

UNITED STATES INTERNATIONAL TRADE COMMISSION

INFORMATION FOR USE IN DETERMINING WHETHER TO  
REMOVE PERMANENT-MAGNET DIRECT CURRENT MOTORS  
FROM THE LIST OF ARTICLES ELIGIBLE FOR THE  
GENERALIZED SYSTEM OF PREFERENCES

Report to the President  
on Investigation No. 332-79(1)  
Under Section 332(g) of the Tariff Act of 1930,  
as Amended



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UNITED STATES INTERNATIONAL TRADE COMMISSION

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Note.--The whole of the Commission's report to the President may not be made public since it contains certain information that has been classified or would result in the disclosure of the operations of an individual concern. This published report is the same as the report to the President, except that the above-mentioned information has been omitted. Such omissions are indicated by asterisks.

## REPORT TO THE PRESIDENT

U.S. International Trade Commission  
December 30, 1976

To the President:

In accordance with the request contained in your letter of September 14, 1976, the United States International Trade Commission reports herein the results of its investigation with respect to permanent-magnet direct current motors. The pertinent portions of the text of your letter are as follows:

In a recent executive branch review of the operation of the Generalized System of Preferences (GSP) the Trade Policy Staff Committee (TPSC) considered several petitions from domestic producers to remove products from the list of articles eligible for duty-free treatment under the GSP. It was necessary to postpone a decision on some of the petitions, however, because of the absence of data on the amount of imports and domestic production or because of inadequate information on recent developments in the industry. To assist the Administration in assembling the needed information, I hereby request the Commission, pursuant to section 332(g) of the Tariff Act of 1930 to conduct investigations and report the results, as follows:

1. With respect to the petitions for the withdrawal of GSP benefits for permanent-magnet direct current motors classifiable in item numbers 682.25 and 682.30 of the Tariff Schedules of the United States (TPSC GSP case No. 76-34), an investigation and report (a) on the economic effect which the designation of those motors as articles eligible for duty-free treatment under the GSP has had on domestic producers of like or directly competitive motors; (b) the probable economic effect which withdrawal of GSP benefits would have on: (i) The domestic producers; (ii) the prospective establishment of new or additional domestic production; and (iii) domestic producers of products that utilize or

incorporate such motors; and (c) which countries, if any, would be eliminated from GSP benefits by virtue of the "competitive need" provisions of section 504(c) of the Trade Act of 1974 if items 682.25 and 682.30 were each subdivided into three new items, as follows: (i) AC motors; (ii) DC motors; and (iii) other motors.

I further request that the Commission make every effort to provide the reports as soon as possible but not later than 120 days of the receipt of this letter.

The investigation (No. 332-79(2)) was conducted by the Commission under the authority of section 332(g) of the Tariff Act of 1930, as amended (19 U.S.C. 1332(g)). Interested parties were afforded an opportunity to be present, to produce evidence, and to be heard at a public hearing. A transcript of the hearing and copies of the briefs submitted by interested parties are attached.

The information for this report was obtained from fieldwork, questionnaires sent to domestic manufacturers and importers, the Commission's files, other Government agencies, evidence presented at the hearings, briefs filed by interested parties, and other sources.

## Introduction

On April 20, 1976, pursuant to title 15, chapter XX, part 2007, of the Code of Federal Regulations (40 F.R. 251, Dec. 31, 1975), International Components Corp. (ICC), Chicago, Ill., petitioned the Trade Policy Staff Committee (TPSC) for withdrawal of permanent-magnet direct current (DC) motors of not over 1/10 horsepower as eligible articles receiving duty-free treatment under the Generalized System of Preferences (GSP). ICC asserted in its petition that it is unable to establish a domestic plant in Durant, Okla., provided that the subject articles continue to receive duty-free treatment under the GSP. ICC further asserted that if the duty was restored, an ICC plant to be located in Durant, Okla., could effectively compete with foreign plants located in Mexico and Hong Kong. Permanent-magnet DC motors of not over 1/10 horsepower are dutiable under items 682.25 and 682.30 of the Tariff Schedules of the United States (TSUS).

At a public hearing conducted by the TPSC on June 2, 1976, ICC's petition was supported by Buehler Products, Inc., Kinston, N.C., which is both a subsidiary of a German firm and a U.S. producer of permanent-magnet DC motors. The General Electric Co. (GE), although not in attendance at the hearing, submitted a written statement in support of the ICC petition, but strongly advised the TPSC of GE's interest in the continued maintenance of alternating current (AC) motors classified under TSUS items 682.25 and 682.30 as eligible articles under the GSP. The ICC petition was also supported by the Chamber of Commerce of Durant, Okla.

After review and due consideration of the petition, members of the TPSC concluded that they had insufficient trade data on which they could base a reasonable determination in this matter. Permanent-magnet DC motors are not separately provided for in the TSUS, Schedule B, or the Standard Industrial Classification.

On September 14, 1976, the President, pursuant to section 332(g) of the Tariff Act of 1930, as amended (19 U.S.C. 1332(g)), requested the U.S. International Trade Commission to conduct an investigation to obtain the data necessary for the review by the TPSC. Specifically, the President requested that the Commission conduct and report the results of the following investigation:

With respect to the petitions for the withdrawal of GSP benefits for permanent-magnet direct current motors classifiable in item numbers 682.25 and 682.30 of the Tariff Schedules of the United States (TPSC GSP case No. 76-34), an investigation and report (a) on the economic effect which the designation of these motors as articles eligible for duty-free treatment under the GSP has had on domestic producers of like or directly competitive motors; (b) the probable economic effect which withdrawal of GSP benefits would have on: (i) The domestic producers; (ii) the prospective establishment of new or additional domestic production; and (iii) domestic producers of products that utilize or incorporate such motors; and (c) which countries, if any, would be eliminated from GSP benefits by virtue of the "competitive need" provisions of section 504(c) of the Trade Act of 1974 if items 682.25 and 682.30 were each subdivided into three new items, as follows: (i) AC motors; (ii) DC motors; and (iii) other motors.

The President further requested that the Commission provide the subject report as soon as possible but not later than January 12, 1977.

The Commission instituted an investigation on September 21, 1976, and notice of the institution of the investigation and of the public

hearing was issued. Copies of the notice were posted at the Commission's offices in Washington, D.C. and New York City and the original notice was published in the Federal Register of September 24, 1976 (41 F.R. 187). The public hearing was held on November 16, 1976.

## The Product

### Description

An electric motor is an electromechanical device which converts electrical energy into mechanical energy and is powered by either alternating current or direct current. AC current is the type commonly supplied to households and factories, whereas DC current is the type supplied by batteries or supplied on the output of a rectifying apparatus using an AC source. Electric motors powered by AC current are called AC motors, and those motors powered by DC current are called DC motors. Certain electric motors, called universal motors, are powered by either AC current or DC current.

DC motors are usually separated into two classes--permanent-magnet DC motors and wound-field DC motors. Permanent-magnet DC motors are a class of motors so named because the stationary field (stator) of the motor consists of a permanent magnet. Wound-field DC motors are those DC motors in which the stationary field is constructed from a number of turns of magnet wire (solid copper wire with an enamel insulation).

Electric motors are most often rated in terms of horsepower or watts (1 horsepower is equal to 746 watts). The product in the instant case is thus a class of electric motors of not over 1/10 horsepower (74.6 watts) powered by DC current, with a stationary field consisting of a permanent magnet.

### Uses

Permanent-magnet DC motors are most often used in toys, automobiles (windshield wipers and automatic door locks), cordless power tools, cordless lawn-care equipment, personal-care equipment (electric razors, electric hair dryers, and electric tooth brushes), and tape drivers. Permanent-magnet DC motors are also being used in a number of new products which have a large market potential, such as power-driven cookie guns.

### Manufacturing and technology

A permanent-magnet DC motor normally contains four principal subparts: The armature assembly, the drive (front) endshield assembly, the brush endshield assembly, and the housing assembly (fig. 1, p. 7).

The armature assembly, the most critical element of the motor, is also the most costly and most labor-consuming subpart. The armature assembly contains the commutator, the magnetic steel lamination stack, and an armature field (turns of magnet wire) which is wound on the lamination stack and soldered or welded to the commutator segments. The armature assembly is adaptable to automation, and at least two U.S. firms can supply equipment which, within seconds, can wind the armature field and solder all field connections. A firm which does not automate the production of its armature assembly is likely to have little chance of producing at competitive prices.

The drive (front) endshield assembly contains the bearing plate for one end of the armature shaft and the brush endshield assembly contains the brush assembly and the remaining bearing plate. The production of these subparts is not usually automated, but a number of jigs and fixtures are required to provide for ease of assembly. The housing assembly contains the permanent magnet and the permanent-magnet retainers, as well as provisions for mounting the endshield and brush endshield assemblies. The production of the housing assembly and the final assembly of the motors are not usually automated processes but do require certain jigs and fixtures for ease of assembly.

#### Like or directly competitive products

A permanent-magnet DC motor is small, light in weight, and capable of operating in battery-powered end products. Industry sources state that there are no other like or directly competitive substitutes for permanent-magnet DC motors. Wound-field DC motors are heavier and larger in diameter and more costly to fabricate.

