.-June..	151.5	89.4	140.1	101.3	80.6	84.6	128.7	96.8	129.0	96.6
July-Sept..	165.4	87.0	149.7	103.1	79.2	85.0	133.0	96.2	133.0	96.2
Oct.-Dec...	160.8	86.1	143.5	102.4	82.6	87.6	133.9	97.5	135.2	96.5
1987:										
Jan.-Mar...	168.2	85.6	147.4	104.3	87.5	93.5	142.4	98.7	144.0	97.7
Apr.-June..	180.6	84.9	154.5	105.4	89.2	94.7	147.1	98.7	146.3	99.2
July-Sept..	175.4	86.0	150.2	106.3	89.9	95.2	144.1	100.6	144.5	100.3
Oct.-Dec...	189.7	89.2	167.9	109.3	89.6 5/	97.1 5/	151.3	101.9 6/	153.0 6/	100.8

See footnotes at end of table.

Table 39
Exchange rates: 1/ Indexes of the nominal and real exchange rates between the U.S. dollar and currencies of eight specified countries, and indexes of producer prices in the foreign countries and the United States, 2/ by quarters, January 1985-December 1987--Continued

	Thailand			United Kingdom			U.S.
Period	Nominal exchange rate index	Producer price index	Real exchange rate index 3/	Nominal exchange rate index	Producer price index	Real exchange rate index 3/	Producer price index
1985:							
Jan.-Mar...	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Apr.-June..	101.2	100.9	102.1	112.8	102.0	114.9	100.1
July-Sept..	103.1	101.6	105.4	123.4	102.6	127.3	99.4
Oct.-Dec...	104.9	102.1	107.2	128.8	103.4	133.3	100.0
1986:							
Jan.-Mar...	104.8	101.4	107.9	129.2	104.9	137.5	98.5
Apr.-June..	105.4	100.3	109.4	135.3	106.6	149.3	96.6
July-Sept..	106.3	100.6	111.2	133.6	107.0	148.6	96.2
Oct.-Dec...	106.0	100.8	110.8	128.2	107.8	143.2	96.5
1987:							
Jan.-Mar...	107.4	101.3	111.4	138.2	109.2	154.6	97.7
Apr.-June..	180.2	104.9	114.4	147.3	110.3	163.8	99.2
July-Sept..	107.4	108.7	116.4	145.0	110.9	160.2	100.3
Oct.-Dec...	109.0	111.9	121.1	157.3	111.3	175.0	100.8

1/ Based on exchange rates expressed in U.S. dollars per unit of foreign currency.
2/ The producer price indexes are aggregate measures of inflation at the wholesale level in the United States and the above foreign countries. Quarterly producer prices in the United States fluctuated but rose slightly, by 0.8 percent, during January 1985-December 1987. Producer prices in Italy and Sweden rose similarly, by 4.9 and 1.9 percent, respectively during the same period; prices in Thailand and the United Kingdom increased at a faster pace, by 11.9 and 11.3 percent, respectively. On the other hand, producer prices in the Federal Republic of Germany, France, Japan, and Singapore declined, falling in a range from 2.1 percent in France to 10.8 percent in Japan. Producer prices in France were available only through June 1987.
3/ The real values of the foreign currencies are the nominal values adjusted for the difference between inflation rates in the individual foreign countries and the United States, as measured by producer price indexes in these countries.
4/ Not available.
5/ Data are derived from producer price indexes reported for October only.
6/ Data are derived from producer price indexes reported for October-November only.

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

Note: January-March 1985=100.0

Italy.--The nominal value of the Italian lira appreciated relative to the U.S. dollar by approximately 62 percent during January 1985-December 1987. An approximately 5-percent inflation rate in Italy compared with about 1 percent inflation in the United States during this period resulted in a 68 percent appreciation of the Italian lira in real terms, somewhat greater than in nominal terms.

Japan.--The nominal value of the Japanese yen appreciated relative to the U.S. dollar by approximately 90 percent during January 1985-December 1987. An approximately 11-percent deflation rate in Japan compared with about 1 percent inflation in the United States during this period, however, resulted in less appreciation of the Japanese yen in real terms compared with nominal terms. In real terms, the Japanese yen appreciated against the U.S. dollar during January 1985-December 1987 by approximately 68 percent, or 22 percentage points less than the appreciation in nominal terms.

Singapore.--The nominal value of the Singapore dollar appreciated somewhat relative to the U.S. dollar during January 1985-December 1987, by about 9 percent. An approximately 10-percent deflation rate in Singapore compared with about 1 percent inflation in the United States during this period, however, resulted in depreciation of the Singapore dollar in real terms against the U.S. dollar. In real terms, the Singapore dollar depreciated against the U.S. dollar during January 1985-December 1987 by approximately 3 percent.

Sweden.--The nominal value of the Swedish krona appreciated relative to the U.S. dollar by approximately 51 percent in nominal terms and 53 percent in real terms during January 1985-December 1987. Similar rates of inflation in Sweden and the United States during this period led to only a slightly greater appreciation of the Swedish krona in real terms compared to nominal terms.

Thailand.--The nominal value of the Thai baht appreciated somewhat relative to the U.S. dollar during January 1985-December 1987, by about 9 percent. An approximately 12-percent inflation rate in Thailand compared with about 1 percent inflation in the United States during this period, however, resulted in greater appreciation of the Thai baht in real terms compared with nominal terms. In real terms, the Thai baht appreciated against the U.S. dollar during January 1985-December 1987 by approximately 21 percent, or 12 percentage points greater than the appreciation in nominal terms.

United Kingdom.--The nominal value of the British pound appreciated relative to the U.S. dollar by approximately 57 percent during January 1985-December 1987. An approximately 11-percent inflation rate in the United Kingdom compared with about 1 percent inflation in the United States during this period, however, resulted in greater appreciation of the British pound in real terms compared with nominal terms. In real terms, the British pound appreciated against the U.S. dollar during January 1985-December 1987 by 75 percent, or 18 percentage points greater than the appreciation in nominal terms.

Lost sales

Eight U.S. producers of the subject antifriction bearings reported specific lost sales allegations involving imports from the Federal Republic of Germany, Japan, and Sweden. 1/ The amount of information and the volume of sales cited in these allegations varied considerably. The Commission staff investigated the more complete allegations, particularly those representing the larger volume sales. Commission staff telephone conversations with the purchasers contacted are discussed below.

Federal Republic of Germany--Fourteen purchasers were identified in lost sales allegations involving imports of the subject antifriction bearings from the Federal Republic of Germany. The Commission staff contacted 7 of the 14 purchasers cited. Conversations with representatives of these purchasing firms are discussed below.

* * * named * * *, in a lost sales allegation involving needle bearings imported from the Federal Republic of Germany. * * * asserts that in * * * it quoted a price of $*** per bearing to * * * for an order of *** bearings, but lost the sale to West German bearings selling at $*** per bearing. * * *, buyer of bearings for * * *, could not recall the specific prices or quantities, but provided general information on his firm's bearing purchases in the last 3 years. Prior to 1985, * * * purchased mostly U.S.-produced bearings, from * * * and * * *. In 1985 * * * asked * * *, * * *, and * * * to submit improved bearing designs and price quotes for several of its bearing products, including needle roller bearings, ball bearings, and inner and outer bearing races. 2/ The bearing products in this request account for about *** percent of * * *'s annual bearing requirements. Based on the bids submitted, * * * contracted with * * * to supply these products to * * * for 3 years, * * *. As part of the contract, prices of the imported West German bearings were fixed at the * * * level during the 3-year period, and the bearings were shipped on a just-in-time supply basis. The supply provision allows * * * to operate virtually without any inventory of these bearings. * * * indicated that his firm chose * * * instead of one of the U.S. producers because * * * preferred the product designs of * * * over the other two firms, and because delivered prices of the West German bearings were generally similar or less than prices of the other two competitors. 3/ * * * also stated that the quality of the West German products as well as delivery reliability is better than the U.S.-produced bearings. * * * buys the remainder of its bearing requirements (about *** percent of its total annual bearing purchases) mostly from * * *. These latter bearings are shelf items which * * * buys on a spot basis.

1/ Three other U.S. producers indicated they had lost sales of antifriction bearings to the subject imported products, but were unable to document such instances. Ten U.S. producers indicated in their questionnaire responses that they have not lost sales of their U.S. produced antifriction bearings to the subject imported products.

2/ * * * sought better bearing designs to improve the load bearing performance and product life of the bearings used in * * *.

3/ During this period, * * *. As a result * * * was trying to improve its product quality and to reduce its costs, the latter exerting downward price pressure on its suppliers.

The Commission staff contacted three other purchasers identified by * * * and one identified by * * * in lost sales allegations involving the subject bearings imported from the Federal Republic of Germany. All four purchasers declined to comment on the specific lost sales allegations or on competitive conditions in general without a written request, including the questions to be answered and a statement assuring them of confidentiality of their responses. Two other purchasers, one identified by * * * and another identified by * * * in lost sales allegations involving the West German bearings, did not return repeated phone calls.

Japan--Fifty-three purchasers were identified in lost sales allegations involving imports of the subject antifriction bearings from Japan. The Commission staff contacted 10 of the purchasers cited. Conversations with representatives of these purchasing firms are discussed below.

* * * cited * * *, a manufacturer of * * * located in * * *, in a lost sales allegation involving * * * bearings imported from Japan. * * * asserts that in * * * it quoted a price of $*** per bearing to * * * for a multi-year order of *** bearings, but lost the sale to Japanese bearings selling at $*** per bearing. 1/ * * * requested written assurance of confidentiality and written questions concerning this sale before responding to Commission staff inquiries. The staff sent the requested information to * * *, but did not receive a reply.

* * * cited * * *, a producer of * * * located in * * *, in a lost sales allegation involving needle bearings. * * * reported that in * * * it quoted * * * a price of $*** per bearing for an order of *** needle bearings but lost the order to imported Japanese bearings at $*** per bearing. Although * * * of * * * could not recall the exact prices, he stated that his firm purchased the Japanese bearings instead of the U.S.-produced bearings because the foreign bearings were priced less than the domestic bearings. * * * indicated that the domestic and imported Japanese bearings are similar in quality. He also indicated that during 1985-87 the Japanese bearings were generally priced less than the domestic bearings. According to * * *, currently the price of domestic needle bearings is $*** per bearing compared with $*** per bearing for the imported Japanese product. But his supplier of the Japanese bearings announced that the price of the imported Japanese bearings will be increased shortly to $*** because of "U.S. Government action."

* * * named * * *, a distributor of bearings and * * * in * * *, in a lost sales allegation involving * * * bearings imported from Japan. * * * asserts that in * * * it quoted a price of $*** per bearing to * * * for an order of *** bearings, but lost the sale to Japanese bearings selling at $*** per bearing. * * *, only vaguely recalled the instance cited, but stated that his firm did not buy any of the bearings. He explained that * * * obtained a price quote from * * * to bid on a sale of about *** of the ball bearings, but the inquiring end user ultimately placed the order with another firm. * * * thought the order was placed with a supplier of imported bearings that were lower priced, but he did not know the country of origin. * * * further indicated that during 1985-87 the imported Japanese bearings were generally priced on a delivered basis from 20 to 25 percent below comparable domestic bearings.

1/ * * *.

* * * named * * *, a distributor of * * * in * * *, in a lost sale allegation also involving * * * bearings. * * * asserts that in * * * it quoted * * * a price of $*** per bearing for *** of the bearings but lost the order to imported Japanese bearings. * * *, recalled that as a distributor they received a request for about * * * bearings and * * *, supplier to * * *, gave them a price quote. * * * indicated that his customer (could not recall the name) did not order the bearings from him. The customer reportedly told * * * that he could buy the bearings from a foreign supplier at a lower price, but did not indicate the country of origin of these imported bearings. * * * further indicated that some of his customers perceive the quality of Japanese bearings to be superior to domestic bearings.

* * * also named * * *, in a lost sales allegation involving * * *. * * * reported that in * * * it quoted * * * a price of $*** per part for *** bearings, but lost the sale to imported Japanese bearings sold at $*** per part. * * * could not recall this specific purchase and was unwilling to provide any more information.

* * * identified * * *, a producer of * * * located in * * *, in a lost sales allegation involving * * *. In * * *, * * * reportedly quoted * * * a price of $*** per unit for * * *, but lost the sale to imported Japanese * * * sold at $*** per unit. * * *, reported that his firm does not purchase these products, but buys mostly * * *. * * * indicated that his firm is currently using Italian bearings because they are better in quality than the Japanese bearings. According to * * *, during 1985-87 prices of the imported Japanese bearings and those produced in the United States were within $*** of each other.

* * * identified * * *, a distributor of * * * located in * * *, in a lost sales allegation involving the subject antifriction bearings. * * * indicated that in * * * it quoted * * * a price of $*** per bearing for *** bearings, but lost the sale to imported Japanese bearings. * * *, recalled that in the instance cited, the price of the Japanese bearings was about $***, but his firm purchased domestic bearings from another U.S. producer. * * * also indicated that during 1985-87, the Japanese bearings were priced *** percent below domestic bearings. But he noted that currently prices of the foreign and domestic bearings are about equal, and attributed this to the depreciation of the U.S. dollar against the Japanese yen.

* * * named * * *, located in * * *, in lost sales allegations involving the subject antifriction bearings imported from Japan. * * * indicated that in 1986 and 1987 it quoted to * * * prices for various bearings that ranged from $*** to $*** per bearing more than prices of the imported bearings, thereby losing these sales to the imported products. * * *'s prices of the different bearings ranged from $*** to $*** per bearing. * * *, could not readily recall the sales cited, but volunteered the following information. In addition to the Japanese firms, * * * and * * * are the only two U.S. producers making the * * * bearings purchased by * * *. During 1985-87 * * * generally found prices of the Japanese bearings to be lower than U.S.-produced bearings. If the U.S. producer can get within *** percent of the foreign price, * * * indicated he would buy the domestic bearings. According to * * *, * * * is typically less price competitive than * * *.

Two other purchasers, one identified by * * * and another identified by * * * in lost sales allegations involving the imported Japanese bearings, did not return repeated phone calls.

Sweden--Two purchasers were identified in lost sales allegations involving imports of the subject antifriction bearings from Sweden. In one of the firms, identified by * * *, the buyer for the firm was on travel and unavailable for comment. The second purchaser, identified by * * *, did not return repeated phone calls.