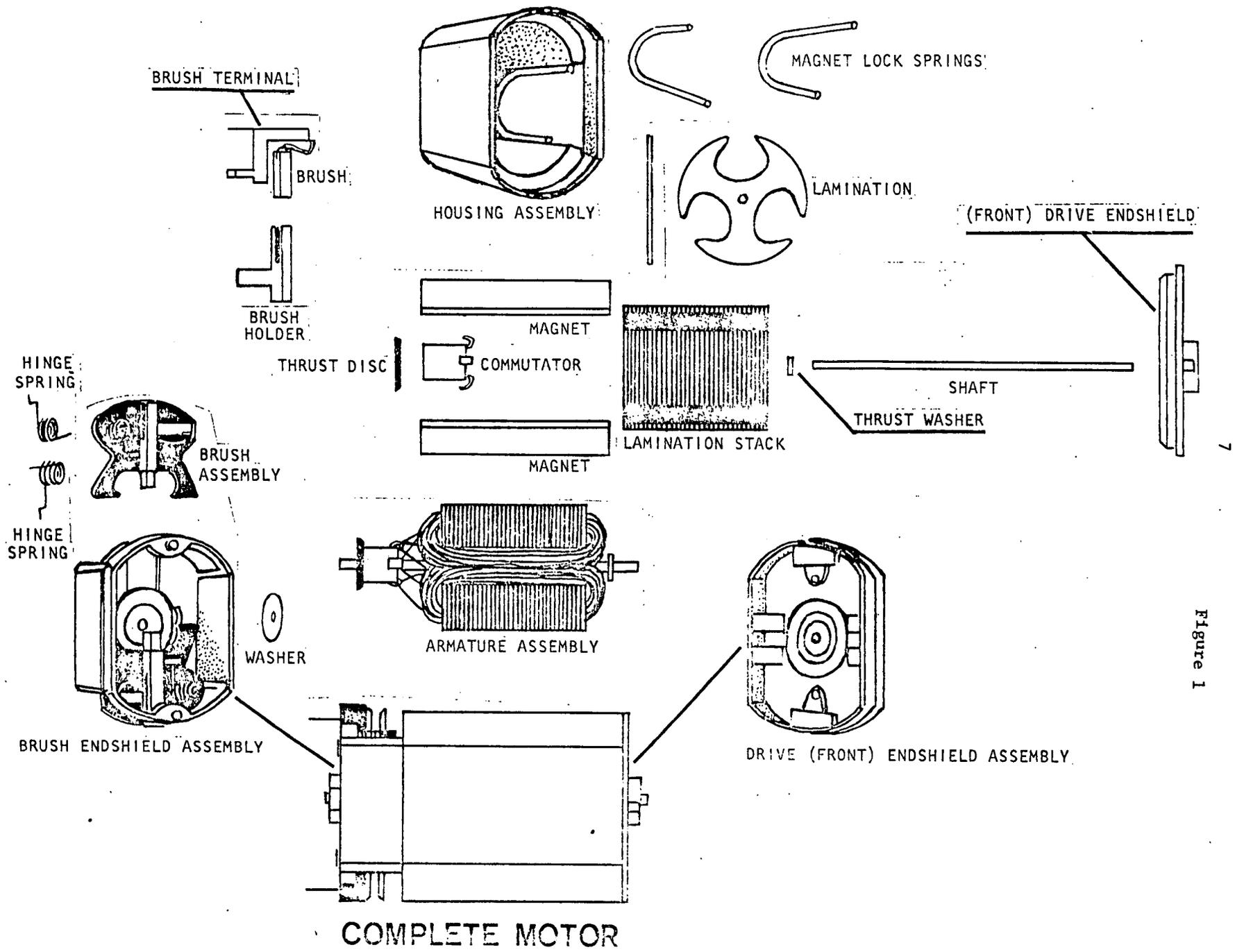


Figure 1

### U.S. Tariff Treatment

Permanent-magnet DC motors of not over 1/10 horsepower are provided for in the TSUS under items 682.25 and 682.30 depending on horsepower rating. Such motors of under 1/40 horsepower, item 682.25, when imported from countries not entitled to GSP, are currently subject to duty at the rate of 12.5 percent ad valorem. The 12.5-percent rate has been applicable since mid-1962 when a series of Customs Court rulings forced a change in customs classification practice which had the effect of reducing the duty from 25 percent ad valorem; the duty was not affected by the Kennedy round of trade negotiations. Imports of permanent-magnet DC motors from designated Communist countries are subject to a duty of 35 percent ad valorem.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower, item 682.30, when imported from countries not entitled to GSP are dutiable at the rate of 6 percent ad valorem; this rate has been in effect since January 1, 1972, and represents the last of a five-stage reduction negotiated during the Kennedy round. Imports of such motors from designated Communist countries are dutiable at the rate of 35 percent ad valorem.

All of the motors that are the subject of this investigation are eligible for duty-free entry when imported from designated beneficiary developing countries.

#### GSP and the "competitive need" provisions

The GSP, authorized by title V of the Trade Act of 1974, enables products which are eligible articles and meet the conditions stipulated

in title V to be imported duty-free into the United States if imported directly from a beneficiary country on or after January 1, 1976.

The "competitive need" provisions of section 504(c) of the Trade Act provide that eligible articles will not receive duty-free treatment if they are (1) the product of a beneficiary country which supplied U.S. imports (of the said article) valued at \$25 million 1/ or more in the preceding year or (2) the product of a beneficiary country which in the preceding calendar year accounted for 50 percent or more by value of total U.S. imports of the article, unless the President has determined that the article (or a like or directly competitive article) was not produced in the United States on January 3, 1975.

Duty-free treatment of an eligible article does not apply when less than 35 percent of the appraised value of the article is added in the beneficiary developing country. In January-June 1976, imports of electric motors of not over 1/10 horsepower continued to enter the United States in significant quantities from certain beneficiary countries under item 807.00 rather than entering under the GSP. There were little or no imports under TSUS item 806.30 during this period.

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1/ The figure of \$25 million is to be adjusted annually by a percentage which corresponds to the ratio of the gross national product of the United States for the preceding calendar year compared with the gross national product of the United States for 1974. The adjusted figure currently in use is \$26.6 million.

## Domestic Industry

U.S. producers

Industry sources indicate that about 50 firms in the United States produce permanent-magnet DC motors of all horsepower ratings. On the basis of responses to a Commission questionnaire and other communications with the Commission staff, it is believed that about 30 firms produce permanent-magnet DC motors of not over 1/10 horsepower. A number of firms, such as \* \* \* produce permanent-magnet DC motors exclusively for their own use. Most domestic producers are single-establishment firms which produce a variety of electric motors other than permanent-magnet DC motors, and some U.S. producers are also importers of permanent-magnet DC motors.

U.S. and foreign producers of permanent-magnet DC motors generally do not compete with one another in marketing their motors in the United States. Foreign producers most often account for motors incorporated in end products such as toys, cordless lawn-care tools, hair dryers, and electric razors. Domestic producers most often account for motors incorporated in end products such as automobiles and special purpose end products which require a greater degree of production precision and testing. Such applications are usually those in which the cost of the motor is a small share of the cost of the end product (such as computer applications, in which a motor failure is likely to mean costly down time). Some domestic producers maintain that the low end of the permanent-magnet DC motor business is economically unattractive given the low prices offered by foreign producers.

The number of U.S. producers has remained fairly stable during the period 1972-76. Rowe Industries, Inc., a large U.S. producer, ceased production in the United States in 1974 and moved its entire production facility to Mexico. Indiana General Division, Electronic Memories and Magnetics Corp., moved its production of large, permanent-magnet DC motors to Mexico in 1976, but continues to produce permanent-magnet DC motors of not over 1/10 horsepower in El Paso, Texas.

\* \* \* was a small producer in 1975, but indicates no U.S. production during January-September 1976. Three U.S. firms, however, started production during 1972-76. Buehler Products became a U.S. producer in 1974, and \* \* \* and \* \* \* became U.S. producers in 1975.

U.S. producers are located largely in the north-central part of the United States, principally in Ohio, Illinois, Indiana, and Wisconsin. A large captive producer is located in the State of New York.

#### U.S. production

In terms of quantity, U.S. production of permanent-magnet DC motors of under 1/40 horsepower increased from 3.8 million units in 1972 to 5.9 million units in 1973 before declining to 3.8 million units in 1975. In January-September 1976, production reached 4.2 million units compared with 3.2 million units in the corresponding period of 1975.

U.S. production of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower increased from 6.2 million units in 1972 to 8.1 million units in 1973 before declining to 5 million units in

1975. In January-September 1976, production reached 4.6 million units compared with 3.8 million units in the corresponding period of 1975.

Permanent-magnet DC motors of not over 1/10 horsepower: U.S. production, 1972-75, January-September 1975, and January-September 1976

(In thousands of units)

	: Permanent-magnet : DC motors of : under 1/40 : horsepower	: Permanent-magnet DC : motors of 1/40 or : more but not over : 1/10 horsepower
1972-----	3,755	6,194
1973-----	5,853	8,056
1974-----	3,966	5,651
1975-----	3,781	4,995
January-September--		
1975-----	3,225	3,771
1976-----	4,227	4,593

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

The demand for permanent-magnet DC motors of not over 1/10 horsepower is in a large part derived from the demand for automobiles. Automobile accessory motors account for a large share of U.S. production of these articles.

### Capacity

Data submitted in response to Commission questionnaires indicate that the capacity of U.S. producers of permanent-magnet DC motors of under 1/40 horsepower increased from about 5 million motors in 1972 to about 12 million motors in 1976. A number of producers did not report capacity for small electric motors, stating that it was difficult to separate the capacity allocated to small motors from the

capacity allocated to other products. Capacity data are based on a given production facility operating 5 days a week, two shifts a day.

Capacity of U.S. producers of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower increased from about 7 million motors in 1972 to about 9 million motors in 1974 before declining to about 8 million motors in 1975. Capacity was reported to be about 8.5 million motors in 1976. The loss of capacity in 1975 resulted from Rowe Industries' closing its facilities in New York.

#### U.S. producers' shipments

U.S. producers' shipments of permanent-magnet DC motors of under 1/40 horsepower increased from 3.1 million units, valued at \$9.2 million in 1972 to 4.6 million units, valued at \$13.7 million, in 1973 before decreasing to 3.1 million units valued at \$12.7 million in 1975 (table 1). In January-September 1976, producers' shipments reached 3.4 million units, valued at \$13 million, compared with 2 million units, valued at \$9.4 million, in the corresponding period of 1975.

During January-September 1976, principal end uses for U.S. producers' shipments of permanent-magnet DC motors of under 1/40 horsepower were in automobiles, personal-care equipment (electric toothbrushes and electric razors), and advertising displays. The table on the next page shows principal end products during 1975 and January-September 1976.

Permanent-magnet DC motors of under 1/40 horsepower: U.S. producers' shipments, by principal end products, 1975 and January-September 1976

(In thousands)

Item	1975	January-September 1976
Automotive accessories-----	1,179	1,419
Personal-care products-----	***	***
Display equipment-----	***	***
Cameras-----	***	***
Coin changers-----	***	***
Toys-----	***	***
Aircraft-----	***	***
Lighting equipment-----	***	***
Dictation equipment-----	***	***
Duplicating machines-----	***	***
Computers-----	***	***
Power tools-----	***	***
Business machines-----	***	***
Other-----	641	831
Total-----	3,122	3,430

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

U.S. producers' shipments of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower increased from 6.2 million units, valued at \$40 million, in 1972 to 7.9 million units, valued at \$52.1 million, in 1973 before declining to 4.9 million units, valued at \$44.3 million, in 1975 (table 2). During January-September 1976, U.S. producers' shipments reached 4.5 million units valued at \$43.5 million, compared with 3.7 million units, valued at \$30 million, in the corresponding period of 1975.