Price suppression/depression

Four U.S. producers of the subject antifriction bearings reported specific allegations of price suppression/depression involving imports of these products from the Republic of Germany, Japan, and Sweden. 1/ The amount of information and the volume of sales cited in these allegations varied considerably. The Commission staff investigated the more complete allegations, particularly those representing the larger sales; staff telephone conversations with the purchasers contacted are discussed below.

Federal Republic of Germany--One purchaser was identified in lost revenue allegations involving imports of the subject antifriction bearings from the Federal Republic of Germany. This purchaser did not return repeated phone calls.

Japan--Eighteen purchasers were identified in lost revenue allegations involving imports of the subject antifriction bearings from Japan. The Commission staff contacted five of the purchasers cited. Conversations with representatives of these purchasing firms are discussed below.

* * * named * * *, a producer of * * * in * * *, in a lost revenue allegation involving * * * bearings. For an order of * * * bearings to be delivered in * * *, * * * reportedly lowered its price to * * * from $*** to $*** per bearing to compete with imported Japanese bearings at the lower price. * * * said the information was essentially correct, but that * * * got *** percent of the order at the lower price and the Japanese got the remainder. * * * indicated that the U.S. and Japanese ball bearings tend to be similar in quality, but U.S. roller bearings tend to be of better quality than the Japanese roller bearings. He also reported that during 1985-87 the imported Japanese bearings were priced about *** percent lower than U.S.-produced bearings. Currently, however, the foreign and domestic bearings are selling at about the same price. * * * attributed this to the appreciation of the Japanese yen vis-a-vis the U.S. dollar.

* * * named * * * located in * * *, in a lost revenue allegation involving the subject antifriction bearings. On sales of *** bearings to * * *

1/ Eight other U.S. producers indicated in their questionnaire responses that they had to reduce prices or roll back price increases of their antifriction bearings in the face of competition with the subject imports. Ten U.S. producers indicated in their questionnaire responses that they did not reduce prices or roll back price increases of their U.S. produced antifriction bearings as a result of competition with the subject imported products.

during 1985-87, * * * reported lowering its price from an average of $*** to $*** per unit to compete with imported Japanese bearings at the lower price. * * *, indicated that the information was essentially correct, commenting that this was a standard high volume bearing. He noted that * * * had to drop its price during this period to compete with imported Japanese products. * * * was the only U.S. producer supplying * * * with this bearing product. * * * considered the domestic and imported Japanese bearings to be similar in terms of quality, delivery, payment terms, and order lead times, but felt that the domestic producers offered better engineering assistance. * * * reported that during 1985-87 the imported Japanese bearings were generally priced less than domestic bearings, but currently are priced similarly. He attributed the recent price trend to the appreciation of the Japanese yen vis-a-vis the U.S. dollar.

* * * named * * *, a producer of * * * located in * * *, in a lost revenue allegation involving the subject antifriction bearings imported from Japan. On sales of * * * bearings to * * * during 1986, * * * reported lowering its price from an average of $*** to $*** per unit to compete with imported Japanese bearings at the lower price. * * * indicated that * * * initially quoted him a price of $*** and did not quote the $*** price. * * * noted that the * * * bearings cited in the allegation are a high volume item that accounts for about *** percent of * * *'s annual bearing requirements. He reported purchasing these bearings from * * * because it was price competitive and because it assures him of a ready supply of low volume bearings also supplied by * * *. * * * has been * * *. * * * also reported that during 1985-87 the imported Japanese bearings were generally priced 15-20 percent less than domestic bearings, but currently are closer in price. He attributed the recent price trend to the appreciation of the Japanese yen vis-a-vis the U.S. dollar. * * * commented that the domestic and imported Japanese bearings are similar overall, taking into consideration quality, reliability of delivery, order lead times, payment terms, and engineering service.

* * * named * * *, a producer of * * * located in * * *, in a lost revenue allegation involving the subject antifriction bearings imported from Japan. On sales of *** various * * * bearings to * * * during 1985-87, * * * reported lowering its price from an average of $*** to $*** per unit to compete with imported Japanese bearings at the lower price. * * * of * * * could not recall any specific sales where * * * lowered its prices directly as a result of lower quoted prices of the imported Japanese bearings. He indicated that prices generally declined during this period due to heavy competition between suppliers both foreign and domestic. * * * indicated that during 1985-87 the imported Japanese bearings were generally priced less than domestic bearings, but currently are closer in price. He attributed the recent price trend to the appreciation of the Japanese yen vis-a-vis the U.S. dollar. * * * also commented that the domestic and imported Japanese bearings are similar overall, taking into consideration quality, reliability of delivery, order lead times, payment terms, and engineering service.

One other purchaser cited in lost revenue allegations involving the imported Japanese bearings would not discuss the specific allegation over the telephone.

Sweden--One purchaser was identified in lost revenue allegations involving imports of the subject antifriction bearings from Sweden. This purchaser would not discuss the specific allegation on the telephone.

APPENDIX A

COMMERCE'S AND THE COMMISSION'S FEDERAL REGISTER NOTICES

International Trade Administration

[A-428-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From the Federal Republic of Germany

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from the Federal Republic of Germany (FRG) are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from FRG are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings produced in FRG and sold in the United States, less U.S. duty, ocean freight, and marine insurance charges, and based on public statistics of West German exports of bearings to the United States.

Petitioner's estimate of foreign market value was based on West Germany home market list prices adjusted for standard discounting, and based on public statistics of West German exports of bearings to Italy and France. No further adjustments were made to foreign market value.

Based on a comparison of United States prices and foreign market value, petitioner alleges dumping margins ranging from nine percent to 355 percent.

Petitioner also provided information concerning a West Germany manufacturer's cost of production. The cost information was based on petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the West German manufactuer's costs. This analysis indicates that home market prices are below the cost of production.

Initiation of Investigation

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

We examined the petition on bearings from the FRG and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from the FRG are being, or are likely to be, sold in the United States at less than fair value. As part of this investigation, we will determine whether the products under investigation are being sold in the home market at less than the cost of production. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference coy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.20, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge and hanger units, and parts of the foregoing (TSUSA

items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from the FRG materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will process according to the statutory and regulatory procedures.

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

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

April 20, 1988

[FR Doc. 88-9190 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-427-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other than Tapered Roller Bearings) and Parts Thereof From France

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from France are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from France are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings produced in France and sold in the United States, less U.S. duty, ocean freight, and marine insurance charges, and based on public statistics of French exports of bearings to the United States.

Petitioner's estimate of foreign market value was based on French home market list prices adjusted for standard discounting, and based on public statistics of French exports of bearings to the Federal Republic of Germany. No further adjustments were made to foreign market value.

Based on a comparison of Untied States prices and foreign market value, petitioner alleges dumping margins ranging from 11 percent to 155 percent.

Petitioner also provided information concerning a French manufacturer's cost of production. The cost information was based on petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the French manufacturer's costs. This analysis indicates that home market prices are below the cost of production.

Initiation of Investigation

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

We examined the petition on bearings from France and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from France are being, or are likely to be, sold in the United States at less than fair value. As part of this investigation, we will determine whether the products under investigation are being sold in the home market at less than the cost of production. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of antifriction bearings from France materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9191 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-475-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other than Tapered Roller Bearings) and Parts Thereof From Italy

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from Italy are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Steet and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from Italy are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings produced in Italy and sold in the United States, less U.S. duty, ocean freight, and marine insurance charges, and based on public statistics of Italian exports of bearings to the United States.

Petitioner's estimate of foreign market value was based on Italian home market prices, and based on public statistics of Italian exports of bearings to the Federal Republic of Germany. No further adjustments were made to foreign market value.

Based on a comparison of United States prices and foreign maket value, petitioner alleges dumping margins ranging from 15 percent to 304 percent.

Petitioner also provided information concerning an Italian manufacturer's cost of production. The cost information was based on petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the Italian manufacturer's costs. This analysis indicates that home market prices are below the cost of production.

Initiation of Investigation

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

We examined the petition on bearings from Italy and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from Italy are being, or are likely to be, sold in the United States at less than fair value. As part of this investigation, we will determine whether the products under investigation are being sold in the home market at less than the cost of production. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

The United States has developed a system of tariff classification based on the international harmonized system of Customs nomeclature. Congress is considering legislation to convert the

United States to this Harmonized System (HS). In view of this proposal, we will be providing both the appropriate *Tariff Schedules of the United States Annotated* (TSUSA) item numbers and the appropriate HS item numbers with our product descriptions on a test basis, pending Congressional approval. As with the TSUSA, the HS item numbers are provided for convenience and Customs purposes. The written description remains dispositive.

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shifts (TSUSA items 680.330 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3852 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from Italy materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9192 Filed 4-27-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-588-804]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From Japan

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from Japan are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 6, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from Japan are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings produced in Japan and sold in the United States, less U.S. duty, ocean fright, and marine insurance charges.

Petitioner's estimate of foreign market value was based on Japanese home market list prices adjusted for standard discounting. No further adjustments were made to foreign market value.

Based on a comparison of United States and foreign market value, petitioner alleges dumping margins ranging from 1 percent to 130 percent.

Petitioner also provided information concerning Japanese manufacturers' cost of production. The cost informtion was based on petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the Japanese manufacturers' costs. This analysis indicates that home market prices are below the cost of production.

Initiation of Investigation

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

reasonably available to the petitioner supporting the allegations.

We examined the petition on bearings from Japan and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from Japan are being, or are likely to be, sold in the United States at less than fair value. As part of this investigation, we will determine whether the products under investigation are being sold in the home market at less than the cost of production. If our investigation proceeds normally, we will make our preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680. 3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from Japan materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9193 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-485-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From Romania

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) and parts thereof (hereinafter referred to as bearings) from Romania are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from Romania are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings produced in Romania and sold in the

United States. U.S. duty ocean freight, and marine insurance charges were deducted.

Alleging that Romania is a state-controlled-economy country, petitioner's estimate of foreign market value was based on home market prices for corresponding bearings in Italy and Portugal, non-state-controlled-economy countries (surrogate countries), in accordance with the provisions of 19 CFR 353.36(a)(8). Petitioner selected Italy as a surrogate country since the Department has used Italy as a surrogate country in the past for other Eastern European state-controlled-economy countries. Petitioner also selected Portugal as a surrogate country since the Department used Portugal as a surrogate country in the past for Romania.

Petitioner's estimate of Italian and Portuguese home market prices was based on petitioner's foreign market information. Using Italian home market prices, petitioner alleges dumping margins ranging from 96 percent to 132 percent. Using Portuguese home market prices, petitioner alleges dumping margins ranging from 87 percent to 107 percent.

Initiation of Investigation

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

We examined the petition on bearings from Romania and found that it meets the requirements on section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from Romania are being, or are likely to be, sold in the United States at less than fair value.

In the course of our investigation, we will determine whether the economy of Romania is state-controlled to an extent that sales of such or similar merchandise in the home market or to third countries do not permit determination of foreign market value. If Romania is determined to be a state-controlled economy, we will then choose a non-state-controled economy surrogate country for purposes of determining foreign market value. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70); ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from Romania materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

Joseph A. Spetrini,
Acting Assistant Secretary for Import Administration.

April 20, 1988.

[FR Doc. 88-9194 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-559-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (other Than Tapered Roller Bearings) and Parts Thereof From Singapore

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from Signapore are being, or are likely to be, sold in the United States

at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from Singapore are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings sold in the United States, less ocean freight, marine insurance, and U.S. duty. The United States prices of bearings produced by a single manufacturer with production facilities in both Singapore and Thailand and which exports bearings from both countries to the United States were used because the country of origin (as between Singapore and Thailand) of the imported bearings could not be determined.

Petitioner's estimate of foreign market value was based on home market prices in Singapore. No further adjustments were made to foreign market value.

Based on a comparison of United States prices and foreign market value, petitioner alleges dumping margins ranging from four percent to 44 percent.

Petitioner also provided information concerning a Singapore manufacturer's cost of production. The cost information was based on petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the Singapore manufacturer's costs. This analysis indicates that home market prices are below the cost of production.

Initiation of Investigation

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

We examined the petition on bearings from Singapore and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act we are initiating an antidumping duty investigation to determine whether imports of bearings from Singapore are being, or are likely to be, sold in the United States at less than fair value. As part of this investigation, we will determine whether the products under investigation are being sold in the home market at less than the cost of production. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from Singapore materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9196 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-401-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From Sweden

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from Sweden are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from Sweden are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings sold in the United States, less ocean freight, marine insurance, and U.S. duty. Prices of bearings produced by a single manufacturer with production facilities in many countries were used because the country of origin of the imported bearings could not be determined with certainty.

Petitioner's estimate of foreign market value is based on Swedish home market list prices adjusted for standard discounting. No further adjustments were made to foreign market value.

Based on a comparison of United States prices and foreign market value, petitioner alleges dumping margins ranging from three percent to 180 percent.

Petitioner also provided information concerning a Swedish manufacturer's cost of production. The cost information was based on petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the Swedish manufacturer's costs. This analysis indicates that home market prices are below the cost of production.

Initiation of Investigation

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

We examined the petition on bearings from Sweden and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from Sweden are being, or are likely to be, sold in the United States at less than fair value. As part of this investigation, we will determine whether the products under investigation are being sold in the home market at less than the cost of production. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40; 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8495.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not

included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from Sweden materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9197 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-412-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From the United Kingdom

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from the United Kingdom are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury, to a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from the United Kingdom (U.K.) are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury, to a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings produced in the U.K. and sold in the United States, less U.S. duty, ocean freight, and marine insurance charges, and based on public statistics of U.K. exports of bearings to the United States.

Petitioner's estimate of foreign market value was based on U.K. home market list prices adjusted for standard discounting, and based on public statistics of U.K. exports of bearings to Italy and the Federal Republic of Germany. No further adjustments were made to foreign market value.

Based on a comparison of United States prices and foreign market value, petitioner alleges dumping margins ranging from 13 percent to 254 percent.

Petitioner also provided information concerning a U.K. manufacturer's cost of production. The cost information was based on petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the U.K. manufacturer's costs. This analysis indicates that home market prices are below the cost of production.

Initiation of Investigation

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

We examined the petition on bearing from the U.K. and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from the U.K. are being, or are likely to be, sold in the United States at less than fair value. As part of this investigation, we will determine whether the products under investigation are being sold in the home market at less than the cost of production. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS

subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from the U.K. materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9200 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[A-549-801]

Initiation of Antidumping Duty Investigation; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From Thailand

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating an antidumping duty investigation to determine whether imports of antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings) from Thailand are being, or are likely to be, sold in the United States at less than fair value. We are notifying the U.S. International Trade Commission (ITC) of this action so that it may determine whether imports of bearings materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988. If that determination is affirmative, we will make a preliminary determination on or before September 7, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition filed in proper form by The Torrington Company on behalf of the domestic antifriction bearing industry. In compliance with the filing requirements of 19 CFR 353.36, petitioner alleges that imports of bearings from Thailand are being, or are likely to be, sold in the United States at less than fair value within the meaning of section 731 of the Tariff Act of 1930, as amended (the Act), and that these imports materially injure, or threaten material injury to, a U.S. industry.

United States Price and Foreign Market Value

Petitioner's estimate of United States price was based on prices for bearings sold in the United States, less ocean freight, marine insurance, and U.S. duty. The United States prices of bearings produced by a single manufacturer with production facilities in both Thailand and Singapore and which exports bearings from both countries to the United States were used because the country of origin (as between Thailand and Singapore) of the imported bearings could not be determined.

Petititioner calculated an estimate of foreign market value by applying the special rule for certain multinational corporations contained in section 773(d) of the Act. Since petitioner alleges that Thai home market sales are inadequate for comparison purposes, foreign market value was based on the sales prices of bearings sold to original equipment manufacturers in Japan by the Thai producer's related affiliate in Japan. The Japanese prices were based on Japanese home market list prices adjusted for standard discounting. No further adjustments were made to foreign market value.

Petitioner also calculated an estimate of foreign market value on the basis of the constructed value of bearings in Thailand. Constructed value was calculated using petitioner's costs for certain bearings, adjusted for known differences between the petitioner's and the Thai manufacturer's costs. The statutory minima of ten percent for general, selling, and administrative expenses, and eight percent for profit were used.

Based on a comparison of United States prices and foreign market value, petitioner alleges dumping margins ranging from 59 percent to 80 percent.

Petitioner also alleges that sales by the Thai company in the relevant third country—Japan—are below the company's cost of production. The cost information is based on petitioner's costs for certain bearings, adjusted or known differences between the petitioner's and the Thai manufacturer's costs.

Initiation of Investigation

Under section732(c) of the Act, we must determine, within 20 days after a petition is filed, whether it sets forth the allegations necessary for the initiation of an antidumping duty investigation, and whether it contains information reasonably available to the petitioner supporting the allegations.

We examined the petition on bearings from Thailand and found that it meets the requirements of section 732(b) of the Act. Therefore, in accordance with section 732 of the Act, we are initiating an antidumping duty investigation to determine whether imports of bearings from Thailand are being, or are likely to be, sold in the United States at less than fair value. Because we are investigating

the allegation of sales at less than fair value pursuant to the special rule for multinational corporations as outlined in section 773(d) of the Act, we have determined that it is inappropriate to initiate an investigation of sales at below cost of production at this time. If our investigation proceeds normally, we will make a preliminary determination by September 7, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230.

Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrial features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8709.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Notification of ITC

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

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports of bearings from Thailand materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, the investigation will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

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

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9198 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[C-559-802]

Initiation of Countervailing Duty Investigation; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From Singapore

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating a countervailing duty investigation to determine whether manufacturers, producers, or exporters in Singapore of antifriction bearings (other than tapered roller bearings) and parts thereof, as described in the "Scope of Investigation" section of this notice, receive benefits which constitute bounties are grants within the meaning of the countervailing duty law. We are notifying the U.S. International Trade Commission (ITC) of this action, so that it may determine whether imports from Singapore of certain of the products included in the scope of this investigation materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988, and we will make our preliminary determination on or before June 24, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition in proper form from The Torrington Company of Torrington, Connecticut, filed on behalf of the U.S. industry producing antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings). In compliance with the filing requirements of § 355.26 of the Commerce Regulations (19 CFR 355.26), the petition alleges that manufacturers, producers, or exporters in Singapore of bearings receive, directly or indirectly, certain benefits which constitute bounties or grants within the meaning of section 303 of the Tariff Act of 1930, as amended (the Act).

Since Singapore is not a "country under the Agreement" within the meaning of section 701(b) of the Act, section 303 of the Act applies to this investigation. However, Singapore is a signatory to the General Agreement on Tariffs and Trade, and certain products included in the scope of this investigation [*i.e.*, those items classified under items 681.1010, 681.1030, 681.3900, and 692.3295 of the *Tariff Schedules of the United States Annotated* (TSUSA)] are nondutiable. Therefore, in accordance with section 303(a)(2), petitioner is required to allege that, and the ITC is required to determine whether, imports of these products from Singapore materially injure, or threaten material injury to, a U.S. industry.

The remaining TSUSA items, as described in the "Scope of Investigation" section of this notice, are dutiable. Therefore, in accordance with section 303(b) of the Act, petitioner is not required to allege that, and the ITC is not required to determine whether, imports of these products from Singapore materially injure, or threaten material injury to, a U.S. industry.

Initiation of Investigation

Under section 702(c) of the Act, we must determine, within 20 days after a petition is filed, whether the petition sets forth the allegations necessary for the initiation of a countervailing duty investigation, and whether it contains information reasonably available to the petitioner supporting the allegations. We have examined the petition on bearings from Singapore and have found that it meets these requirements. Therefore, we are initiating a countervailing duty investigation to determine whether manufacturers, producers, or exporters in Singapore of bearings, as described in the "Scope of Investigation" section of this notice, receive bounties or grants. If our investigation proceeds normally, we will make our preliminary determination on or before June 24, 1988.

Scope of Investigation

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Rom B–099, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products covered by this investigation include the following articles, whether finished or unfinished: Antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 680.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Allegations of Bounties or Grants

Petitioner lists a number of practices by the Government of Singapore which allegedly confer bounties or grants on manufacturers, producers or exporters in Singapore of bearings. We are initiating an investigation on the following programs:

- Economic Expansion of Incentives Act of 1985 (EEIA)
  1. Part II, Pioneer Enterprises
  2. Part IV, Expansion of Established Enterprises
  3. Part VI, Production For Export
  4. Part VII International Trade Incentives
  5. Part VIII, Foreign Loans for Productive Equipment
  6. Part IX, Royalties, Fees and Development Contributions
  7. Part X, Investment Allowances
  8. Part VI, Warehousing and Servicing Incentives
- Income Tax Act (ITA)
  1. Section 14(B) and 14(C), Double deduction for Export Promotion Expenses

  Promotion Expenses
  2. Section 16, Initial and Annual Allowances
- Research and Development (R&D) Incentives
  1. Section 14E of the ITA, Double Deduction for R&D Expenses
  2. Section 19B of the ITA, Writing Down Allowance for Expenditures Relating to Patents and Know-How
- Monetary Authority of Singapore (MAS) Rediscount Facility
- Singapore Economic Development Board (EDB) Programs
  1. Capital Assistance Scheme
  2. Product Development Assistance Scheme
  3. Initiatives in New Technologies

Although not specifically alleged by petitioner, we are also investigating whether the antifriction bearing industry in Singapore receives countervailable benefits under the following programs which are currently under investigation in the countervailing duty investigation of *Certain Carbon Steel Wire Rod from Singapore*.

- Section 19A of the ITA, Accelerated Depreciation
- Research and Development Assistance Scheme Under the Singapore Science Council

Although alleged by petitioner, we are not investigating the following programs:

- *Skills Development Fund Under the EDB*

The Department has previously investigated the Skills Development Fund under the EDB and has found that these loans are not limited to a specific enterprise or industry, or group of enterprises or industries. [*See, Final Negative Countervailing Duty Determinations: Certain Textile Mill Products and Apparel from Singapore*, (50 FR 9840, March 12, 1985)]. Because

petitioner has presented no new evidence or alleged changed circumstances with respect to the Skills Development Fund, we are not initiating an investigation on this program.

• *Location in Industrial Estates*

Petitioner alleges that the Jurong Town Corporation (JTC) controls most of the land and buildings used by international companies, and the JTC provides prepared sites with infrastructural facilities at lower rents. Petitioner also alleges that the Singapore Science Park provides similar facilities for technology-oriented companies. We previously investigated location in industrial estates and determined that it was not limited to a specific enterprise or industry, or group of enterprises or industries. *See, Final Negative Countervailing Duty Determination: Carbon Steel Wire Rod from Singapore* (51 FR 3357, January 27, 1986). In that determination, we stated that "location in industrial estates and rental charges cannot be considered countervailable unless the government limits which industries can locate in the industrial estates * * *." Because petitioner has submitted any new evidence or alleged changed circumstances, we are not initiating an investigation on this program. With respect to the Singapore Science Park, the petitioner provided no supporting documentation that benefits are being provided through location in the Science Park, nor that the Singapore bearings companies are located in the Science Park.

Notification of ITC

Section 702(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonproprietary information. We will also allow the ITC access to all privileged and business proprietary information in our files, provided it confirms in writing that it will not disclose such information either publicly or under administrative protective order without the written consent of the Acting Assistant Secretary for Import Administration.

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports from Singapore of certain of the products included in the scope of this investigation materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, our investigation with respect to the products classified under TSUSA items 681.1010, 681.1030, 681.3900, and 692.3295 will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

This notice is published pursuant to section 702(c)(2) of the Act.

April 20, 1988.

Joseph A. Spetrini

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9195 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

[C-549-802]

Initiation of Countervailing Duty Investigations; Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From Thailand

AGENCY: Import Administration, International Trade Administration, Commerce.

ACTION: Notice.

SUMMARY: On the basis of a petition filed in proper form with the U.S. Department of Commerce, we are initiating a countervailing duty investigation to determine whether manufacturers, producers, or exporters in Thailand of antifriction bearings (other than tapered roller bearings) and parts thereof, as described in the "Scope of Investigation" section of this notice, receive benefits which constitute bounties or grants within the meaning of the countervailing duty law. We are notifying the U.S. International Trade Commission (ITC) of this action, so that it may determine whether imports from Thailand of certain of the products included in the scope of this investigation materially injure, or threaten material injury to, a U.S. industry. If this investigation proceeds normally, the ITC will make its preliminary determination on or before May 16, 1988, and we will make our preliminary determination on or before June 24, 1988.

EFFECTIVE DATE: April 27, 1988.

FOR FURTHER INFORMATION CONTACT: Gary Taverman, Office of Investigations, Import Administration, International Trade Administration, U.S. Department of Commerce, 14th Street and Constitution Avenue NW., Washington, DC 20230; telephone: (202) 377-0161.

SUPPLEMENTARY INFORMATION:

The Petition

On March 31, 1988, we received a petition in proper form from The Torrington Company of Torrington, Connecticut, filed on behalf of the U.S. industry producing antifriction bearings (other than tapered roller bearings) and parts thereof (hereinafter referred to as bearings). In compliance with the filing requirements of § 355.26 of the Commerce Regulations (19 CFR 355.26), the petition alleges that manufacturers, producers, or exporters in Thailand of bearings receive, directly or indirectly, certain benefits which constitute bounties or grants within the meaning of section 303 of the Tariff Act of 1930, as amended (the Act).

Since Thailand is not a "country under the Agreement" within the meaning of section 701(b) of the Act, section 303 of the Act applies to this investigation. However, Thailand is a signatory to the General Agreement on Tariffs and Trade, and certain products included in the scope of this investigation [*i.e.*, those classified under items 681.1010, 681.1030, 681.3900, and 692.3295 of the *Tariff Schedules of the United States Annotated* (TSUSA)] are nondutiable. Therefore, in accordance with section 303(a)(2), petitioner is required to allege that, and the ITC is required to determine whether, imports of these products from Thailand materially injure, or threaten material injury to, a U.S. industry.

The remaining TSUSA items, as described in the "Scope of Investigation" section of this notice, are dutiable. Therefore, in accordance with section 303(b) of the Act, petitioner is not required to allege that, and the ITC is not required to determine whether, imports of these products from Thailand materially injure, or threaten material injury to, a U.S. industry.

Initiation of Investigation

Under section 702(c) of the Act, we must determine, within 20 days after a petition is filed, whether the petition sets forth the allegations necessary for the initiation of a countervailing duty investigation, and whether it contains information reasonably available to the petitioner supporting the allegations. We have examined the petition on bearings from Thailand and have found that it meets these requirements. Therefore, we are initiating a countervailing duty investigation to determine whether manufacturers, producers, or exporters in Thailand of bearings, as described in the "Scope of Investigation" section of this notice, receive bounties or grants. If our investigation proceeds normally, we will make our preliminary determination on or before June 24, 1988.

Scope of Investigation

B-15

The United States has developed a system of tariff classification based on

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

We are requesting petitioners to include the appropriate HS item number(s) as well as the TSUSA item number(s) in all new petitions filed with the Department. A reference copy of the proposed HS schedule is available for consultation at the Central Records Unit, Room B-099, U.S. Department of Commerce, 14th Street and Constitution Avenue, NW., Washington, DC 20230. Additionally, all Customs offices have reference copies and petitioners may contact the Import Specialist at their local Customs office to consult the schedule.

The products convered by this investigation include the following articles, whether finished or unfinished: antifriction balls and rollers (TSUSA items 680.3025, 680.3030, and 680.3040, and proposed HS subheading 8482.91.00); ball bearings with integral shafts (TSUSA item 680.3300 and HS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof TSUSA items 680.3704, 680.3708, 680.3712, 680.3717, 680.3718, 680.3722, 680.3727, and 680.3728, and HS subheadings 848.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUSA items 680.3952 and 680.3956, and HS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUSA item 680.3960 and HS subheadings 8482.40.00, 8482.50.00, 8482.80.00, and 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUSA items 681.0410 and 681.0430, and HS subheadings 8483.20.80, 8483.30.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up cartridge, and hanger units, and parts of the foregoing (TSUSA items 681.1010 and 681.1030, and HS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specifically provided for (TSUSA item 681.3900 and HS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUSA item 692.3295 and HS subheading 8708.99.50). Finished but unground or semiground balls are not included in the scope of this investigation.