During January-September 1976, principal end uses for U.S. producers' shipments of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower were in automobiles, cordless lawn-care equipment, and computers. The table on the following page shows principal end products during 1975 and January-September 1976.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower:  
U.S. shipments, by principal end products, 1975 and January-September  
1976

(In thousands)

Item	1975	January- September 1976
Automobile accessories-----	4,284	4,159
Lawn-care equipment-----	***	***
Computers-----	***	***
Music machines-----	***	***
Business machines-----	***	***
Aircraft-----	***	***
Power tools-----	***	***
Other-----	212	61
Total-----	4,924	4,523

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

As evidenced in responses to Commission questionnaires, automobile accessory motors account for a substantial share of U.S. producers' shipments of permanent-magnet DC motors of not over 1/10 horsepower. The data supplied in response to Commission questionnaires are supported also by official statistics of the U.S. Department of Commerce (Current Industrial Report MA-36H) for the period 1972-75 (table 3). During the period 1972-75, automobile accessory motors, in terms of quantity, accounted for about 82-86 percent of U.S. producers' shipments of fractional-horsepower DC motors. DC fractional-horsepower motors classified in MA-36H are believed to be largely permanent-magnet DC motors. Data submitted in response to Commission questionnaires for 1975 reveal that automobile accessory motors account for about 38 percent of U.S. producers' shipments of permanent-magnet DC motors of under 1/40 horsepower and account for 87 percent of U.S. producers' shipments of permanent-magnet DC motors of 1/40 or

more but not over 1/10 horsepower. The value of annual production of fractional-horsepower AC motors, however, is about twice the value of annual production of fractional-horsepower DC motors (table 4).

#### U.S. producers' inventories

U.S. producers' inventories of permanent-magnet DC motors of under 1/40 horsepower, in terms of quantity, increased from 487,000 units on December 31, 1972, to 1.2 million units in 1973 before declining to 623,000 units in 1975. On September 30, 1976, inventories totaled 944,000 units as compared with 601,000 units on the same date in 1975. During the periods under consideration, U.S. producers' inventories included a large number of motors which were imported from Japan for sale both in the United States and foreign markets.

U.S. producers' inventories of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower, in terms of quantity, increased from 697,000 units on December 31, 1972, to 1.2 million units in 1973, before declining to 709,000 units in 1975. On September 30, 1976, inventories reached 718,000 units, compared with 708,000 units on the corresponding date in 1975.

A significant number of U.S. producers of permanent-magnet DC motors of not over 1/10 horsepower are job shoppers as opposed to volume producers, and as such do not maintain inventories of their products. A number of catalog items are freely offered by such producers, but these items are usually produced after the receipt of an order and are shipped to the contracting source as soon as practicable.

Apparent U.S. consumption

Apparent U.S. consumption of permanent-magnet DC motors of under 1/40 horsepower increased from 25.8 million units, valued at \$16.8 million, in 1972 to 43.7 million units, valued at \$29.0 million, in 1973, then decreased to 17.5 million units, valued at \$18.0 million, in 1975 (table 1). Consumption during January-September 1976 increased to 29.0 million units, valued at \$22.1 million. The fluctuations in consumption are reflected mainly in the fluctuations in imports, which account for approximately 90 percent of U.S. consumption by quantity, and 50 percent by value.

Apparent U.S. consumption of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower increased from 8.1 million units, valued at \$41.1 million, in 1972 to 11.8 million units, valued at \$48.1 million, in 1974, but decreased to 8.9 million units, valued at \$46.9 million, in 1975 (table 2). Consumption during January-September 1976 increased to 11.4 million units, valued at \$48.3 million. Imports accounted for 61 percent of U.S. consumption by quantity, and 13.3 by value, during January-September 1976.

U.S. exports

U.S. exports of permanent-magnet DC motors of under 1/40 horsepower rose steadily from 578,000 units, valued at \$1.4 million, in 1972 to 1.2 million units, valued at \$2.3 million, in 1975. During January-September 1976, exports reached 1 million units, valued at \$1.9 million, compared with 788,000 units, valued at \$1.6 million, in the corresponding period of 1975. A large share of these U.S. exports had previously been imported into the United States from \* \* \*.

U.S. exports of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower increased from 84,000 units, valued at \$964,000, in 1972 to 136,000 units, valued at \$1.6 million, in 1973, before declining to 88,000 units, valued at \$1.5 million, in 1975. During January-September 1976, exports reached 88,000 units, valued at \$1.5 million, compared with 67,000 units, valued at \$1.1 million, in the corresponding period of 1975.

U.S. employment

Data on employment of production workers were compiled from U.S. producers' responses to questionnaires of the U.S. International Trade Commission. Firms were requested to report the number of production and related workers engaged in the production of (1) all products, and (2) permanent-magnet DC motors of not over 1/10 horsepower, at the firm's establishments where permanent-magnet DC motors of not over 1/10 horsepower were produced.

Permanent-magnet DC motors of under 1/40 horsepower.--The number of production and related workers engaged in the production of permanent-magnet DC motors of under 1/40 horsepower increased from 335 workers in 1972 to 513 workers in 1973, decreased to 346 workers in 1975, and increased again to 428 workers in January-September 1976, as shown in the table below.

Permanent-magnet DC motors of under 1/40 horsepower: Average number of production and related workers employed in U.S. establishments, 1972-75, January-September 1975, and January-September 1976

Period	Production and related workers engaged in the production of--	
	All products	Permanent-magnet DC motors of under 1/40 horsepower
1972-----	3,204	335
1973-----	3,834	513
1974-----	3,321	369
1975-----	2,601	346
January-September--		
1975-----	2,519	338
1976-----	3,208	428

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

The total number of production and related workers producing all products in those establishments where permanent-magnet DC motors are produced is far higher than the total number of workers engaged in the production of those motors alone. However, of the \* \* \* which are the largest known employers (based on responses to Commission questionnaires) of workers producing permanent-magnet DC motors of under 1/40 horsepower, a high percentage of their total workers (in the same establishment) are engaged in the production of permanent-magnet DC motors of under 1/40 horsepower. \* \* \*.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower.--The number of production and related workers engaged in the production of permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower, increased from 1,215 workers in 1972 to 1,455 workers in 1973, decreased to 970 workers in 1975, but increased to 1,203 workers in January-September 1976, as shown in the table on the following page.

---

1/ January-September 1976 data.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower: Average number of production and related workers employed in U.S. establishments, 1972-75, January-September 1975, and January-September 1976

Period	Production and related workers engaged in the production of--	
	All products	Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower
1972-----	5,604	1,215
1973-----	6,569	1,455
1974-----	6,024	1,167
1975-----	4,961	970
January-September--		
1975-----	4,967	968
1976-----	5,031	1,203

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

The number of workers producing "all products" compared to those producing only permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower is much larger.

\* \* \* \* \*

Other employment.--In addition to employees involved in the production of permanent-magnet DC motors of not over 1/10 horsepower in the United States, an indeterminate number of employees are engaged in the production of end products (hair dryers, toys, and so forth) which utilize such motors. There are indications that if GSP were withdrawn on TSUS items 682.25 and 682.30, some of these end products would be produced abroad rather than in the United States, with a resulting loss of employment in the United States. One company \* \* \* feels that the withdrawal of GSP on TSUS items 682.25 and 682.30 would likely jeopardize the jobs of up to 200 of its employees who are presently engaged in the production of \* \* \*. Another company (the \* \* \*, indicated that ". . . the slightly lower price this year has helped us develop a new item which we can wholesale in the neighborhood of \$4.00 each. . . the lower duty has. . . provided jobs for approximately 70 more people than we had last year."

Adjustment assistance.--There have been three worker adjustment assistance cases for fractional-horsepower motors under the Trade Act of 1974. On September 22, 1975, adjustment assistance benefits were denied to workers producing automobile accessory motors at General Motors Corp. in Rochester, New York. On October 29, 1975, adjustment assistance benefits were denied to workers producing AC motors at the Alliance Manufacturing Co. in Shenandoah, Virginia. However, on September 27, 1976, 28 workers were certified as eligible for adjustment assistance at the Indiana General Division of Electronic Memories and Magnetic Corp.

Man-hours

Man-hours worked by production and related workers engaged in the production of permanent-magnet DC motors of not over 1/10 horsepower are shown in the table below.

Permanent-magnet DC motors of not over 1/10 horsepower: Man-hours worked by production and related workers, 1972-75, January-September 1975, and January-September 1976

(In thousands of man-hours)

Period	: Man-hours worked by production and : related workers in the : production of--	
	: Permanent magnet	
	: Permanent magnet	: DC motors of
	: DC motors of under:	: 1/40 or more
	: 1/40 horsepower	: but not over
	:	: 1/10 horsepower
1972-----	712	2,306
1973-----	1,084	2,784
1974-----	730	2,212
1975-----	677	1,783
January-September--	:	:
1975-----	523	1,333
1976-----	655	1,486
	:	:

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

Profit-and-loss experience of domestic producers

The financial information was compiled from data submitted by eight domestic producers of permanent-magnet DC motors of not over 1/10 horsepower. The producers were requested to submit data for the period 1972-75 and January-September 1976. Only four producers supplied data for January-September 1976; one producer supplied data on permanent-magnet DC motors of under 1/40 horsepower, and three producers supplied data on permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower. The data supplied by the one producer of permanent-magnet DC motors of 1/40 horsepower were not used in the table on the following page. It is not known whether the producer is representative of the industry.

Profit-and-loss experience of 5 domestic producers of permanent-magnet DC motors of under 1/40 horsepower, 1972-75 and January-September 1976 1/

\* \* \* \* \*

Producers of motors under 1/40 horsepower.--Five producers submitted data for all periods under consideration. Only three producers operated the full 4 years, and two started production after 1972, one in 1974, and one in 1975. Considering the change in the number of producers from year to year, the trend in sales and profits may not be meaningful. Sales by these firms fluctuated between \$4.2 million in 1972 and \$7.0 million in 1975. Sales were \$5.3 million for three producers supplying data for January-September 1976. The producers, in the aggregate, had net operating profits for 1972 and 1973 and losses in 1974 and 1975. The data for January-September 1976 showed a small profit (see table on page 25).

Producers of motors of 1/40 or more but not over 1/10 horsepower.--Only three producers of the above described motors submitted usable profit-and-loss data for the 4 years. In total, the industry showed a profit in each year, although one company, \* \* \*, had losses in 3 of the 4 years. Sales rose sharply in 1973 by about \$7 million, declined by about \$2.5 million in 1974, and remained approximately the same in 1975. The ratio of net profit to net sales remained steady during the period with a high of 12.7 percent in 1973 and a low of 9.4 percent in 1974. The dollar value of profits amounted to \$4.5 million in 1972, \$6.1 million in 1973, \$4.3 million in 1974, and \$4.8 million in 1975. Data for the one company submitting 9-month data were not shown. Figures on profit-and-loss history for the group are shown in the following table.

Profit-and-loss experience of 3 domestic producers of permanent-magnet  
DC motors of 1/40 horsepower or more but not over 1/10 horsepower,  
1972-75

\* \* \* \* \*

### Representations by Interested Parties

Representations were made by interested parties at various stages of the Commission's investigation. Firms responding to the producers' questionnaire were asked to comment on the reasons underlying changes between 1975 and 1976. Three firms (two of these firms were also represented at the public hearing) urged the Commission to recommend to the TPSC that duty-free treatment of permanent-magnet DC motors of not over 1/10 horsepower be withdrawn. The three firms cited increased competitive pressures from producers in beneficiary countries. One of the three firms strongly urged the Commission to recommend that AC motors of under 1/40 horsepower be removed from the list of eligible articles under the GSP. The firm expressed alarm over a recent loss of annual production of about 500,000 AC motors for aquarium pumps to a Hong Kong firm.