Allegations of Bounties or Grants

Petitioner lists or number of practices by the Government of Thailand which allegedly confer bounties or grants on manufacturers, producers, or exporters in Thailand or bearings. We are initiating an investigation of the following programs:

- Export Packing Credits
- Rediscount of Industrial Bills
- Electricity Discounts for Exporters
- Tax Certificates for Exports
- Income Tax Exemption under the Investment Promotion Act
- Double Deduction of Foreign Marketing Expenses and Foreign Taxes
- Export Processing Zones
- Reduced Business Tax for Producers of Intermediate Goods for Export Industries

Although not specifically alleged by petitioner, we are also investigating whether the antifriction bearings industry in Thailand receives countervailable benefits under the following programs:

- Tax Exemptions for Goodwill and Royalty Payments
- Tax Deduction for Dividends
- International Trade Promotion Fund

Notification of ITC

Section 702(d) of the Act requires us to notify the ITC of this action and to provide it with the information we used to arrive at this determination. We will notify the ITC and make available to it all nonprivileged and nonproprietary information. We will also allow the ITC access to all privileged and business proprietary information in our files, provided it confirms in writing that it will not disclose such information either publicly or under administrative protective order without the written consent of the Acting Assistant Secretary for Import Administration.

Preliminary Determination by ITC

The ITC will determine by May 16, 1988, whether there is a reasonable indication that imports from Thailand of certain of the products included in the scope of this investigation materially injure, or threaten material injury to, a U.S. industry. If its determination is negative, our investigation with respect to the products classified under TSUSA items 681.1010, 681.1030, 681.3900, and 692.3295 will terminate; otherwise, it will proceed according to the statutory and regulatory procedures.

This notice is published pursuant to section 702(c)(2) of the Act.

April 20, 1988.

Joseph A. Spetrini,

Acting Assistant Secretary for Import Administration.

[FR Doc. 88-9199 Filed 4-26-88; 8:45 am]

BILLING CODE 3510-DS-M

INTERNATIONAL TRADE COMMISSION

[Investigations Nos. 303-TA-19 and 20 and 731-TA-391-399 (Preliminary)]

Antifriction Bearings (Other Than Tapered Roller Bearings) and Parts Thereof From the Federal Republic of Germany, France, Italy, Japan, Romania, Singapore, Sweden, Thailand, and the United Kingdom

AGENCY: International Trade Commission.

ACTION: Institution of preliminary countervailing duty and antidumping investigations, and scheduling of a conference to be held in connection with the investigations.

SUMMARY: The Commission hereby gives notice of the institution of preliminary countervailing duty investigations Nos. 303-TA-19 and 20 (Preliminary) under section 303 of the Tariff Act of 1930 (19 U.S.C. 1303) 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 of antifriction bearings (other than tapered roller bearings) and parts thereof whether finished or unfinished, provided for in items 681.10, 681.39 and 692.32 of the Tariff Schedules of the United States (TSUS), which are alleged to be subsidized by the governments of Singapore and Thailand.[1]

The Commission also gives notice of the institution or preliminary antidumping investigations Nos. 731-TA-391-399 (Preliminary) under section 733(a) of the Tariff Act of 1930 (19 U.S.C. 1673b(a)) to determine whether there is a reasonable indication that an industry in the United States is materially injured, or is threatened with material injury, or the establishment of an industry in the United States is materially retarded, by reason of imports from the following countries of antifriction bearings (other than tapered roller bearings) and parts thereof, whether finished or unfinished, provided for in items 680.30, 680.33, 680.37, 680.39, 680.04, 681.10, 681.39 and 692.32 [2] of the Tariff Schedules of the United States (TSUS), that are alleged to be sold in the United States at less than fair value:

Country	Investigation No.
Federal Republic of Germany	731-TA-391 (preliminary).
France	731-TA-392 (preliminary).
Italy	731-TA-393 (preliminary).
Japan	731-TA-394 (preliminary).
Romania	731-TA-395 (preliminary).
Singapore	731-TA-396 (preliminary).
Sweden	731-TA-397 (preliminary).
Thailand	731-TA-398 (preliminary).
United Kingdom	731-TA-399 (preliminary).

As provided in sections 303 and 733(a), the Commission must complete preliminary countervailing duty and antidumping investigations in 45 days, or in this case by May 16, 1988.

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

EFFECTIVE DATE: March 31, 1988.

FOR FURTHER INFORMATION CONTACT: Diane Mazur (202-252-1184), Office of Investigations, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1809. Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-252-1000.

SUPPLEMENTARY INFORMATION:

Background

These investigations are being instituted in response to petitions filed on March 31, 1988, by the Torrington Co., Torrington, Connecticut.

Participation in the investigations

Persons wishing to participate in these investigations as parties must file an entry of appearance with the Secretary to the Commission, as provided in § 201.11 of the Commission's rules (19 CFR 201.11), not later than seven (7) days after publication of this notice in the Federal Register. Any entry of appearance filed after this date will be referred to the Chairman, who will determine whether to accept the late entry for good cause shown by the person desiring to file the entry.

Service List

Pursuant to § 201.11(d) of the Commission's rules (19 CFR 201.11(d)), the Secretary will prepare a service list containing the names and addresses of all persons, or their representatives, who are parties to these investigation upon the expiration of the period for filing entries of appearance. In accordance with §§ 201.16(c) and 207.3 of the rules (19 CFR 201.16(c) and 207.3), each document filed by a party to the investigations must be served on all other parties to the investigation (as identified by the service list), and a certificate of service must accompany the document. The Secretary will not accept a document for filing without a certificate of service.

Conference

The Director of Operations of the Commission has scheduled a conference in connection with these investigations for 9:30 a.m. on April 21, 1988 at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC. Parties wishing to participate in the conference should contact Diane Mazur (202-252-1184) not later than April 14, 1988 to arrange for their appearance.

Written Submissions

Any person may submit to the Commission on or before April 25, 1988 a written statement of information pertinent to the subject of the investigations, as provided in § 207.15 of the Commission's rules (19 CFR 207.15). A signed original and fourteen (14) copies of each submission must be filed with the Secretary to the Commission in accordance with § 201.8 of the rules (19 CFR 201.8). All written submissions except for confidential business data will be available for public inspection during regular business hours (8:45 a.m.

[1] Antifriction bearings (other than tapered roller bearings) and parts thereof from Singapore and Thailand subject to investigation include ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUS item 681.10 and HTS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUS item 681.39 and HTS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUS item 692.32 and HTS subheading 8708.99.50).

[2] For purposes of these investigations, the subject bearings and parts thereof include the following articles, whether finished or unfinished: antifriction balls and rollers (TSUS item 680.30 and proposed Harmonized Tariff Schedule (HTS) subheading 8482.91.00); ball bearings with integral shafts (TSUS item 680.33 and HTS subheading 8482.10.10); ball bearings (including radial ball bearings) and parts thereof (TSUS item 680.37 and HTS subheadings 8482.10.50 and 8482.99.10); spherical roller bearings and parts thereof (TSUS item 689.39 and HTS subheadings 8482.30.00 and 8482.99.50); other roller bearings (except tapered roller bearings) and parts thereof (TSUS item 680.39 and HTS subheadings 8482.99.70; ball or roller bearing type pillow blocks and parts thereof (TSUS item 681.04 and HTS subheadings 8483.20.80, 8483.20.80, 8483.90.30, and 8483.90.70); ball or roller bearing type flange, take-up, cartridge, and hanger units, and parts of the foregoing (TSUS item 681.10 and HTS subheadings 8483.20.40, 8483.30.40, 8483.90.20, and 8483.90.30); machinery parts containing any of the foregoing bearings, not containing electrical features and not specially provided for (TSUS item 681.3900 and HTS subheading 8485.90.00); and parts of motor vehicles containing any of the foregoing bearings and not specially provided for (TSUS item 692.3295 and HTS subheading 8708.99.50).

to 5:15 p.m.) in the Office of the Secretary to the Commission.

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

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

By order of the Commission.

Kenneth R. Mason,

Secretary.

Issued: April 6, 1988.

[FR Doc. 88-7833 Filed 4-8-88; 8:45 am]

BILLING CODE 7020-02-M

APPENDIX B

CALENDAR OF PUBLIC CONFERENCE

CALENDAR OF THE PUBLIC CONFERENCE

April 21, 1988

Investigations Nos. **303-TA-19** and **20** and
Investigations Nos. **731-TA-391-399** (Preliminary)

ANTIFRICTION BEARINGS (OTHER THAN TAPERED ROLLER BEARINGS) AND PARTS THEREOF FROM **THE FEDERAL REPUBLIC OF GERMANY, FRANCE, ITALY, JAPAN, ROMANIA, SINGAPORE, SWEDEN, THAILAND, AND THE UNITED KINGDOM**

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

In support of the imposition of countervailing and antidumping duties

Stewart and Stewart--Counsel
Washington, DC
on behalf of--

The Torrington Company

C. E. Harwood, Secretary & Corporate Counsel
David Gridley, Industry Marketing Manager
Bruno Bagnaschi, Business Research Manager
Joseph R. Christiano, Asst. Corporate Controller
Mr. Boyd; Secretary & General Counsel, Ingersoll Rand

Eugene L. Stewart)
Terrence P. Stewart) --OF COUNSEL

In opposition to the imposition of countervailing and antidumping duties

Barnes, Richardson, and Colburn--Counsel
Washington, DC
Chicago, IL
on behalf of--

NTN Bearing Corporation of America
NTN Bower Corporation
American NTN Manufacturing Corp.
NTN Toyo Bearing Co., Ltd.
NTN Kugellagerfabrik Deutschland Gmbh

James H. Lundquist)
Robert E. Burke) --OF COUNSEL

In opposition to the imposition of countervailing and antidumping duties--Continued

Heron, Burchette, Luckert, & Rothwell--Counsel
Washington, DC
on behalf of--

INA Bearing Company, Inc.

Thomas A. Rothwell, Jr.)
James M. Lyons) --OF COUNSEL
Joseph A. Vicario, Jr.)
Alfred G. Scholle)

Howrey and Simon--Counsel
Washington, DC
on behalf of--

SKF Kugellagerfabriken Gmbh
SKF Compagnie d'Applications Mecaniques S.A.
RIV-SKF Officine Di Villar Perose S.p.A.
SKF S.E. Asia (Pte) Ltd.
Aktiebolaget SKF
SKF (U.K.) Limited
SKF Industries Inc.

Herbert C. Shelley)
Joel D. Kaufman) -- OF COUNSEL

Sharretts, Paley, Carter & Blauvelt
Washington, DC
on behalf of--

Caterpillar Inc.

Peter Suchman) --OF COUNSEL

-more-

In opposition to the imposition of countervailing and antidumping duties--Continued

Tanaka, Ritger, and Middleton
Washington, DC
on behalf of--

Japan Bearing Industrial Association

H. William Tanaka)
Michelle N.Tanaka) --OF COUNSEL
John J. Kenkel)
Alice L. Mattice)

James Davenport --Industrial Economist

Koyo Seiko Co., Ltd.
Koyo Corporation of USA

H. William Tanaka)
John J. Kenkel) --OF COUNSEL
Alice L. Mattice)

Whitman and Ransom--Counsel
New York, NY
Adduci, Dinan, Mastriani, Meeks, & Schill--Co-counsel
Washington, DC
on behalf of--

FAG Kugelfishcer Georg Schafer KGaA
FAG Cuscinetti S.p.A.
FAG Bearings Corporation

FAG Bearings Corporation

Walter Schwarz, President
Walter P. Wieland, Vice President-Engineering
Suresh Mehta, Marketing Manager

Max F. Schutzman)
Louis S. Mastriani) --OF COUNSEL
James Adduci)

Whitman and Ransom--Counsel
New York, NY
on behalf of--

Federation of European Bearing Manufactuers' Associations

Richard E. Lutringer) -- OF COUNSEL

APPENDIX C

ADDITIONAL PRODUCT CHARTS AND TRADE TABLES

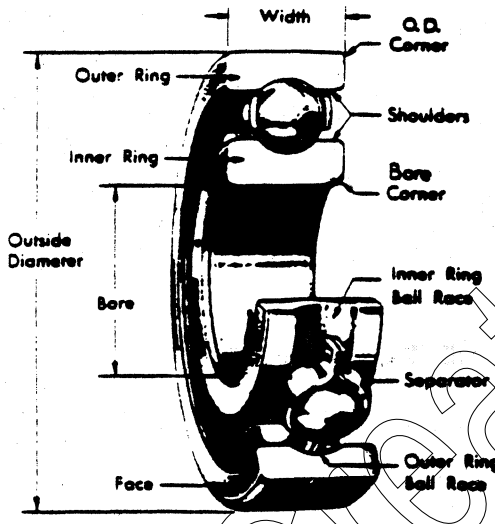
Figure C-1

Bearing Parts and Their Names

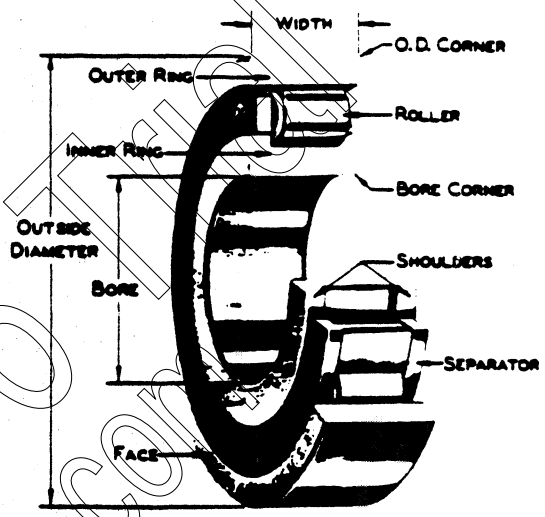
The parts common to all standard ball and roller bearings have, for the purpose of this manual, been given names as shown below.

Basically all anti-friction bearings consist of two hardened steel rings, the hardened balls or rollers and separator. A number of variations of these types are in use. Some types, such as Needle roller bearings may be used without an inner ring, the rollers fitting directly upon the hardened shaft. Needle bearings have no separator.