Eleven firms reported that they were either in the production of high-quality, low-volume motors which required close liaison with the end user, or they were in production of motors to be incorporated in their own end products. Each of these eleven firms felt that the duty-free treatment of permanent-magnet DC motors of not over 1/10 horsepower has had little effect on its markets. Five firms reported that they produced automobile accessory motors or motors to be incorporated in computers. These five firms reported that Japanese firms are their major foreign competitors, and that changes in the levels of small-motor production often resulted from changes in levels of automobile production. One firm reported that production of motors

declined when the industrial customer which it served ceased to produce the end product. Presentations were made at the public hearing by a former producer of permanent-magnet DC motors of not over 1/10 horsepower who favored withdrawal of duty-free treatment of these articles under the GSP.

A large number of U.S. toy producers (the largest U.S. toy producer appeared at the public hearing) submitted written statements to the Commission strongly urging the Commission to recommend to the TPSC that permanent-magnet DC motors be retained as eligible articles under the GSP. The toy producers claimed that there are no U.S. producers of motors for toys, and that a withdrawal of duty-free treatment would only serve to increase the cost of toys and likely reduce sales and employment in the toy industry. U.S. producers of such end products as hair dryers, bilge pumps, defoggers, and refrigerators for recreational vehicles also submitted statements requesting the maintenance of permanent-magnet DC motors as eligible articles under the GSP. These end-product producers cited the need for the GSP to compete with foreign producers in their end-product markets. A representative of India submitted a statement requesting the continued maintenance of small electric motors as eligible articles under the GSP because India is attempting to establish a small-electric-motor industry, and the continued eligibility of permanent-magnet DC motors is necessary for India to compete in U.S. markets.

## Foreign Industry

Activities by U.S. and Japanese multinational firms account for a large share of the value of U.S. imports of electric motors of not over 1/10 horsepower from beneficiary countries. Permanent-magnet DC motors are supplied by Japanese firms located in Hong Kong and the Republic of China, and AC motors and wound-field DC motors are supplied by U.S. firms located in Singapore, the Dominican Republic, and Mexico. Japanese firms located in Japan are large suppliers of permanent-magnet DC motors.

Japan

\* \* \* \* \*

Hong Kong

\* \* \* \* \*

Singapore

\* \* \* \* \*

Republic of China

\* \* \* \* \*

Dominican Republic

\* \* \* \* \*

Mexico

\* \* \* \* \*

Other countries

Other countries that supply U.S. imports under TSUS items 682.25 and 682.30 are primarily developed countries (not eligible for GSP) such as West Germany, Switzerland, and the United Kingdom. Foreign car producers and foreign business machine producers account for a large share of the value of U.S. imports from these sources.

### U.S. Imports of Electric Motors of Under 1/40 Horsepower

Total U.S. imports of electric motors of under 1/40 horsepower, classified under item 682.25 (all types--AC, DC, and other), increased from 27.8 million units, valued at \$16.8 million, in 1972 to 33.8 million units, valued at \$25.0 million, in 1973 before declining to 19.7 million units, valued at \$19.5 million, in 1975 (table 5). During January-September 1976, imports reached 27.3 million units, valued at \$22.3 million, compared with 14.2 million units, valued at \$14.7 million, in the corresponding period of 1975.

Japan was the principal source of imports, by quantity, between 1972 and 1974. Hong Kong was the principal source, by quantity, in 1975 and January-September 1976. In terms of value, Japan was the principal source throughout the 1972-September 1976 period.

### U.S. imports from beneficiary countries

U.S. imports from beneficiary countries under item 682.25 (table 6) increased from 5.0 million units, valued at \$1.0 million, in 1972 to 13.9 million units, valued at \$3.7 million, in 1974 before declining to 11.9 million units, valued at \$3.6 million, in 1975. During January-September 1976, imports reached 17.4 million units, valued at \$7.8 million, compared with 8.3 million units, valued at \$2.3 million, in the corresponding period of 1975.

Hong Kong has been the principal source, both by quantity and by value, of U.S. imports from beneficiary developing countries during the 1972-September 1976 period. Singapore and the Republic of China are also major sources of imports, especially in 1976.

During the 1972-75 period (prior to GSP), imports from countries subsequently designated as beneficiary countries increased by 6.9 million units, while imports from all other countries decreased by 14.9 million units. During January-September 1976 (since the GSP has gone into effect), imports from beneficiary developing countries increased by 9.1 million units over the corresponding period in 1975, while imports from all other countries increased by 3.9 million units. It is apparent that in recent years there has been a substantial shift in imports of motors under 1/40 horsepower in favor of beneficiary developing countries. This shift is due to (1) the displacement of Japanese production by Japanese companies setting up production facilities in Hong Kong and the Republic of China, and (2) the establishment of independent facilities in Hong Kong. The effect of GSP on this shift is unclear at the present time.

#### U.S. imports of permanent-magnet DC motors

Permanent-magnet DC motors have accounted for most of the imports of electric motors of under 1/40 horsepower, both by quantity and by value, during the 1972-September 1976 period (table 7). U.S. imports of permanent-magnet DC motors increased from 23.3 million units, valued at \$9.0 million, in 1972 to 39.8 million units, valued at \$17.1 million, in 1973 before declining to 15.5 million units, valued at \$7.5 million, in 1975. During January-September 1976, such imports increased substantially to 26.6 million units, valued at \$11.0 million, compared with only 11.6 million units, valued at \$5.7 million, in the corresponding period of 1975.

Japan was the principal source of U.S. imports of permanent-magnet DC motors of under 1/40 horsepower in 1972 and 1973. Hong Kong has been the principal supplier by quantity since 1974, and by both quantity and value in January-September 1975 and January-September 1976.

U.S. imports of permanent-magnet DC motors from beneficiary countries

U.S. imports of permanent-magnet DC motors of under 1/40 horsepower from beneficiary countries increased from 2.9 million units in 1972 to 12.2 million units in 1974 before declining to 10.9 million units in 1975 (table 8). During January-September 1976, imports from beneficiary countries increased substantially to 21.4 million units compared with 8.3 million units in the corresponding period of 1975.

Hong Kong has been the principal source of imports, both by quantity and by value, throughout the 1972-September 1976 period. However, imports from the Republic of China increased substantially in 1976.

During the 1972-75 period, imports of permanent-magnet DC motors from beneficiary countries increased by 8.0 million units, while imports from all other countries decreased by 15.8 million units. During the January-September 1976 period, imports from beneficiary countries increased by 13.1 million units, while imports from all other countries increased by 2.0 million units. The principal reason for the shift in imports in favor of beneficiary developing

countries has been the displacement of Japanese production by Japanese companies and other companies setting up production facilities in Hong Kong and the Republic of China. The effect of the GSP on this displacement is unclear.

The ratio of imports to consumption

For permanent-magnet DC motors of under 1/40 horsepower the ratio of imports to consumption by value is substantially lower than the ratio of imports to consumption by quantity, as indicated in the table below.

Permanent-magnet DC motors of under 1/40 horsepower: Ratio of imports to apparent consumption, 1972-75, January-September 1975, and January-September 1976

Period	(In percent)			
	: Ratio of total		: Ratio of imports from	
	: imports to apparent		: GSP-eligible countries	
	: consumption		: to apparent consumption	
	: Quantity	: Value	: Quantity	: Value
1972-----	: 90.3	: 53.5	: 11.3	: 3.7
1973-----	: 90.9	: 59.1	: 25.4	: 12.3
1974-----	: 89.4	: 55.9	: 53.1	: 26.5
1975-----	: 88.8	: 41.7	: 62.7	: 21.0
January-September --	: :	: :	: :	: :
1975-----	: 90.2	: 42.3	: 65.0	: 23.7
1976-----	: 91.7	: 49.6	: 73.7	: 26.8

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

U.S. imports of electric motors under TSUS item 807.00

U.S. imports of electric motors of under 1/40 horsepower under TSUS item 807.00, dutiable under TSUS item 682.25 (table 9), increased from

40,000 units, valued at \$361,000, in 1972 to 629,000 units, valued at \$736,000 in 1974, before decreasing to 263,000 units, valued at \$609,000 in 1975. Imports under TSUS item 682.25 during January-June 1976 were 216,000 units valued at \$541,000. Mexico was the principal source of U.S. imports between 1972 and 1974 and Singapore was the principal source in 1975 and January-September 1976.

Some imports from beneficiary countries continue to enter the United States under TSUS item 807.00 (instead of duty-free under the GSP) because they do not qualify for the 35-percent value-added requirement for the GSP. Dutiable value increased from \$223,000 in 1972 to \$444,000 in 1974 before declining to \$376,000 in 1975. During January-June 1976, dutiable value reached \$320,000 compared with \$46,000 in the corresponding period of 1975. The value of U.S. products increased from \$138,000 in 1972 to \$329,000 in 1973 before declining to \$233,000 in 1975. During January-June 1976, the value of U.S. products reached \$222,000 compared with \$67,000 in the corresponding period of 1975. Imports under TSUS item 806.30 are minimal.

#### Importers

\* \* \* \* \*

\* \* \* \* \*

Importers' inventories

Importers' inventories of permanent-magnet DC motors of under 1/40 horsepower increased from 1.5 million units on December 31, 1972, to 4.4 million units on December 31, 1973, then decreased to 4.1 million units on December 31, 1975. Inventories on September 30, 1976, had decreased to 1.75 million units. Between 1972 and 1975, inventories from Hong Kong increased by 3.5 million units, while inventories from Japan decreased by 1.0 million units, as shown in the table on the following page.

Permanent-magnet DC motors of under 1/40 horsepower: Importers' inventories, by source, December 31 of 1972-75 and September 30 of 1975-76

(In thousands of motors)

Source	Dec. 31--				Sept. 30--	
	1972	1973	1974	1975	1975	1976
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Republic of China----	***	***	***	***	***	***
Total, GSP-----	351	289	2,806	3,949	4,142	1,615
Japan-----	***	***	***	***	***	***
Switzerland-----	***	***	***	***	***	***
West Germany-----	***	***	***	***	***	***
Total, non-GSP---	1,110	4,083	1,352	111	117	135
Total-----	1,461	4,372	4,158	4,060	4,259	1,750

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

Importers' markets for permanent-magnet DC motors

The major end-use markets for imported permanent-magnet DC motors of under 1/40 horsepower in 1975 and January-September 1976 were

(1) toys, games, and novelty producers; (2) producers of automotive accessories; and (3) producers of personal-care equipment, as shown in the table on the following page.

Permanent-magnet DC motors of under 1/40 horsepower: U.S. imports  
for consumption, by end use and principal sources, 1975 and  
January-September 1976

(In thousands of motors)

End use	Hong Kong	Japan	Mexico	Republic of China	Total
Toys, games, and novelties:					
1975-----	7,925	***	***	***	9,722
1976 (January-September)---	8,168	***	***	***	12,497
Personal care equipment:					
1975-----	***	***	***	***	1,450
1976 (January-September)---	***	***	***	***	2,694
Automotive accessories:					
1975-----	***	***	***	***	2,269
1976 (January-September)---	***	***	***	***	2,382
Cameras:					
1975-----	***	***	***	***	***
1976 (January-September)---	***	***	***	***	***
Kitchen appliances:					
1975-----	***	***	***	***	***
1976 (January-September)---	***	***	***	***	***
Garden tools:					
1975-----	***	***	***	***	***
1976 (January-September)---	***	***	***	***	***
Bilge pumps:					
1975-----	***	***	***	***	***
1976 (January-September)---	***	***	***	***	***
Other:					
1975-----	***	***	***	***	345
1976 (January-September)---	***	***	***	***	467
Unknown:					
1975-----	***	***	***	***	1,212
1976 (January-September)---	***	***	***	***	6,585
Total:					
1975-----	9,125	4,545	***	***	15,493
1976 (January- September)---	11,551	4,926	***	***	26,335

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

When the table on the previous page is compared with a similar table for U.S. producers' shipments (see page 14), it is apparent that a far greater proportion of the imported motors are used in the manufacture of toys, games, and novelties, while a smaller proportion of imported motors are used in automotive accessories.

The toy, game, and novelty market is by far the major end user for permanent-magnet DC motors of less than 1/40 horsepower. Nearly all of the motors used in the manufacture of toys, games, and novelties are low-priced motors from Hong Kong and Republic of China. The second largest end use is in personal-care equipment; \* \* \* supplies most of these motors, and the \* \* \* began to supply them in 1976. \* \* \* share of the personal-care-equipment motors is apparently decreasing. The third largest end use, in automotive accessories, is mainly supplied by Japan; nearly all of the motors entering from Japan are produced by

\* \* \* \* \*

U.S. Imports of Electric Motors of 1/40 or More  
but Not Over 1/10 Horsepower

Total U.S. imports of electric motors of 1/40 or more but not over 1/10 horsepower (TSUS item 682.30) increased from 5.1 million units, valued at \$10.5 million, in 1972 to 10.9 million units, valued at \$21.1 million, in 1974 before declining to 6.7 million units, valued at \$15.2 million, in 1975 (table 10). During January-September 1976, imports reached 8.2 million units, valued at \$14.8 million, compared with 4.6 million units, valued at \$11.3 million, in the corresponding period of 1975.

Japan has been the principal source of imports by quantity every year since 1973. In terms of value, Japan was the principal source in 1973 and 1974, while Mexico was the principal source in 1975 and January-September 1976.

U.S. imports from beneficiary countries

U.S. imports from beneficiary developing countries (table 11) increased irregularly from 4.0 million units, valued at \$6.0 million, in 1972 to 5.6 million units, valued at \$8.3 million, in 1974 before declining to 4.1 million units, valued at \$7.7 million, in 1975. During January-September 1976, imports reached 4.7 million units, valued at \$8.9 million, compared with 2.7 million units, valued at \$5.5 million, in the corresponding period of 1975.

Mexico and Singapore were the principal sources of U.S. imports from beneficiary countries between 1972 and 1975. During January-September 1976, there were no imports from Singapore owing to a change

in customs classification. \* \* \*. Mexico remained the principal supplier during January-September 1976, although imports from Hong Kong increased substantially.

During the 1972-75 period, imports from beneficiary countries increased by only 40,000 units, while imports from all other countries increased by 1.6 million units. During January-September 1976, imports from beneficiary developing countries increased by 1.9 million units over the corresponding period in 1975, while imports from all other countries increased by 1.6 million units. Contrary to the situation which has occurred in imports under TSUS item 682.25, under item 682.30 there has been little or no displacement of developed-country imports by the beneficiary developing countries. Evidently, Japanese firms have not moved production facilities offshore (to any large extent) for this type of motor.

#### U.S. imports of permanent-magnet DC motors

Permanent-magnet DC motors have accounted for most of the motors imported under TSUS item 682.30 by quantity, although not by value, between 1972 and 1976 (table 12). U.S. imports of permanent-magnet DC motors increased from 2.0 million units, valued at \$2.0 million, in 1972 to 6.1 million units, valued at \$6.0 million, in 1974 before decreasing in 1975 to 4.1 million units, valued at \$4.1 million. During January-September 1976, imports increased substantially, rising to 6.9 million units, valued at \$6.4 million, compared with only 2.7

million units, valued at \$2.7 million, in the corresponding period of 1975. Japan was the principal supplier throughout the 1972-September 1976 period.

U.S. imports of permanent-magnet DC motors  
from beneficiary countries

U.S. imports of permanent-magnet DC motors from beneficiary developing countries under TSUS item 682.30 increased from 199,000 units, valued at \$150,000, in 1972 to 2.7 million units, valued at \$2.0 million, in 1974 before declining to 2.1 million units, valued at \$1.6 million, in 1975 (table 13). During January-September 1976, imports from beneficiary countries increased to 3.1 million units, valued at \$2.3 million, compared with 1.2 million units, valued at \$0.8 million, in the corresponding period of 1975.

Hong Kong and Mexico have been the principal sources of imports throughout the 1972-September 1976 period. There are no known imports from the Republic of China under TSUS item 682.30, in contrast to the substantial amounts imported from that source under TSUS item 682.25.

During the 1972-75 period, imports of permanent-magnet DC motors from beneficiary countries increased by 1.9 million units, while imports from all other countries increased by 0.2 million units. During the January-September 1976 period, imports from beneficiary developing countries increased by 2.0 million units, while imports from all other countries increased by 2.3 million units. There has been little, if any, displacement of "other country" imports by imports of permanent-magnet DC motors from beneficiary countries under TSUS item 682.30.

The ratio of imports to apparent consumption

For permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower, the ratio of imports to consumption by value is substantially lower than the ratio by quantity, as shown in the tabulation below.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower: Ratio of imports to apparent consumption, 1972-75, January-September 1975, and January-September 1976

(In percent)					
Period	Ratio of total imports to apparent consumption		Ratio of imports from GSP-eligible countries to apparent consumption		
	Quantity	Value	Quantity	Value	
	1972-----	24.7	4.9	2.5	0.4
1973-----	32.2	6.7	5.5	0.7	
1974-----	51.5	12.4	22.6	4.1	
1975-----	46.0	8.8	23.7	3.4	
January-September--					
1975-----	42.5	8.7	18.5	2.7	
1976-----	61.0	13.3	27.5	4.8	

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

U.S. imports of electric motors under TSUS 807.00

U.S. imports of electric motors of 1/40 or more but not over 1/10 horsepower under TSUS item 807.00, dutiable under TSUS item 682.30 (table 14), increased from 4.0 million units, valued at \$6.5 million, in 1972 to 4.5 million units, valued at \$7.5 million, in 1974 before declining to 3.1 million units, valued at \$6.9 million, in 1975. During January-June 1976, imports reached 1.4 million units, valued

at \$4.5 million, compared with 1.2 million units, valued at \$3.1 million, in the corresponding period of 1975. Mexico and Singapore were principal sources of U.S. imports between 1972 and 1975 and Mexico was by far the principal source in January-June 1976.

Dutiable value increased from \$4.0 million in 1972 to \$5.4 million in 1974 and then decreased to \$3.9 million in 1975. During January-June 1976, dutiable value reached \$1.9 million compared with \$1.8 million in the corresponding period of 1975. The value of U.S. products decreased from \$2.5 million in 1972 to \$2.2 million in 1974 and then increased to \$3.0 million in 1975. During January-June 1976, the value of U.S. products reached \$2.6 million compared with \$1.3 million in the corresponding period of 1975. Imports under TSUS item 806.30 are minimal.

#### Importers

Ten firms are known to have imported permanent-magnet DC motors under TSUS item 682.30 in the period 1972-September 1976. The four largest, ranked according to 1976 imports, by quantity, are:

\* \* \* \* \*

Importers' inventories

Importers' inventories of permanent-magnet DC motors imported under TSUS 682.30 increased from 0.3 million units on December 31, 1972, to nearly 0.9 million units on December 31, 1974, then declined to 0.4 million units on December 31, 1975. Inventories on September 30, 1976, had increased to nearly 1.0 million units. Hong Kong and Japan are the major sources of imported motors held in inventory, as shown in the table below.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower: Importers' inventories, by sources, Dec. 31 of 1972-75 and Sept. 30 of 1975 and 1976

(In thousands of motors)

Source	Dec. 31--				Sept. 30--	
	1972	1973	1974	1975	1975	1976
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Total, GSP-----	127	36	78	228	86	498
Japan (non-GSP)-----	206	720	782	214	450	453
Total-----	333	756	860	442	536	951

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

Importers' markets for permanent-magnet DC motors

The two major end-uses for permanent-magnet DC motors imported under TSUS item 682.30 are in (1) lawn-care equipment and (2) hair dryers, as shown in the following table.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower:  
U.S. imports for consumption, by end use and by principal sources,  
1975 and January-September 1976

(In thousands of motors)

End use	Hong Kong	Mexico	Japan	Total
Lawn care equipment:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Hair dryers:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Cookie guns:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Marine bilge pumps:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Battery-driven tools:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Toys:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Automotive accessories:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Other:				
1975-----	***	***	***	***
1976 (January-September)-----	***	***	***	***
Unknown:				
1975-----	25	28	641	694
1976 (January-September)-----	604	252	1,454	2,310
Total:				
1975-----	1,318	***	***	4,094
1976 (January-September)-----	2,543	***	***	6,916

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

When the preceding table is compared with a similar table for U.S. producers' markets (p. 15), it is apparent that a far greater proportion of imported motors are used in the manufacture of lawn-care equipment, while only a few imported motors are used for automobile accessories.

The major sources of permanent-magnet DC motors imported for use in lawn-care equipment are \* \* \* and \* \* \*. Usage of imported motors for lawn-care equipment increased for both countries in 1976. In the hair-dryer market, usage of motors from \* \* \* increased in 1976, while usage of motors from \* \* \* decreased.

## Prices

Permanent-magnet DC motors of under 1/40 horsepower

Prices of both domestic and imported permanent-magnet DC motors vary substantially, depending on the size, type, and quality of a motor. The lowest priced permanent-magnet DC motors of under 1/40 horsepower are sold at about 16 cents per motor (delivered price); these are imported motors used in toys. On the other hand, some of the most sophisticated, precision motors are priced at \$50.00 or more per motor; such motors are most often produced by domestic firms.