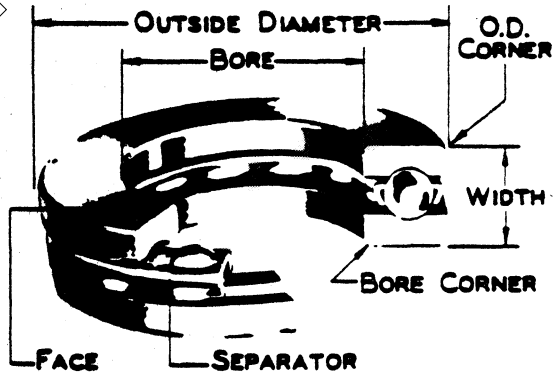
Ball Bearing



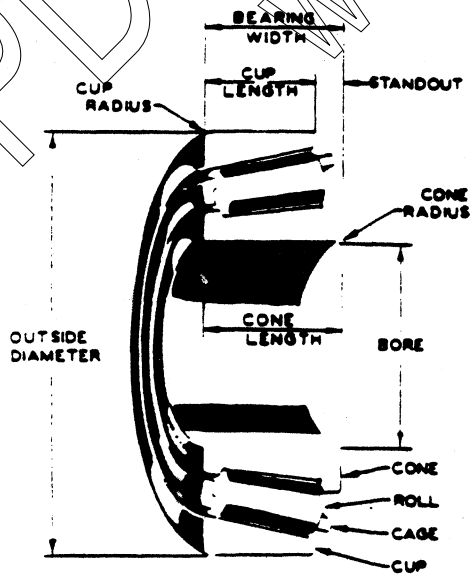
Straight Roller Bearing



Ball Thrust Bearing



Tapered Roller Bearing



Needle Roller Bearing

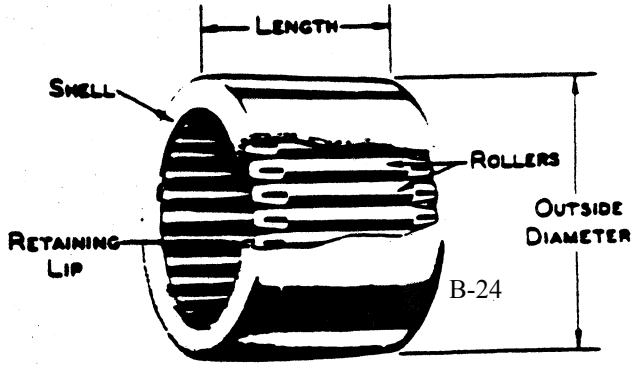


Figure C-2

Types of Anti-friction Bearings

Ball Bearings

*4. Duplex bearings are specially face ground for use in pairs.

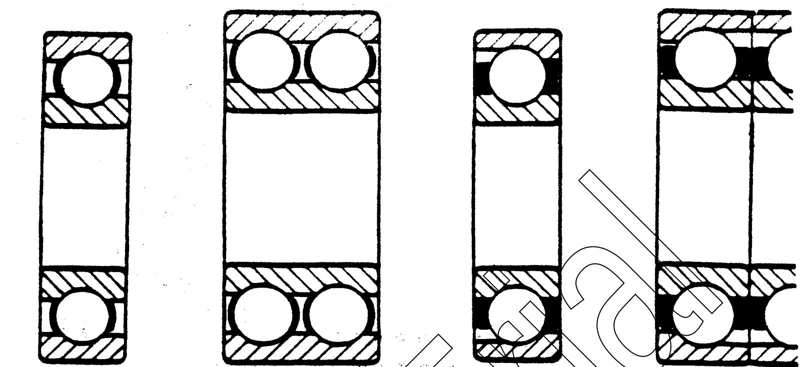
*5. Snap Ring bearings are used both with and without shields.

*6. Shields may be on either one or both sides.

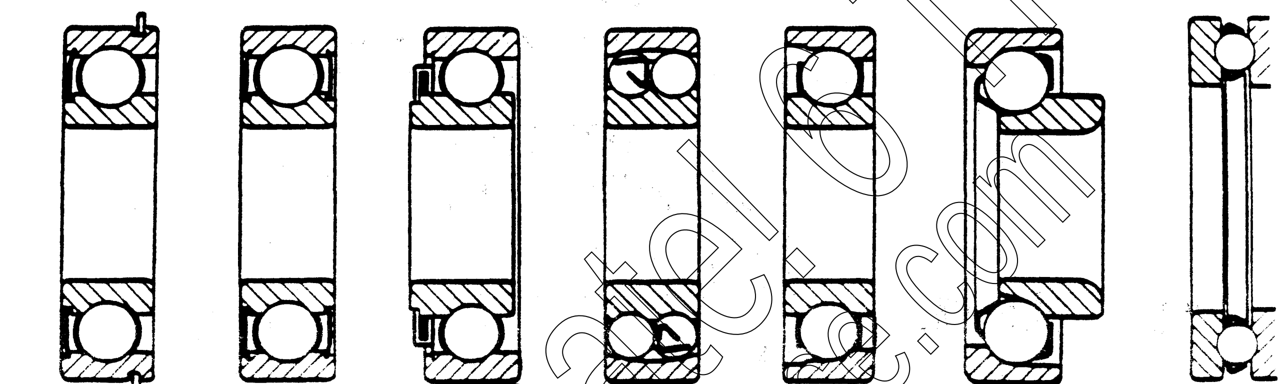
*7. Sealed bearings may have seals on both sides—are then wider.

*9 & 10. Magneto and Front Wheel bearings are separable.

*11. Ball Thrust bearings are treated separately on pages 16 and 17.



1. Single Row 2. Double Row 3. Radial-Thrust *4. Duplex



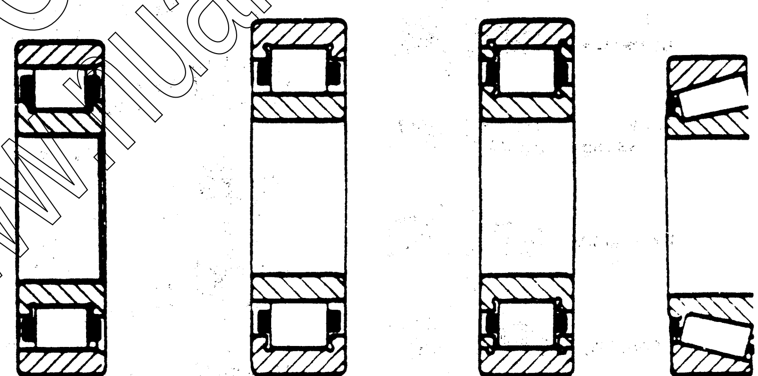
*5. Snap Ring *6. Shielded *7. Single Seal 8. Self-aligning *9. Magneto *10. Front Wheel *11. Ball T

Roller Bearings

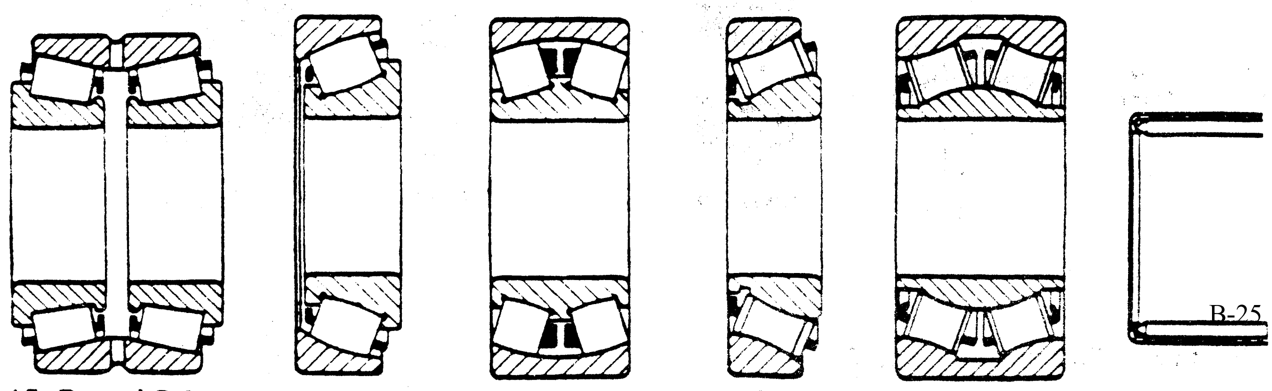
*1, 2, 4, 5, 6, & 8. These bearings are all separable either as to inner or outer rings.

*5. Double Row tapered roller, adjustable through cones. Also made adjustable through the cups.

*10. In some cases needle bearings may have inner rings which are separable.



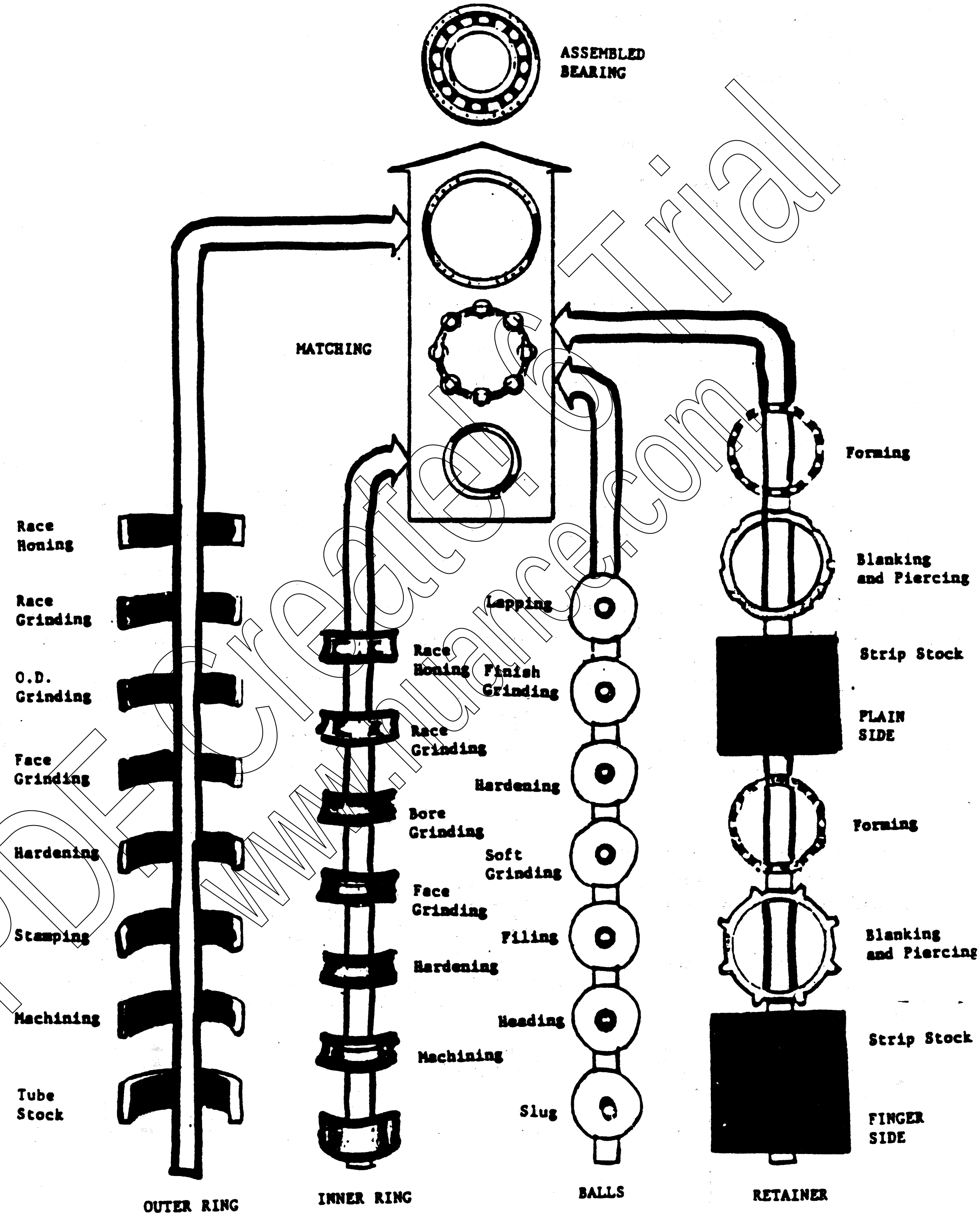
*1. Straight Roller Separable outer ring *2. Straight Roller Separable inner ring 3. Straight Roller Non-separable *4. Taper Roller



*5. Tapered Roller Double Row *6. Barrel Roller 7. Barrel Roller Double Row *8. Concave Roller 9. Concave Roller Double Row *10. Needle Roller

Figure C-3

STEPS IN THE MANUFACTURE OF A BALL BEARING



Source: Fafnir Bearing Co.