Listed on the following page are lowest net wholesale prices f.o.b. point of shipment in the United States of U.S. producers, importers from beneficiary countries, and importers from Japan. All prices are net selling prices, as reported on questionnaires returned to the U.S. International Trade Commission. Prices shown do not reflect "prices" (internal costs) at which U.S. captive producers produce their motors.

Permanent-magnet DC motors of under 1/40 horsepower: Lowest net wholesale prices of U.S. producers and importers, by quarters, 1975 and January-September 1976

Period	U.S. producers' prices		Importers' prices			
			Imports from GSP countries		Imports from Japan	
	Range	Weighted average	Range	Weighted average	Range	Weighted average
1975:						
January-March-----	\$1.15-\$50.00	\$3.35	\$0.16-\$0.68	\$0.22	\$0.95-\$4.80	\$1.45
April-June-----	1.15- 50.00	3.35	.16- .68	.22	.95- 4.80	\$1.45
July-September-----	1.15- 50.00	3.26	.16- .68	.22	<u>1/</u>	<u>1/</u>
October-December-----	1.15- 50.00	3.26	.16- .68	.22	<u>1/</u>	<u>1/</u>
1976:						
January-March-----	1.27- 50.00	3.28	.16- .68	.22	.95- 4.80	1.45
April-June-----	1.29- 50.00	3.29	<u>1/</u>	<u>1/</u>	.95- 4.80	1.45
July-September-----	1.30- 50.00	3.21	<u>1/</u>	<u>1/</u>	.95- 4.80	1.45

1/ Data comparable to that reported for prior periods are not available.

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

Price ranges shown demonstrate the wide price variations which occur in permanent-magnet DC motors of under 1/40 horsepower. The price range of domestically produced motors is the widest--from \$1.15 to \$50.00 (it is reported that some domestic motors sell for as little as \$0.75, but price data received on questionnaires from U.S. producers did not substantiate this). The price range of motors imported from beneficiary countries is by far the narrowest. The average price charged by domestic producers is approximately \$3.21, the average price of imports from beneficiary countries is about \$0.22, and the average price of imports from Japan is about \$1.02.

Price ranges by end-product usage are more useful than average overall prices in determining the actual head-to-head price competition between domestic producers and importers. However, domestically produced and foreign-produced permanent-magnet DC motors of under 1/40 horsepower do not compete for most end-product uses. Prices of U.S. producers and importers from GSP countries for permanent-magnet DC motors of under 1/40 horsepower, by selected end uses, are as follows:

<u>End use</u>	<u>Price 1/</u>
U.S. producers:	
Hair dryer-----	***
Electric toothbrush-----	***
Electric shaver-----	***
Calculator-----	***
Automobile tape deck-----	***
Importers from GSP countries:	
Toys-----	***
Hair dryers-----	***

1/ Prices are lowest net wholesale prices for July-September 1976.

Permanent-magnet DC motors of 1/40 or more but  
not over 1/10 horsepower

There is also considerable price variation for permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower, depending on the size, type, and quality of the motor. The lowest priced permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower were for the July-September 1976 period, sold at 72 cents per motor (delivered price); these motors are imported from \* \* \* for use in \* \* \*. On the other hand, some of the most sophisticated, precision motors (domestically produced) are priced at \$60.00 or more per motor.

Listed on the following page are lowest net wholesale prices f.o.b. point of shipment in the United States of U.S. producers, importers from beneficiary developing countries, and importers from Japan. All prices are net selling prices, as reported on questionnaires returned to the U.S. International Trade Commission. Prices do not reflect "prices" (internal costs) at which U.S. captive producers produce their motors.

Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower: Lowest net wholesale prices of U.S. producers and importers, by quarters, 1975 and January-September 1976

Period	U.S. producers' prices		Importers' prices			
			Imports from GSP countries		Imports from Japan	
	Range	Weighted average	Range	Weighted average	Range	Weighted average
1975:						
January-March-----	\$0.80-\$60.00	\$8.88	<u>1/</u>	<u>1/</u>	<u>1/</u>	<u>1/</u>
April-June-----	.80- 60.00	8.93	\$0.93-\$1.04	\$1.00	\$1.10-\$10.40	\$1.21
July-September-----	.80- 60.00	8.69	.93- 1.02	.99	1.10- 10.40	1.21
October-December-----	.90- 60.00	9.20	.88- 1.12	1.00	<u>1/</u>	<u>1/</u>
1976:						
January-March-----	.90- 60.00	8.97	.90- 1.12	1.00	1.10- 9.35	1.14
April-June-----	.90- 60.00	8.96	.76- 1.08	1.02	1.10- 9.35	1.14
July-September-----	.90- 60.00	8.92	.72- 1.35	<u>1/</u>	<u>1/</u>	<u>1/</u>

1/ Data comparable to that reported for prior periods are not available.

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

The price range of domestically produced motors is by far the widest, with prices in 1976 from \$0.90 to \$60.00 per motor.

The price range of motors imported from beneficiary countries is the narrowest. The average price charged by domestic producers was \$8.96 during the April-June 1976 period, the average price of imported motors from beneficiary countries was \$1.02 per motor, and the average price of imported motors from Japan was \$1.14 per motor.

Prices of U.S. producers and importers from GSP countries for permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower, by selected end uses, are as follows:

<u>End-use</u>	<u>Price</u> <u>1/</u>
U.S. producers:	
Automobile windshield washer-----	***
Hedge trimmer-----	<u>2/</u> ***
Automotive accessory-----	***
Importers from GSP countries:	
Hair dryer-----	<u>3/</u> ***
Lawn-care equipment-----	***

1/ Prices are lowest net wholesale prices for July-September 1976, unless indicated otherwise.

2/ Manufacturing cost.

3/ Delivered price.

#### Price effects of the GSP

Three major importers of permanent-magnet DC motors of not over 1/10 horsepower from GSP countries are reported to have reduced their prices since the GSP became effective. Johnson Electric Industries, a major importer from Hong Kong, reduced its prices on some motors by the amount of the duty. \* \* \*.

Users of imported permanent-magnet DC motors have indicated to the Commission that imported motors would be price-competitive with domestic motors even without the GSP. One example is the Black and Decker Manufacturing Co., a major producer of cordless lawn-care equipment, which stated at the U.S. International Trade Commission hearing on electric motors:

In January 1976, Black and Decker studied the possibility of manufacturing permanent-magnet direct current motors in the United States similar to those we are presently importing from Mabuchi. . . . The results of this study indicated that on a volume of 1 to 2 million motors per year, the cost alone of producing this motor would be 20 percent higher than the price we are currently paying. If we were to attempt to sell this product to an end user, our price would be approximately 80 percent higher than the price we are currently paying for imported motors. . . . Because of this study, Black and Decker concluded that the manufacture of this motor in one of its plants in the United States was not a satisfactory alternative. The withdrawal of GSP benefits would not affect this decision.

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\* \* \* \* \*

Effects on GSP Benefits by Virtue of the Competitive-Need Provisions of Section 504(c)

Under the competitive need provisions of section 504(c) of the Trade Act of 1974, an eligible article is afforded duty-free treatment if the value of such articles from the beneficiary country is less than \$25 million 1/ when supplied by a beneficiary country in the preceeding year, or if the value of such article is less than 50 percent of the total value of U.S. imports of the article in the preceeding year. During January-September 1976, U.S. imports under TSUS items 682.25 and 682.30 were valued at about \$22.3 million and \$14.8 million, respectively, and during the period, no beneficiary country accounted for 50 percent or more of the entered value under either item.

A subdivision of TSUS items 682.25 and 682.30 each into three new items--(1) AC motors (2) DC motors (3) other motor--could eliminate some GSP countries under the competitive need provisions. However, responses to Commission questionnaires did not provide sufficient data to make definitive determinations in all instances (see table on p. 66). For the period January-September 1976, responses to Commission questionnaires accounted for \$14.5 million of U.S. imports under TSUS item 682.25 and \$13.1 million of U.S. imports under TSUS item 682.30 compared with \$22.3 million and \$14.8 million, respectively, as reported in official statistics of the U.S. Department of Commerce.

On the basis of data compiled in response to Commission questionnaires, no beneficiary country would lose its duty-free status

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1/ See footnote 1, p. 9.

as a supplier of DC motors under either item 682.25 or 682.30. However, Singapore would likely lose its duty-free status as a supplier of AC motors under item 682.25, and Mexico would likely lose its duty-free status as a supplier of AC motors under item 682.30. A determination cannot be made with respect to other motors since data compiled in response to Commission questionnaires showed only a small value of imports of other motors.

The analysis above covers the period January-September 1976. The competitive need provisions, however, are based on the entered value of imports during the preceeding year. It is assumed that the distribution of AC motors, DC motors, and other motors which will enter the U.S. during October-December 1976 is the same distribution that entered during January-September 1976.

Electric motors of under 1/40 horsepower (TSUS item 682.25): U.S. imports for consumption, by sources, January-September 1976

(In thousands of dollars)

Source	Electric motors of under 1/40 horsepower			
	AC	DC	Other	Total
Hong Kong-----	211	<u>1/</u> 4,302	0	<u>1/</u> 4,513
Singapore-----	2,912	0	0	2,912
Republic of China-----	0	<u>1/</u> 1,645	0	<u>1/</u> 1,645
Mexico-----	0	225	0	<u>1/</u> 225
Dominican Republic-----	166	0	0	166
Total, GSP-----	3,289	6,172	0	<u>1/</u> 9,461
Non-GSP-----	0	5,031	0	<u>2/</u> 5,031
Total-----	3,289	11,203	0	14,492

1/ Value reported in response to Commission questionnaires is higher than the value reported in official statistics of the U.S. Department of Commerce.

2/ Value of \$9.8 million in U.S. imports from GSP and non-GSP countries was not reported in response to Commission questionnaires.

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

Electric motors of 1/40 or more but not over 1/10 horsepower (TSUS item 682.30): U.S. imports for consumption, by sources, January-September 1976

(In thousands of dollars)

Source	Electric motors of 1/40 or more but not over 1/10 horsepower			
	AC	DC	Other	Total
Mexico-----	2,998	2,689	393	6,080
Hong Kong-----	0	<u>1/</u> 1,934	0	<u>1/</u> 1,934
Dominican Republic-----	289	0	0	289
Total, GSP-----	3,287	<u>1/</u> 4,623	393	<u>1/</u> 8,303
Non-GSP-----	647	4,085	0	<u>2/</u> 4,759
Total-----	3,961	<u>1/</u> 8,708	393	13,062

1/ Value reported in response to Commission questionnaires is higher than the value reported in official statistics of the U.S. Department of Commerce.

2/ Value of \$1.2 million in U.S. imports from GSP and non-GSP countries was not reported in response to Commission questionnaires.

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

\* \* \* \* \*

APPENDIX A  
STATISTICAL TABLES

Table 1.--Permanent-magnet DC motors of under 1/40 horsepower (TSUS item 682.25): U.S. producers' shipments, imports for consumption, exports, and apparent consumption, 1972-75, January-September 1975, and January-September 1976

(Quantity in thousands of units; value in thousands of dollars)								
Year	Producers' shipments	Imports		Exports	Apparent consumption	Ratio (percent) of total imports to apparent consumption	Ratio (percent) of imports from GSP-eligible countries to apparent consumption	
		Total	From GSP-eligible countries					
Quantity								
1972-----	3,081	23,264	2,915	578	25,767	90.3		11.3
1973-----	4,603	39,752	11,124	633	43,722	90.9		25.4
1974-----	3,297	20,441	12,153	863	22,875	89.4		53.1
1975-----	3,122	15,508	10,948	1,162	17,468	88.8		62.7
January-September--								
1975-----	2,046	11,579	8,339	788	12,837	90.2		65.0
1976-----	3,430	26,626	21,409	1,016	29,040	91.7		73.7
Value								
1972-----	9,204	8,977	628	1,388	16,793	53.5		3.7
1973-----	13,720	17,146	3,559	1,853	29,013	59.1		12.3
1974-----	11,201	11,688	5,548	1,973	20,916	55.9		26.5
1975-----	12,736	7,479	3,768	2,264	17,951	41.7		21.0
January-September--								
1975-----	9,392	5,720	3,204	1,598	13,514	42.3		23.7
1976-----	13,028	10,959	5,928	1,898	22,089	49.6		26.8
Unit value								
1972-----	\$2.99	\$0.39	\$0.22	\$2.40	\$0.65	-		-
1973-----	2.98	.43	.32	2.92	.66	-		-
1974-----	3.40	.57	.46	2.29	.91	-		-
1975-----	4.08	.48	.34	1.95	1.03	-		-
January-September--								
1975-----	4.59	.49	.38	2.03	1.05	-		-
1976-----	3.79	.41	.28	1.89	.76	-		-

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

Table 2.--Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower (TSUS item 682.30): U.S. producers' shipments, imports for consumption, exports, and apparent consumption, 1972-75, January-September 1975, and January-September 1976

(Quantity in thousands of units; value in thousands of dollars)								
Year	Producers' shipments	Imports		Exports	Apparent consumption	Ratio (percent) of total imports to apparent consumption	Ratio (percent) of imports from GSP-eligible countries to apparent consumption	
		Total	From GSP-eligible countries					
Quantity								
1972-----	6,154	1,989	199	84	8,059	24.7		2.5
1973-----	7,916	3,699	633	136	11,479	32.2		5.5
1974-----	5,850	6,071	2,671	127	11,794	51.5		22.6
1975-----	4,924	4,112	2,118	88	8,948	46.0		23.7
January-September--								
1975-----	3,705	2,687	1,170	67	6,325	42.5		18.5
1976-----	4,523	6,935	3,123	88	11,370	61.0		27.5
Value								
1972-----	40,005	2,018	150	964	41,059	4.9		0.4
1973-----	52,136	3,645	395	1,621	54,160	6.7		0.7
1974-----	43,747	5,952	1,956	1,625	48,074	12.4		4.1
1975-----	44,279	4,127	1,610	1,546	46,860	8.8		3.4
January-September--								
1975-----	29,982	2,743	847	1,113	31,612	8.7		2.7
1976-----	43,454	6,408	2,323	1,519	48,343	13.3		4.8
Unit value								
1972-----	\$6.50	\$1.01	\$0.75	\$11.48	\$5.09	-		-
1973-----	6.59	.99	.62	11.92	4.72	-		-
1974-----	7.48	.98	.73	12.80	4.08	-		-
1975-----	8.99	1.00	.76	17.57	5.24	-		-
January-September--								
1975-----	8.09	1.02	.72	16.61	5.00	-		-
1976-----	9.61	.92	.74	17.26	4.25	-		-

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

Table 3.--Fractional-horsepower DC motors: U.S. producers' shipments,  
by types, 1972-75

(Quantity in thousands of units; value in thousands of dollars)

Year	Auto accessory	Other	Total	Ratio (percent) of auto accessory motors to total	Ratio (percent) of other motors to total
Quantity					
1972-----	38,688	6,501	45,189	85.6	14.4
1973-----	42,726	7,820	50,546	84.5	15.5
1974-----	33,159	7,354	40,513	81.8	18.2
1975-----	31,136	5,466	36,602	85.1	14.9
Value					
1972-----	251,747	66,103	317,850	79.2	20.8
1973-----	269,038	81,150	350,188	76.8	23.2
1974-----	231,421	104,199	335,520	69.0	31.0
1975-----	242,037	101,731	343,768	70.4	29.6
Unit value					
1972-----	\$6.86	\$10.16	\$7.03	-	-
1973-----	6.30	10.38	6.93	-	-
1974-----	6.98	14.17	8.28	-	-
1975-----	7.77	18.61	9.39	-	-

Source: Estimated by the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

Table 4.--Fractional horsepower motors: U.S. producers' shipments, by types, 1972-75

Year	AC	DC			Other	Total
		Auto accessory	Other	Total		
Quantity (1,000 units)						
1972-----	104,163	38,688	6,501	45,189	8,246	157,598
1973-----	115,327	42,726	7,820	50,546	12,093	177,196
1974-----	112,095	33,159	7,354	40,513	13,423	166,031
1975-----	79,190	31,136	5,466	36,602	11,826	127,618
Value (1,000 dollars)						
1972-----	712,829	251,747	66,103	317,850	51,059	1,081,738
1973-----	869,065	269,038	81,150	350,188	67,476	1,286,729
1974-----	935,164	231,421	104,199	335,520	83,890	1,354,574
1975-----	758,921	242,037	101,731	343,768	80,314	1,183,003
Unit value						
1972-----	\$6.84	\$6.86	\$10.16	\$7.03	\$6.19	\$6.86
1973-----	7.54	6.30	10.38	6.93	5.58	7.23
1974-----	8.34	6.98	14.17	8.28	6.25	8.16
1975-----	9.58	7.77	18.61	9.39	6.79	9.27

Source: Estimated by the U.S. International Trade Commission from official statistics of the U.S. Department of Commerce.

Table 5.--Electric motors of under 1/40 horsepower (TSUS item 682.25): U.S. imports for consumption, by principal sources, 1972-75, January-September 1975, and January-September 1976

Source	1972	1973	1974	1975	January-September--	
					1975	1976
Quantity (units)						
Dominican Republic----	0	0	0	33,226	14,617	79,697
Hong Kong-----	4,806,796	11,894,496	11,619,168	10,063,240	7,147,491	11,279,453
Mexico-----	70,194	413,483	711,907	63,528	38,375	76,695
Singapore-----	2,735	0	136	147,040	0	1,472,169
Japan-----	22,323,629	19,672,408	12,327,034	7,133,803	5,289,230	9,096,858
West Germany-----	235,973	520,948	719,631	269,647	221,501	291,053
Switzerland-----	80,015	210,693	364,365	266,568	219,997	314,392
Canada-----	6,362	435,936	14,512	3,796	3,362	30,158
Sweden-----	6,890	2,550	3,204	4,979	4,907	363
United Kingdom-----	107,651	25,138	24,269	52,512	43,274	14,192
Netherlands-----	33,703	52,075	73,088	48,715	36,162	48,505
Belgium-----	281	5,326	4,687	23,897	20,713	26,912
France-----	7,554	37,219	10,204	11,204	8,017	4,261
Italy-----	2,886	7,860	0	31,018	30,993	713
Republic of China-----	102,740	503,610	1,542,554	1,347,430	891,363	4,525,175
Other-----	868	3,158	155,050	248,168	215,528	7,274
Total-----	27,788,277	33,793,525	27,461,348	19,746,673	14,185,530	27,267,870
Value (1,000 dollars)						
Dominican Republic----	0	0	0	72	31	166
Hong Kong-----	877	2,663	2,760	2,652	1,928	3,373
Mexico-----	68	403	590	233	132	273
Singapore-----	4	0	1	309	0	3,256
Japan-----	12,965	16,235	13,353	9,792	7,345	9,655
West Germany-----	1,461	2,601	3,413	2,403	2,017	1,554
Switzerland-----	462	1,309	2,286	2,075	1,668	2,131
Canada-----	271	675	256	91	75	163
Sweden-----	61	70	78	164	151	6
United Kingdom-----	345	155	373	479	421	414
Netherlands-----	199	321	401	325	242	277
Belgium-----	19	5	74	221	173	106
France-----	35	177	121	244	196	78
Italy-----	15	39	0	73	68	21
Republic of China-----	16	82	266	252	179	756
Other-----	25	26	176	113	70	53
Total-----	16,824	25,040	24,214	19,482	14,702	22,282
Unit value						
Dominican Republic----	-	-	-	\$2.16	\$2.13	\$2.09
Hong Kong-----	\$0.18	\$0.22	\$0.24	.26	.27	.30
Mexico-----	.97	.97	.83	3.50	3.44	3.56
Singapore-----	1.48	-	4.22	2.10	-	2.21
Japan-----	.58	.83	1.08	1.37	1.39	1.06
West Germany-----	6.19	4.99	4.74	8.91	9.11	5.34
Switzerland-----	5.77	6.21	6.27	7.78	7.58	6.78
Canada-----	42.60	1.55	17.64	23.97	22.31	5.40
Sweden-----	8.85	27.45	24.35	32.94	30.77	16.53
United Kingdom-----	3.21	6.17	15.37	9.12	9.73	29.17
Netherlands-----	5.91	6.16	5.49	6.67	6.70	5.71
Belgium-----	67.62	.94	15.79	9.25	8.35	3.94
France-----	4.63	4.76	11.86	21.78	24.45	18.31
Italy-----	5.20	4.96	-	2.35	2.19	29.45
Republic of China-----	.16	.16	.17	.19	.20	.17
Other-----	28.80	8.23	1.14	.46	.33	7.29
Average-----	.61	.74	.88	.99	1.04	.82

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

Table 6.--Electric motors of under 1/40 horsepower (TSUS item 682.25): U.S. imports for consumption, by beneficiary developing countries, 1972-75, January-September 1975, and January-September 1976