Table C-1
Antifriction bearings: Market share of U.S. producers domestic shipments and imports, 1985-87

Item	Market share		
	1985	1986	1987
Ball bearings:			
U.S. producers domestic shipments:			
Automotive and automotive related	29.37	32.17	29.73
Heavy trucks and buses	1.63	1.52	1.76
Off-highway equipment	2.88	2.70	2.62
Other industrial equipment	9.02	4.43	4.02
Railroad/railway uses	0.01	0.00	0.02
Machine tools	0.78	0.79	0.70
Other applications	15.49	16.50	17.31
Total	59.18	58.11	56.18
U.S. Imports from subject countries:			
Automotive and automotive related	21.41	22.78	21.59
Heavy trucks and buses	2.02	1.86	2.55
Off-highway equipment	2.86	4.15	4.62
Other industrial equipment	16.55	16.01	16.42
Railroad/railway uses	0.12	0.08	0.05
Machine tools	0.86	0.84	0.81
Other applications	32.84	29.32	30.04
Total	76.65	75.02	76.08
Roller bearings:			
U.S. producers domestic shipments:			
Automotive and automotive related	9.29	10.62	10.68
Heavy trucks and buses	1.05	1.04	1.25
Off-highway equipment	1.36	1.57	1.26
Other industrial equipment	4.00	3.15	3.32
Railroad/railway uses	0.19	0.20	0.17
Machine tools	0.44	0.46	0.47
Other applications	10.13	11.16	12.58
Total	26.36	28.20	29.73
U.S. Imports from subject countries:			
Automotive and automotive related	0.91	0.96	1.07
Heavy trucks and buses	0.00	0.00	0.00
Off-highway	0.03	0.03	0.02
Other industrial equipment	0.54	0.16	0.38
Railroad/railway uses	0.00	0.00	0.00
Machine tools	0.03	0.01	0.00
Other applications	0.80	0.38	1.69
Total	2.31	2.54	3.16

continued

Table C-1--continued
Antifriction bearings: Market share of U.S. producers domestic shipments and imports, 1985-87

Item	Market share		
	1985	1986	1987
Other bearings:			
U.S. producers domestic shipments:			
Automotive and automotive related.....	0.71	0.69	0.78
Heavy trucks and buses...............	0.05	0.06	0.07
Off-highway equipment................	1.92	1.69	1.94
Other industrial equipment...........	3.09	2.72	2.83
Railroad/railway uses................	0.00	0.00	0.01
Machine tools........................	0.07	0.05	0.05
Other applications...................	4.11	3.87	4.02
Total............................	9.96	9.08	9.70
U.S. Imports from subject-countries:			
Automotive and automotive related.....	11.48	11.40	9.42
Heavy trucks and buses...............	0.05	0.07	0.06
Off-highway equipment................	0.79	0.87	1.07
Other industrial equipment...........	2.34	2.86	2.30
Railroad/railway uses................	0.01	0.01	0.03
Machine tools........................	0.04	0.05	0.09
Other applications...................	4.02	4.63	4.62
Total............................	18.73	19.90	17.59
Components and parts:			
U.S. producers domestic shipment:			
Automotive and automotive related.....	3.34	3.47	3.23
Heavy trucks and buses...............	0.15	0.16	0.12
Off-highway equipment................	0.27	0.26	0.33
Other industrial equipment...........	0.34	0.16	0.12
Railroad/railway uses................	0.00	0.00	0.00
Machine tools........................	0.05	0.06	0.06
Other applications...................	0.35	0.50	0.52
Total............................	4.50	4.61	4.40
U.S. Imports from subject countries:			
Automotive and automotive related.....	0.91	0.96	1.07
Heavy trucks and buses...............	0.00	0.00	0.00
Off-highway equipment................	0.03	0.03	0.02
Other industrial equipment...........	0.54	0.16	0.38
Railroad/railway uses................	0.00	0.00	0.00
Machine tools........................	0.03	0.01	0.00
Other applications...................	0.80	1.38	1.69
Total............................	2.31	2.54	3.16

continued

Table C-1--continued
Antifriction bearings: Market share of U.S. producers domestic shipments and imports, 1985-87

Item	Market share		
	1985	1986	1987
Total bearings, complete:			
U.S. producers domestic-shipments:			
Automotive and automotive related	42.71	46.96	44.43
Heavy trucks and buses	2.88	2.78	3.21
Off-highway equipment	6.43	6.21	6.15
Other industrial equipment	16.46	10.46	10.30
Railroad/railway uses	0.20	0.20	0.19
Machine tools	1.35	1.35	1.29
Other applications	29.97	32.03	34.43
Total	100.00	100.00	100.00
U.S. Imports from subject-countries:			
Automotive and automotive related	34.70	36.08	33.15
Heavy trucks and buses	2.08	1.93	2.61
Off-highway equipment	3.71	5.08	5.74
Other industrial equipment	19.96	19.19	19.48
Railroad/railway uses	0.14	0.09	0.09
Machine tools	0.95	0.91	0.91
Other applications	38.46	36.72	38.03
Total	100.00	100.00	100.00

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

Table C-2.--Antifriction bearings: Finishing types, 1985-87

Item	1985	1986	1987
U.S. producers shipments:			
Ball bearings:			
Commercial quality	879,569	787,514	747,451
Custom-made	206,382	225,415	237,341
Total	1,085,951	1,012,929	984,792
Roller bearings:			
Commercial quality	284,005	287,191	303,695
Custom-made	240,888	252,224	258,477
Total	524,893	539,415	562,172
Other bearing:			
Commercial quality	207,479	188,356	189,690
Custom-made	37,990	37,025	39,054
Total	245,469	225,381	228,744
Total			
Commercial quality	1,371,053	1,263,061	1,240,836
Custom-made	485,260	514,664	534,872
Total	1,856,313	1,922,369	1,775,708
U.S. imports:			
Ball bearings:			
Commercial quality	198,920	192,148	229,958
Custom-made	22,639	29,906	37,552
Total	221,559	222,054	267,510
Roller bearings:			
Commercial quality	38,128	41,239	53,260
Custom-made	33,963	33,832	40,708
Total	72,091	75,071	93,968
Other bearing:			
Commercial quality	21,132	25,621	27,836
Custom-made	28,955	30,072	36,497
Total	50,087	55,693	64,333
Total bearing:			
Commercial quality	258,180	149,008	311,054
Custom-made	85,557	93,810	114,757
Total	343,737	352,818	425,811

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

Exhibity C-1.--Torrington plants, products, product end use and major accounts

* * * * * *

APPENDIX D

TARIFF SCHEDULES

Item	Stat. Suf-fix	Articles	Units of Quantity	Rates of Duty 1	Special	2
		Taps, cocks, valves, and similar devices, however operated, used to control the flow of liquids, gases, or solids, all the foregoing and parts thereof (con.):				
		Hand-operated and check, and parts thereof (con.):				
680.19		Other..	....	4.4% ad val.	Free (A,E,I)	45% ad val.
		Of plastics:				
		Valves:				
	05	Bath, shower, sink and lavatory faucets,(shower-heads and handheld showers)....	No.			
	15	Other..........................				
	20	Other devices......................	Lb.			
		Parts:				
	30	Valve bodies..................	Lb.			
	35	Other..........................	Lb.			
	40	Other.................................	Lb.			
680.24	00	If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6).........................	Lb......	Free		
		Other:				
680.25		Ballcock mechanisms, and parts..............	....	3.9% ad val.	Free (A,E,I)	35% ad val.
	10	Of brass................................	X.			
	20	Other....................................	X.			
680.27		Other..	....	3.7% ad val.	Free (A,E,I)	35% ad val.
	20	Safety and relief valves, self-actuated..	No.			
	25	Pressure regulating valves, self-actuated..............................	No.			
	26	Valves for oleohydraulic or pneumatic transmission...........................	No.			
	27	Solenoid valves..........................	No.			
		Other valves with or without actuators:				
	29	With electrical actuators..........	No.			
	30	With hydraulic actuators...........	No.			
	35	With pneumatic actuators............	No.			
	38	With thermostatic actuators........	No.			
		Other:				
	42	Gate..............................	Lb.			
	43	Globe.............................	Lb.			
	44	Plug..............................	Lb.			
	46	Ball..............................	Lb.			
	48	Butterfly.........................	Lb.			
	49	Other.............................	Lb.			
	52	Other......................................	Lb.			
		Parts:				
	53	Valve bodies.........................	No.			
	55	Other................................	X			
680.28	00	If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6).........	X.......	Free		
[680.30		]Antifriction balls and rollers........................	....	4.9% ad val.	Free (E,I)	45% ad val.
		Balls:				
	25	Alloy steel.................................	Lb.			
	30	Other.......................................	Lb.			
	40	Rollers..	Lb.			
680.31	00	If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6)....	Lb......	Free		
		Ball or roller bearings, including such bearings with integral shafts, and parts thereof:				
[680.33	00]	Ball bearings with integral shafts.................	No......	4.2% ad val.	Free (E,I)	35% ad val.
680.34	00	If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6)........................	No......	Free		

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Special	2
		Ball or roller bearings, including such bearings with integral shafts, and parts thereof (con.):				
		Other:				
680.37		Ball bearings, and parts thereof	.....	11% ad val.	Free (E) 6.6% ad val.(I)	67% ad val.
		Radial ball bearings, having an outside diameter of:				
	04	Under 9 mm	No.			
	08	9 mm and over but not over 30 mm	No.			
	12	Over 30 mm but not over 52 mm	No.			
	17	Over 52 mm but not over 100 mm	No.			
	18	Over 100 mm	No.			
	22	Ball bearings, other than radial	No.			
		Parts of ball bearings (including parts of articles provided for in item 680.33):				
	27	Inner races and outer races (including inner and outer races of integral shaft bearings provided for in item 680.33)	No.			
	28	Other parts	Lb.			
680.38		If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6)	.....	Free		
		Ball bearings and parts:				
	20	Ball bearings	No.			
	30	Parts of ball bearings	Lb.			
680.39		Other	.....	6.5% ad val.	Free (E,I)	67% ad val.
		Tapered roller bearings and parts:				
	32	Cup and cone assemblies imported as a set	No.			
	34	Cups imported separately	No.			
	38	Cone assemblies imported separately	No.			
	40	Other parts	Lb.			
		Spherical roller bearings and parts:				
	52	Spherical roller bearings	No.			
	56	Parts	Lb.			
	60	Other roller bearings (including combination roller and ball bearings) and parts	Lb.			
680.41		If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6)	.....	Free		
		Tapered roller bearings and parts:				
	40	Cup and cone assemblies imported as a set	No.			
	44	Cups imported separately	No.			
	48	Cone assemblies imported separately	No.			
	52	Other parts	Lb.			
	70	Other roller bearings (including combination roller and ball bearings) and parts	Lb.			
680.42	00	Forged steel grinding balls	Lb.....	4.2% ad val.	Free (A,E,I)	27.5% ad val.

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Special	2
		Gear boxes and other speed changers with fixed, multiple, or variable ratios; pulleys and shaft couplings; pillow blocks; flange, take-up, cartridge, and hanger units; torque converters; chain sprockets; clutches and universal joints; all the foregoing (except parts of agricultural or horticultural machinery and implements provided for in item 666.00 and parts of motor vehicles and bicycles) and parts thereof:				
		Gear boxes and other speed changers, and parts thereof:				
		Fixed ratio speed changers, multiple and variable ratio speed changers each ratio of which is selected by manual manipulation, and parts thereof:				
680.46	00	Imported for use with machines for making cellulosic pulp, paper, or paperboard	X	Free		27.5% ad val.
680.49		Other		2.5% ad val.	Free (A,E,I)	27.5% ad val.
	10	Fixed ratio speed changers	No.			
	40	Multiple and variable ratio speed changers each ratio of which is selected by manual manipulation	No.			
	60	Parts	X			
680.59	00	Other speed changers	No	50¢ each + 7.7% ad val.	Free (A,E) 20¢ each + 3.1% ad val.(I)	$4.50 each + 65% ad val.
680.61	00	If certified for use in civil aircraft (see headnote 3, part 6C, schedule 6)	No	Free		$4.50 each + 65% ad val.
680.62	00	Other parts	X	9% ad val.	Free (A,E)	65% ad val.
680.63	00	If certified for use in civil aircraft (see headnote 3, part 6C, schedule 6)	X	Free		65% ad val.
		Pulleys and shaft couplings, and parts thereof:				
680.92	00	Gray-iron awning or tackle pulleys, not over 2 1/2 inches in wheel diameter	X	5.7% ad val.	Free (A,E,I)	45% ad val.
680.95		Other		5.7% ad val.	Free (E,I)	45% ad val.
	15	Pulleys and parts thereof	X			
	30	Shaft couplings and parts thereof	X			
681.01	00	If certified for use in civil aircraft (see headnote 3, part 6C, schedule 6)	X	Free		45% ad val.
		Pillow blocks and parts thereof:				
681.04		Ball or roller bearing type		5.7% ad val.	Free (E,I)	45% ad val.
	10	Pillow block units	No.			
	30	Parts	X			
681.07	00	Other types	X	5.7% ad val.	Free (E,I)	45% ad val.
		Flange, take-up, cartridge, and hanger units, and parts thereof:				
681.10		Ball or roller bearing type		5.7% ad val.	Free (A,E,I)	45% ad val.
	10	Complete units	No.			
	30	Parts	X			
681.13	00	Other types	X	5.7% ad val.	Free (A,E,I)	45% ad val.
681.15	00	Torque converters, and parts thereof	X	3.4% ad val.	Free (A,E,I)	27.5% ad val.
681.18	00	If certified for use in civil aircraft (see headnote 3, part 6C, schedule 6)	X	Free		27.5% ad val.

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Special	2
		Gear boxes and other speed changers with fixed, multiple, or variable ratios; pulleys and shaft couplings; pillow blocks; flange, take-up, cartridge, and hanger units; torque converters; chain sprockets; clutches and universal joints; all the foregoing (except parts of agricultural or horticultural machinery and implements provided for in item 666.00 and parts of motor vehicles, and bicycles) and parts thereof (con.):				
681.21		Chain sprockets, clutches, universal joints, and parts thereof	.....	5.7% ad val.	Free (A,E,I)	45% ad val.
	10	Forged sprockets and forged sprocket segments	Lb.			
	20	Other	X			
681.24	00	If certified for use in civil aircraft (see headnote 3, part 6C, schedule 6)	X.....	Free		45% ad val.
681.27	00	Lubrication fittings	X.....	5.7% ad val.	Free (A,E,I)	45% ad val.
681.30	00	If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6)	X.....	Free		
681.33	00	Cast-iron (except malleable cast-iron) rollers for machines, not alloyed and not advanced beyond cleaning, and machined only for the removal of fins, gates, sprues, and risers or to permit location in finishing machinery	Lb.....	1.4% ad val.	Free (A,E,I)	10% ad val.
681.36	00	Kits, each containing three or more replacement parts however provided for elsewhere in the schedules, put up and packaged for the repair of hydraulic-brake master or wheel cylinders or for the repair of internal-combustion engine pumps or carburetors	No.....	3.7% ad val.	Free (A,E,I)	35% ad val.
[681.39	00]	Machinery parts not containing electrical features and not specially provided for	X.....	5.7% ad val.	Free (A,E,I)	45% ad val.
681.42	00	If Canadian article and original motor-vehicle equipment (see headnote 2, part 6B, schedule 6)	X.....	Free		

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1987)

SCHEDULE 6. - METALS AND METAL PRODUCTS
Part 6. - Transportation Equipment

Item	Stat. Suffix	Articles	Units of Quantity	Rates of Duty 1	Special	2
		Chassis, bodies (including cabs), and parts of the foregoing motor vehicles (con.):				
		Other:				
692.24	00	Cast-iron (except malleable cast-iron) parts, not alloyed and not advanced beyond cleaning, and machined only for the removal of fins, gates, sprues, and risers or to permit location in finishing machinery.....	Lb.....	Free		10% ad val.
		Other:				
692.29	00	Automobile truck tractors, if imported without their trailers.....	No.....	4% ad val.	Free (A,E,I)	25% ad val.
692.31		If Canadian article (see headnote 2 of this subpart).....	.....	Free		
	20	Gasoline fueled.....	No.			
	40	Other.....	No.			
[692.32]		Other.....	.....	3.1% ad val. 1/	Free (A*,E,I)	25% ad val.
	07	Axle spindles.....	No. v Lb.			
	09	Beam hanger brackets.....	No.			
	15	Body stampings.....	X			
	20	Bumpers.....	X			
	30	Wheels designed to be mounted with pneumatic tires.....	X			
	40	Hubcaps and wheel covers.....	X			
		Radiators and parts thereof:				
	42	Complete radiators.....	No.			
	44	Radiator cores.....	No.			
	46	Parts of radiators (other than cores).....	X			
	60	Mufflers and tailpipes.....	X			
		Brakes and parts thereof:				
	62	Brake drums and rotors (discs).....	No.			
	64	Other.....	X			
		Transmissions:				
	74	For automobile trucks and motor buses.....	X			
	76	For passenger automobiles.....	X			
	78	Other.....	X			
	82	Shock absorbers.....	X			
		Truck trailers:				
	84	Van type.....	No.			
	86	Other.....	No.			
	88	Safety seat belts.....	X			
[	95	Other.....	X			

1/ Duty on axle spindles and shock absorbers temporarily reduced. See item 947.36 in part 2, Appendix to the Tariff Schedules and general headnote 3(d)(ii).

HARMONIZED TARIFF SCHEDULE of the United States

XVI
84-56

Annotated for Statistical Reporting Purposes

Heading/ Subheading	Stat. Suf. & cd	Article Description	Units of Quantity	Rates of Duty 1 General	Rates of Duty 1 Special	Rates of Duty 2
8481 (con.)		Taps, cocks, valves and similar appliances, for pipes, boiler shells, tanks, vats or the like, including pressure-reducing valves and thermostatically controlled valves; parts thereof (con.):				
8481.90		Parts:				
		Of hand operated and check appliances:				
8481.90.10	00 0	Of copper	kg	5.6%	Free (A*,B,E,I)	47%
8481.90.30	00 6	Of iron or steel	kg	8%	Free (A,B,E,I)	45%
8481.90.50	00 1	Of other materials	kg	4.4%	Free (A*,B,E,I)	45%
8481.90.90		Other		3.7%	Free (A,B,E,I)	35%
		Of valves of subheading 8481.20:				
	20 9	Valve bodies	kg			
	40 5	Other	kg			
		Other:				
	60 0	Valve bodies	kg			
	80 6	Other	kg			
8482		Ball or roller bearings, and parts thereof:				
8482.10		Ball bearings:				
8482.10.10	00 6	Ball bearings with integral shafts	No	4.2%	Free (B,E,I)	35%
8482.10.50		Other		11%	Free (B,E) 5.5% (I)	67%
		Radial ball bearings, having an outside diameter of:				
	10 5	Under 9 mm	No.			
	20 3	9 mm and over but not over 30 mm	No.			
	30 1	Over 30 mm but not over 52 mm	No.			
	40 9	Over 52 mm but not over 100 mm	No.			
	50 6	Over 100 mm	No.			
	90 8	Ball bearings, other than radial	No.			
8482.20.00		Tapered roller bearings, including cone and tapered roller assemblies		6.5%	Free (B,E,I)	67%
	10 4	Cup and cone assemblies entered as a set	No.			
	50 5	Cone assemblies entered separately	No.			
8482.30.00	00 4	Spherical roller bearings	No	6.5%	Free (B,E,I)	67%
8482.40.00	00 2	Needle roller bearings	No	6.5%	Free (B,E,I)	67%
8482.50.00	00 9	Other cylindrical roller bearings	No	6.5%	Free (B,E,I)	67%
8482.80.00	00 3	Other, including combined ball/roller bearings	No	6.5%	Free (B,E,I)	67%
		Parts:				
8482.91.00		Balls, needles and rollers		4.9%	Free (B,E,I)	45%
		Balls:				
	10 8	Of alloy steel	kg			
	20 6	Other	kg			
	40 2	Needles	kg			
	60 7	Other	kg			
8482.99		Other:				
8482.99.10		Parts of ball bearings (including parts of ball bearings with integral shafts)		11%	Free (B,E) 5.5% (I)	67%
	10 8	Inner and outer races	No.			
	50 9	Other	kg			
8482.99.30		Parts of tapered roller bearings		6.5%	Free (B,E,I)	67%
	10 4	Cups entered separately	No.			
	50 5	Other	kg			
8482.99.50	00 1	Parts of spherical roller bearings	kg	6.5%	Free (B,E,I)	67%
8482.99.70	00 7	Parts of other roller bearings or combined ball/roller bearings	kg	6.5%	Free (B,E,I)	67%

HARMONIZED TARIFF SCHEDULE of the United States

Annotated for Statistical Reporting Purposes

Heading/ Subheading	Stat. Suf. & cd	Article Description	Units of Quantity	Rates of Duty 1 General	Rates of Duty 1 Special	Rates of Duty 2
8483		Transmission shafts (including camshafts and crankshafts) and cranks; bearing housings, housed bearings and plain shaft bearings; gears and gearing; ball screws; gear boxes and other speed changers, including torque converters; flywheels and pulleys, including pulley blocks; clutches and shaft couplings (including universal joints); parts thereof:				
8483.10		Transmission shafts (including camshafts and crankshafts) and cranks:				
		Camshafts and crankshafts:				
8483.10.10		Designed for use solely or principally with spark-ignition internal combustion piston engines or rotary engines....	.....	3.1%	Free (A*,B,C,E,I)	35%
	10 3	For vehicles of chapter 87: For motorcycles.....	No. v kg			
	30 9	Other.....	No. v kg			
	50 4	Other.....	No. v kg			
8483.10.30		Other.....	.....	3.7%	Free (A*,B,C,E,I)	35%
	10 9	For vehicles of chapter 87.....	No. v kg			
	50 0	Other.....	No. v kg			
8483.10.50	00 6	Other transmission shafts and cranks.....	kg.....	4%	Free (A*,C,E,I)	30%
8483.20		Housed bearings, incorporating ball or roller bearings:				
8483.20.40		Flange, take-up, cartridge and hanger units.....	.....	5.7%	Free (A,E,I)	45%
	40 9	Incorporating ball bearings.....	No.			
	80 0	Incorporating roller bearings.....	No.			
8483.20.80		Other.....	.....	5.7%	Free (E,I)	45%
	40 0	Incorporating ball bearings.....	No.			
	80 1	Incorporating roller bearings.....	No.			
8483.30		Bearing housings; plain shaft bearings:				
8483.30.40		Flange, take-up, cartridge and hanger units.....	.....	5.7%	Free (A,C,E,I)	45%
	40 7	Ball or roller bearing type.....	kg			
	80 8	Other.....	kg			
8483.30.80		Other.....	.....	5.7%	Free (C,E,I)	45%
		Bearing housings:				
	20 2	Ball or roller bearing type....	kg			
	40 8	Other.....	kg			
		Plain shaft bearings:				
	60 3	With housing.....	kg			
	80 9	Without housing.....	kg			
8483.40		Gears and gearing, other than toothed wheels, chain sprockets and other transmission elements entered separately; ball screws; gear boxes and other speed changers, including torque converters:				
8483.40.10	00 9	Torque converters.....	No.....	3.4%	Free (A,C,E,I)	27.5%
		Gear boxes and other speed changers:				
		Fixed ratio speed changers, multiple and variable ratio speed changers each ratio of which is selected by manual manipulation:				
8483.40.30		Imported for use with machines for making cellulosic pulp, paper or paperboard.....	.....	Free		27.5%
	40 7	Fixed ratio speed changers.....	No.			
	80 8	Other.....	No.			
8483.40.50		Other.....	.....	2.5%	Free (A,C,E,I)	27.5%
	10 8	Fixed ratio speed changers.....	No.			
	50 9	Other.....	No.			
8483.40.70	00 6	Other speed changers.....	No.	50¢ each + 7.7%	Free (A,C,E) 20¢ each + 3.1% (I)	$4.50 each + 65%

HARMONIZED TARIFF SCHEDULE of the United States

XVI
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Annotated for Statistical Reporting Purposes

Heading/ Subheading	Stat. Suf. & cd	Article Description	Units of Quantity	Rates of Duty 1 General	Rates of Duty 1 Special	Rates of Duty 2
8483 (con.)		Transmission shafts (including camshafts and crankshafts) and cranks; bearing housings, housed bearings and plain shaft bearings; gears and gearing; ball screws; gear boxes and other speed changers, including torque converters; flywheels and pulleys, including pulley blocks; clutches and shaft couplings (including universal joints); parts thereof (con.):				
8483.40 (con.)		Gears and gearing, other than toothed wheels, chain sprockets and other transmission elements entered separately; ball screws; gear boxes and other speed changers, including torque converters (con.):				
8483.40.80	00 4	Ball screws	X	5.7%	Free (A,B,C,E,I)	45%
8483.40.90	00 2	Gears and gearing, other than toothed wheels, chain sprockets and other transmission elements entered separately	X	2.5%	Free (A,C,E,I)	27.5%
8483.50		Flywheels and pulleys, including pulley blocks:				
8483.50.40	00 0	Gray-iron awning or tackle pulleys, not over 6.4 cm in wheel diameter	X	5.7%	Free (A,C,E,I)	45%
8483.50.80		Other		5.7%	Free (C,E,I)	45%
	40 3	Grooved pulleys	X			
	80 4	Other	X			
8483.60		Clutches and shaft couplings (including universal joints):				
8483.60.40	00 8	Clutches and universal joints	X	5.7%	Free (A,C,E,I)	45%
8483.60.80	00 9	Other	X	5.7%	Free (C,E,I)	45%
8483.90		Parts:				
8483.90.10		Chain sprockets and parts thereof		5.7%	Free (A,C,E,I)	45%
	10 6	Forged	kg			
	50 7	Other	kg			
		Parts of bearing housings and plain shaft bearings:				
8483.90.20	00 6	Parts of flange, take-up, cartridge and hanger units	X	5.7%	Free (A,C,E,I)	45%
8483.90.30	00 4	Other	X	5.7%	Free (C,E,I)	45%
8483.90.50	00 9	Parts of gearing, gear boxes and other speed changers	X	2.5%	Free (A,C,E,I)	27.5%
		Other:				
8483.90.70	00 5	Parts of articles of subheading 8483.20	X	5.7%	Free (E,I)	45%
8483.90.80		Other		5.7%	Free (C,E,I)	45%
	10 1	Parts of articles of subheading 8483.60.80	X			
	90 4	Other	X			
8484		Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal; sets or assortments of gaskets and similar joints, dissimilar in composition, put up in pouches, envelopes or similar packings:				
8484.10.00	00 6	Gaskets and similar joints of metal sheeting combined with other material or of two or more layers of metal	X	3.7%	Free (A,C,E,I)	35%
8484.90.00	00 9	Other	No	3.7%	Free (A,C,E,I)	35%
8485		Machinery parts, not containing electrical connectors, insulators, coils, contacts or other electrical features, and not specified or included elsewhere in this chapter:				
8485.10.00		Ships' propellers and blades therefor		4.2%	Free (A,E,I)	30%
	40 7	Of copper	No.			
	80 8	Other	X			
8485.90.00	00 8	Other	X	5.7%	Free (A,B,E,I)	45%

HARMONIZED TARIFF SCHEDULE of the United States

Annotated for Statistical Reporting Purposes

Heading/ Subheading	Stat. Suf. & cd	Article Description	Units of Quantity	Rates of Duty 1 General	Rates of Duty 1 Special	Rates of Duty 2
8708 (con.)		Parts and accessories of the motor vehicles of headings 8701 to 8705 (con.):				
		Other parts and accessories (con.):				
8708.94		Steering wheels, steering columns and steering boxes:				
8708.94.10	00 3	For tractors suitable for agricultural use	X	Free		Free
8708.94.50	00 4	For other vehicles	X	3.1%	Free (A*,B,E,I)	25%
8708.99		Other:				
8708.99.10	00 8	Parts of tractors suitable for agricultural use	X	Free		Free
8708.99.20		Parts of other tractors (except road tractors)		2.2%	Free (A,E,I)	27.5%
	10 4	Tracklinks for track-laying tractors	No. v kg			
	50 5	Other	X			
		Other:				
8708.99.30	00 4	Of cast-iron	kg	Free		Free
8708.99.50		Other		3.1%	Free (A*,B,E,I)	25%
	30 3	Beam hanger brackets	No.			
	60 6	Radiator cores	No.			
	90 0	Other	X			
8709		Works trucks, self-propelled, not fitted with lifting or handling equipment, of the type used in factories, warehouses, dock areas or airports for short distance transport of goods; tractors of the type used on railway station platforms; parts of the foregoing vehicles:				
		Vehicles:				
8709.11.00		Electrical		Free		35%
	30 8	Operator riding	No.			
	60 1	Other	No.			
8709.19.00		Other		Free		35%
	30 0	Operator riding	No.			
	60 3	Other	No.			
8709.90.00	00 8	Parts	X	Free		35%
8710.00.00		Tanks and other armored fighting vehicles, motorized, whether or not fitted with weapons, and parts of such vehicles		Free		35%
		Vehicles:				
	30 8	Tracked (including half-tracked)	No.			
	60 1	Other	No.			
	90 5	Parts	X			
8711		Motorcycles (including mopeds) and cycles fitted with an auxiliary motor, with or without side-cars; side-cars:				
8711.10.00	00 1	With reciprocating internal combustion piston engine of a cylinder capacity not exceeding 50 cc	No.	3.7%	Free (A,E,I)	10%
8711.20.00		With reciprocating internal combustion piston engine of a cylinder capacity exceeding 50 cc but not exceeding 250 cc		3.7%	Free (A,E,I)	10%
	30 3	Exceeding 50 cc but not exceeding 90 cc	No.			
	60 6	Exceeding 90 cc but not exceeding 190 cc	No.			
	90 0	Exceeding 190 cc but not exceeding 250 cc	No.			

APPENDIX E

ADDITIONAL FINANCIAL TABLES

Table E-1
Income-and-loss experience of U.S. producers on their operations producing antifriction bearings, accounting years 1985-87 and interim periods ended December 31, 1986, and December 31, 1987 1/

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Exhibit E-1
Antifriction bearings: Additional Corporate Financial Data for Ingersoll-Rand

Stock exchange prices 1/--

Stock Exchange Listing	Stock price 52 week range thru 4/26/88		Closing price
	High	Low	
New York	45-3/4	22-1/2	38-1/8

1/ April 27, 1987 Wall Street Journal

General financial information

Ingersoll-Rand operates in three major business segments: standard machinery, engineered equipment, and bearings, locks and tools.

1987 Dividend - $1.04 per share
1987 Dividend - $1.04 per share

Source: 1987 annual report, p. 24.

Inc.-loss-summary--

1987 Income-and loss data for Ingersoll-Rand's Business Segment that includes the subject product.

Total sales	Segment sales	Segment income	Operating Income margin	Antifriction bearings and parts/total segment sales 2/
	--1,000 dolllars--		-------Percent-------	
2,647,900	1/ 1,299,700	161,200	12.4	***

1/ Bearings, locks and tools--49.1 percent of Ingersoll Rand's total sales.
2/ * * *.

Source: 1987 annual report, p. 24.

Exhibit E-2
Antifriction bearings: Negative Effects of Imports

U.S. producers of antifriction bearings and parts were asked to describe any actual or potential negative effects of imports of antifriction bearings and parts from the specified countries on their firms' growth, investment, and ability to raise capital. Comments from SKF are quoted below:

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Exhibit E-3
Antifriction bearings: Torrington's Captial Expenditures Justification

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Exhibit E-4
Antifriction bearings: Torrington's Overhead Presentation

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APPENDIX F

WEIGHTED-AVERAGE NET U.S.-F.O.B. SELLING PRICES OF THE DOMESTIC AND SUBJECT IMPORTED ANTIFRICTION BEARINGS

Table F-1
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from the Federal Republic of Germany and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1987 1/

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Federal Republic of Germany	Margins of under/(over) selling 3/	U.S.	Federal Republic of Germany	Margins of under/(over) selling 3/
	$/unit					
Product 1:						
1985:						
Jan.-Mar....	$0.68	$ ***	$ ***	$1.40	4/	-
Apr.-June...	0.67	***	***	1.36	4/	-
July-Sept...	0.63	***	***	1.59	4/	-
Oct.-Dec....	0.78	4/	-	1.24	4/	-
1986:						
Jan.-Mar....	0.46	***	***	1.41	4/	-
Apr.-June...	0.63	4/	-	1.19	4/	-
July-Sept...	0.63	***	***	1.47	4/	-
Oct.-Dec....	0.62	***	***	1.28	4/	-
1987:						
Jan.-Mar....	0.63	***	***	2.24	4/	-
Product 5						
1987:						
Jan.-Mar....	74.59	4/	-	107.83	$ ***	$ ***
Apr.-June...	87.23	4/	-	112.17	***	***
July-Sept...	78.05	4/	-	111.50	***	***
Oct.-Dec....	73.60	4/	-	112.72	***	***

1/ The price data were based on total sales of the specified products to original equipment manufacturers and to distributors.
2/ Original equipment manufacturers.
3/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported product.
4/ No price data were reported during this period for the imported West German product.

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

Table F-2
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from Italy and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1987 1/

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Italy	Margins of under/(over) selling 3/	U.S.	Italy	Margins of under/(over) selling 3/
	$/unit					
Product 1:						
1985:						
Jan.-Mar....	$0.68	$ ***	$ ***	$1.40	$ ***	$ ***
Apr.-June...	0.67	***	***	1.36	***	***
July-Sept...	0.63	***	***	1.59	***	***
Oct.-Dec....	0.78	***	***	1.24	***	***
1986:						
Jan.-Mar....	0.46	***	***	1.41	***	***
Apr.-June...	0.63	***	***	1.19	***	***
July-Sept...	0.63	***	***	1.47	***	***
Oct.-Dec....	0.62	***	***	1.28	***	***
1987:						
Jan.-Mar....	0.63	***	***	2.24	***	***
Apr.-June...	0.62	***	***	1.38	***	***
July-Sept...	0.61	***	***	1.38	***	***
Oct.-Dec....	0.63	***	***	1.27	***	***
Product 5:						
1985:						
July-Sept...	$77.35	4/	-	$89.82	$ ***	$ ***
Oct.-Dec....	75.21	4/	-	99.88	***	***
1986:						
Jan.-Mar....	77.90	4/	-	111.39	***	***
Apr.-June...	87.68	4/	-	106.06	***	***
July-Sept...	86.18	4/	-	105.78	***	***
Oct.-Dec....	82.08	4/	-	106.20	***	***
1987:						
Jan.-Mar....	74.59	4/	-	107.83	***	***
Apr.-June...	87.23	4/	-	112.17	***	***
July-Sept...	78.05	4/	-	111.50	***	***
Oct.-Dec....	73.60	4/	-	112.72	***	***

1/ The price data were based on total sales of the specified products to original equipment manufacturers and to distributors.
2/ Original equipment manufacturers.
3/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported product.
4/ No price data were reported during this period for the imported Italian product.

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

Table F-3
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from Japan and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1987 1/

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Japan	Margins of under/(over) selling 3/	U.S.	Japan	Margins of under/(over) selling 3/
	$/unit					
Product 1:						
1985:						
Jan.-Mar....	$0.68	$0.67	$0.01	$1.40	$ ***	$ ***
Apr.-June...	0.67	0.67	0.00	1.36	***	***
July-Sept...	0.63	0.68	(0.05)	1.59	***	***
Oct.-Dec....	0.78	0.66	0.12	1.24	***	***
1986:						
Jan.-Mar....	0.46	0.64	(0.18)	1.41	1.04	0.37
Apr.-June...	0.63	1.27	(0.64)	1.19	1.12	0.07
July-Sept...	0.63	0.63	0.00	1.47	0.96	0.51
Oct.-Dec....	0.62	0.63	(0.01)	1.28	1.02	0.26
1987:						
Jan.-Mar....	0.63	0.64	(0.01)	2.24	1.03	1.21
Apr.-June...	0.62	0.66	(0.04)	1.38	0.85	0.53
July-Sept...	0.61	0.68	(0.07)	1.38	0.85	0.53
Oct.-Dec....	0.63	0.65	(0.02)	1.27	0.84	0.43
Product 2:						

* * * * * *

See footnotes at end of table.

Table F-3
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from Japan and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1987 1/--Continued

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Japan	Margins of under/(over) selling 3/	U.S.	Japan	Margins of under/(over) selling 3/
	$/unit					
Product 3:						
1985:						
Jan.-Mar....	$2.73	$ ***	$ ***	$3.41	$2.61	$0.80
Apr.-June...	2.65	***	***	3.31	2.26	1.05
July-Sept...	2.71	***	***	3.76	2.22	1.54
Oct.-Dec....	2.54	***	***	3.20	2.36	0.84
1986:						
Jan.-Mar....	2.11	***	***	3.09	2.29	0.80
Apr.-June...	2.14	***	***	2.87	2.30	0.57
July-Sept...	2.29	***	***	2.93	2.54	0.39
Oct.-Dec....	2.32	***	***	3.06	2.53	0.53
1987:						
Jan.-Mar....	2.34	***	***	2.60	2.61	(0.01)
Apr.-June...	2.22	***	***	2.70	2.77	(0.07)
July-Sept...	2.23	***	***	2.86	2.78	0.08
Oct.-Dec....	2.42	***	***	3.16	2.78	0.38
Product 4:						
1985:						
Jan.-Mar....	$10.81	$ ***	$ ***	$11.69	$ ***	$ ***
Apr.-June...	10.28	***	***	11.87	***	***
July-Sept...	11.25	***	***	11.90	***	***
Oct.-Dec....	10.29	***	***	11.79	***	***
1986:						
Jan.-Mar....	10.32	***	***	11.20	***	***
Apr.-June...	12.62	***	***	11.25	***	***
July-Sept...	10.01	***	***	11.52	***	***
Oct.-Dec....	10.19	***	***	11.52	***	***
1987:						
Jan.-Mar....	8.03	***	***	11.35	***	***
Apr.-June...	6.70	***	***	11.12	***	***
July-Sept...	10.27	***	***	10.78	***	***
Oct.-Dec....	7.49	***	***	10.97	***	***

See footnotes at end of table.

Table F-3
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S. produced antifriction bearings and bearings imported from Japan and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1987 1/--Continued

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Japan	Margins of under/(over) selling 3/	U.S.	Japan	Margins of under/(over) selling 3/
	$/unit					
Product 5:						
1985:						
Jan.-Mar....	$77.43	$71.19	$6.24	$93.75	$77.84	$15.91
Apr.-June...	79.62	69.69	9.93	97.67	89.95	7.72
July-Sept...	77.35	70.18	7.17	89.82	82.59	7.23
Oct.-Dec....	75.21	69.57	5.64	99.88	88.25	11.63
1986:						
Jan.-Mar....	77.90	40.33	37.57	111.39	95.21	16.18
Apr.-June...	87.68	68.85	18.83	106.06	90.89	15.17
July-Sept...	86.18	72.24	13.94	105.78	99.50	6.28
Oct.-Dec....	82.08	69.63	12.45	106.20	89.78	16.42
1987:						
Jan.-Mar....	74.59	73.76	0.83	107.83	88.61	19.22
Apr.-June...	87.23	89.93	(2.70)	112.17	87.79	24.38
July-Sept...	78.05	68.43	9.62	111.50	99.05	12.45
Oct.-Dec....	73.60	65.12	8.48	112.72	96.88	15.84
Product 6:						

* * * * * *

1/ The price data were based on total sales of the specified products to original equipment manufacturers and to distributors.
2/ Original equipment manufacturers.
3/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported product.
4/ No price data were reported during this period for the imported Japanese bearing product.
5/ No price data were requested for sales of Product 6 to distributors; Product 6 (needle bearings) is sold primarily to OEMs.

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

Table F-4
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from Romania and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1987 1/--Continued

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Romania	Margins of under/(over) selling 3/	U.S.	Romania	Margins of under/(over) selling 3/
	$/unit					
Product 1:						
1985:						
Jan.-Mar....	$0.68	$ ***	$ ***	$1.40	$ ***	$ ***
Apr.-June...	0.67	***	***	1.36	***	***
July-Sept...	0.63	***	***	1.59	***	***
Oct.-Dec....	0.78	***	***	1.24	***	***
1986:						
Jan.-Mar....	0.46	***	***	1.41	***	***
Apr.-June...	0.63	***	***	1.19	***	***
July-Sept...	0.63	***	***	1.47	***	***
Oct.-Dec....	0.62	***	***	1.28	***	***
1987:						
Jan.-Mar....	0.63	***	***	2.24	***	***
Apr.-June...	0.62	***	***	1.38	***	***
July-Sept...	0.61	***	***	1.38	***	***
Oct.-Dec....	0.63	***	***	1.27	***	***
Product 2:						
1985:						
Jan.-Mar....	$ ***	$ ***	$ ***	$ ***	$ ***	$ ***
Apr.-June...	***	***	***	***	***	***
July-Sept...	***	***	***	***	***	***
Oct.-Dec....	***	***	***	***	***	***
1986:						
Jan.-Mar....	***	***	***	***	***	***
Apr.-June...	***	***	***	***	***	***
July-Sept...	***	***	***	***	***	***
Oct.-Dec....	***	***	***	***	***	***
1987:						
Jan.-Mar....	***	***	***	***	***	***
Apr.-June...	***	***	***	***	***	***
July-Sept...	***	***	***	***	***	***
Oct.-Dec....	***	***	***	***	***	***

See footnotes at end of table.

Table F-4
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from Romania and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1987 1/

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Romania	Margins of under/(over) selling 3/	U.S.	Romania	Margins of under/(over) selling 3/
	$/unit					
Product 3:						
1985:						
Jan.-Mar....	$2.73	$ ***	$ ***	$3.41	$ ***	$ ***
Apr.-June...	2.65	***	***	3.31	***	***
July-Sept...	2.71	***	***	3.76	***	***
Oct.-Dec....	2.54	***	***	3.20	***	***
1986:						
Jan.-Mar....	2.11	***	***	3.09	***	***
Apr.-June...	2.14	***	***	2.87	***	***
July-Sept...	2.29	***	***	2.93	***	***
Oct.-Dec....	2.32	***	***	3.06	***	***
1987:						
Jan.-Mar....	2.34	***	***	2.60	***	***
Apr.-June...	2.22	***	***	2.70	***	***
July-Sept...	2.23	***	***	2.86	***	***
Oct.-Dec....	2.42	***	***	3.16	***	***

1/ The price data were based on total sales of the specified products to original equipment manufacturers and to distributors.
2/ Original equipment manufacturers.
3/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported product.

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

Table F-5
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from Sweden and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-December 1986 1/

Period	Sales to OEMs 2/			Sales to distributors		
	U.S.	Sweden	Margins of under/(over) selling 3/	U.S.	Sweden	Margins of under/(over) selling 3/
	$/unit					
Product 5:						
1985:						
Jan.-Mar....	$77.43	$ ***	$ ***	$93.75	4/	-
Apr.-June...	79.62	***	***	97.67	4/	-
July-Sept...	77.35	***	***	89.82	4/	-
Oct.-Dec....	75.21	***	***	99.88	$ ***	$ ***
1986:						
Jan.-Mar....	77.90	***	***	$111.39	4/	-
Apr.-June...	87.68	***	***	106.06	4/	-
July-Sept...	86.18	***	***	105.78	4/	-
Oct.-Dec....	82.08	***	***	106.20	4/	-

1/ The price data were based on total sales of the specified products to original equipment manufacturers and to distributors.
2/ Original equipment manufacturers.
3/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported product.
4/ No price data were reported during this period for the imported Swedish product.

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

Table F-6
Antifriction bearings: Weighted-average net U.S. f.o.b. selling prices of U.S.-produced antifriction bearings and bearings imported from the United Kingdom and margins of under/(over) selling (in $/unit), by type of customer, by specified products, and by quarters, January 1985-September 1987 1/

Period	Sales to distributors		
	U.S.	The United Kingdom	Margins of under/(over) 2/ selling
	$/unit		
Product 2:			
1985:			
Jan.-Mar....	$ ***	$ ***	$ ***
Apr.-June...	***	***	***
1986:			
Oct.-Dec....	***	***	***
1987:			
July-Sept...	***	***	***

1/ The price data were based on total sales of the specified products to original equipment manufacturers and to distributors.
2/ Any figures in parentheses indicate that the price of the domestic product was less than the price of the imported product.

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