Source	1972	1973	1974	1975	January-September--	
					1975	1976
Quantity (units)						
Dominican Republic----	0	0	0	33,226	14,617	79,697
Hong Kong-----	4,806,796	11,894,496	11,619,168	10,063,240	7,147,491	11,279,453
Mexico-----	70,194	413,483	711,907	63,528	38,375	76,695
Singapore-----	2,735	0	136	147,040	0	1,472,169
Brazil-----	50	0	125	23	23	50
Yugoslavia-----	0	1,500	0	0	0	0
Argentina-----	0	0	0	127	127	0
Malaysia-----	0	0	10,000	0	0	0
Republic of Korea-----	0	1	120	210,927	210,402	764
Republic of China-----	102,740	503,610	1,542,554	1,347,430	891,363	4,525,175
Leeward Islands-----	0	0	0	170	170	0
Portugal-----	0	1,028	0	0	0	0
Lebanon-----	5	0	0	0	0	0
Israel-----	0	0	0	0	0	2,000
Total-----	4,982,520	12,814,118	13,884,010	11,865,711	8,302,568	17,436,003
Value						
Dominican Republic----	0	0	0	\$71,817	\$31,088	\$166,256
Hong Kong-----	\$877,480	\$2,662,802	\$2,759,568	2,651,632	1,927,878	3,373,435
Mexico-----	68,082	402,632	590,295	222,587	131,998	272,693
Singapore-----	4,035	0	574	308,626	0	3,256,336
Brazil-----	361	0	110,052	608	608	6,360
Yugoslavia-----	0	825	0	0	0	0
Argentina-----	0	0	0	6,433	6,433	0
Malaysia-----	0	0	7,223	0	0	0
Republic of Korea-----	0	450	264	41,101	39,806	2,487
Republic of China-----	16,450	82,409	265,521	251,638	178,883	755,854
Leeward Islands-----	0	0	0	681	681	0
Portugal-----	0	2,425	0	0	0	0
Lebanon-----	726	0	0	0	0	0
Israel-----	0	0	0	0	0	3,800
Total-----	967,134	3,151,543	3,733,497	3,555,123	2,317,375	7,837,221
Unit value						
Dominican Republic----	-	-	-	\$ 2.16	\$ 2.13	\$ 2.09
Hong Kong-----	\$0.18	\$0.22	\$0.24	.26	.27	.30
Mexico-----	.97	.97	.83	3.50	3.44	3.56
Singapore-----	1.48	-	4.22	2.10	-	2.21
Brazil-----	7.22	-	880.42	26.44	26.44	127.20
Yugoslavia-----	-	.55	-	-	-	-
Argentina-----	-	-	-	50.65	50.65	-
Malaysia-----	-	-	.72	-	-	-
Republic of Korea-----	-	450.00	2.20	.20	.19	3.26
Republic of China-----	.16	.16	.17	.19	.20	.17
Leeward Islands-----	-	-	-	4.01	4.01	-
Portugal-----	-	2.36	-	-	-	-
Lebanon-----	145.20	-	-	-	-	-
Israel-----	-	-	-	-	-	1.90
Average-----	.19	.25	.27	.30	.28	.45

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

Table 7.--Electric motors of under 1/40 horsepower (TSUS item 682.25): U.S. imports for consumption, by types, 1972-75, January-September 1975, and January-September 1976

Type	1972	1973	1974	1975	January-September--	
					1975	1976
Quantity (1,000 motors)						
DC:						
Permanent-						
magnet-----	23,264	39,752	20,441	15,508	11,579	26,626
Other-----	***	***	***	***	***	***
AC-----	***	***	***	***	***	***
Total-----	23,348	2/ 39,847	20,523	15,620	11,621	2/ 28,306
Value (1,000 dollars)						
DC:						
Permanent-						
magnet-----	8,977	17,146	11,688	7,479	5,720	10,959
Other-----	***	***	***	***	***	***
AC-----	***	***	***	***	***	***
Total-----	9,163	17,339	11,880	7,788	5,809	14,492
Unit value						
DC:						
Permanent-						
magnet-----	\$0.39	\$0.43	\$0.57	\$0.48	\$0.49	\$0.41
Other-----	***	***	***	***	***	***
AC-----	***	***	***	***	***	***
Average-----	0.39	0.44	0.58	0.50	0.50	0.51

1/ Responses to questionnaires of the U.S. International Trade Commission did not indicate any AC-motor imports under TSUS item 682.25 in the \* \* \* period; however, it is believed that some AC motors were indeed imported from importers that were not surveyed.

2/ Imports reported in U.S. International Trade Commission questionnaires were higher than officially reported imports in 1973 and 1976.

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

Table 8.--Permanent-magnet DC motors of under 1/40 horsepower: Imports, GSP and non-GSP, by sources, 1972-75, January-September 1975, and January-September 1976

Source	1972	1973	1974	1975	Jan.-Sept.--	
					1975	1976
Quantity (1,000 motors)						
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Republic of China-----	***	***	***	***	***	***
Total, GSP----	2,915	11,124	12,153	10,948	8,339	21,409
Japan-----	***	***	***	***	***	***
Switzerland-----	***	***	***	***	***	***
West Germany-----	***	***	***	***	***	***
Total, non- GSP-----	20,349	28,628	8,288	4,560	3,240	5,217
Total-----	23,264	39,752	20,441	15,508	11,579	26,626
Value (1,000 dollars)						
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Republic of China-----	***	***	***	***	***	***
Total, GSP----	628	3,559	5,548	3,768	3,204	5,928
Japan-----	***	***	***	***	***	***
Switzerland-----	***	***	***	***	***	***
West Germany-----	***	***	***	***	***	***
Total, non- GSP-----	8,349	13,587	6,140	3,711	2,516	5,031
Total-----	8,977	17,146	11,688	7,479	5,720	10,959
Unit value						
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Republic of China-----	***	***	***	***	***	***
Average, GSP--	.22	.32	.46	.34	.38	.28
Japan-----	***	***	***	***	***	***
Switzerland-----	***	***	***	***	***	***
West Germany-----	***	***	***	***	***	***
Average, non- GSP-----	.41	.48	.74	.81	.78	.96
Average-----	.39	.43	.57	.48	.49	.41

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

Table 9.--Electric motors of under 1/40 horsepower (TSUS item 682.25): U.S. imports for consumption under TSUS item 807.00, by sources, 1972-75, January-June 1975, and January-June 1976

Source	1972	1973	1974	1975	January-June--	
					1975	1976
Quantity (units)						
Dominican Republic-----	0	0	0	33,226	0	57,502
Hong Kong-----	0	0	0	80	80	10,342
Mexico-----	31,303	418,843	203,457	61,430	29,563	38,965
Singapore-----	0	0	0	147,040	0	107,220
Republic of China-----	0	0	13,600	20,563	20,563	0
Leeward Islands-----	0	0	0	170	170	0
Portugal-----	0	1,028	0	0	0	0
United Kingdom-----	4,699	8,265	2,265	0	0	0
Canada-----	3,935	4,098	10,063	40	40	1,832
Italy 1/-----	0	0	0	0	0	0
Japan-----	373	0	0	0	0	0
Total-----	40,310	427,234	629,385	262,549	50,416	215,861
Value						
Dominican Republic-----	0	0	0	\$71,817	0	\$112,226
Hong Kong-----	0	0	0	6,820	\$6,820	35,795
Mexico-----	\$59,223	\$402,632	\$548,727	218,504	102,793	139,829
Singapore-----	0	0	0	308,626	0	241,765
Republic of China-----	0	0	631	1,281	1,281	0
Leeward Islands-----	0	0	0	681	681	0
Portugal-----	0	2,425	0	0	0	0
United Kingdom-----	95,180	152,636	22,113	0	0	0
Canada-----	189,634	171,068	164,800	1,412	1,412	11,561
Italy 1/-----	0	0	0	0	0	0
Japan-----	17,308	0	0	0	0	0
Total-----	361,345	728,761	736,271	609,141	112,987	541,176
Dutiable value						
Dominican Republic-----	0	0	0	\$15,611	0	\$25,109
Hong Kong-----	0	0	0	5,828	\$5,828	15,296
Mexico-----	\$20,771	\$211,004	\$281,777	85,017	37,208	60,146
Singapore-----	0	0	0	266,703	0	210,831
Republic of China-----	0	0	474	993	993	0
Leeward Islands-----	0	0	0	331	331	0
Portugal-----	0	951	0	0	0	0
United Kingdom-----	19,788	27,437	8,910	0	0	0
Canada-----	181,967	160,003	153,001	1,310	1,310	8,217
Italy 1/-----	0	0	0	0	0	0
Japan-----	914	0	0	0	0	0
Total-----	223,440	399,395	444,162	375,793	45,670	319,599
Value of U.S. products						
Dominican Republic-----	0	0	0	\$56,206	0	\$87,117
Hong Kong-----	0	0	0	992	\$992	20,499
Mexico-----	\$38,542	\$191,628	\$266,950	133,487	65,585	79,683
Singapore-----	0	0	0	41,923	0	30,934
Republic of China-----	0	0	157	288	288	0
Leeward Islands-----	0	0	0	350	350	0
Portugal-----	0	1,474	0	0	0	0
United Kingdom-----	75,392	125,199	13,203	0	0	0
Canada-----	7,667	11,065	11,799	102	102	3,344
Italy 1/-----	0	0	0	0	0	0
Japan-----	16,394	0	0	0	0	0
Total-----	137,905	329,366	292,109	233,343	67,317	221,577

1/ Some imports have entered under 807.00 since June 1976.

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

Table 10.--Electric motors of 1/40 or more but not over 1/10 horsepower (TSUS item 682.30):  
U.S. imports for consumption, by principal sources, 1972-75, January-September 1975, and  
January-September 1976

Source	1972	1973	1974	1975	Jan.-Sept.--	
					1975	1976
Quantity (units)						
Dominican Republic----	0	0	0	33,925	18	105,844
Hong Kong-----	3,920	72,514	1,163,520	988,962	613,794	2,017,060
Mexico-----	1,503,776	1,188,615	1,473,808	2,087,471	1,469,621	2,511,615
Singapore-----	2,508,840	2,768,756	2,936,999	957,150	634,571	0
Japan-----	520,202	3,037,117	4,904,767	2,381,707	1,734,222	3,405,945
West Germany-----	70,509	93,033	111,794	64,574	53,003	40,912
Switzerland-----	1,142	568	0	2,843	2,484	3,966
Canada-----	354,625	385,810	199,138	93,609	74,277	74,090
Sweden-----	5,778	9,951	7,824	5,023	3,440	3,163
United Kingdom-----	15,783	20,348	27,846	17,674	13,435	17,651
France-----	1,716	8,275	1,939	2,071	1,299	2,899
Italy-----	65,399	54,273	23,701	36,451	32,496	8,378
Other-----	21,252	2,674	22,088	58,369	2,970	34,905
Total-----	5,073,084	7,642,934	10,873,424	6,729,829	4,635,630	8,226,428
Value (1,000 dollars)						
Dominican Republic----	0	0	0	107	2	289
Hong Kong-----	1	46	1,014	903	575	1,917
Mexico-----	3,249	2,656	2,724	4,763	3,562	6,642
Singapore-----	2,783	3,877	4,571	1,927	1,310	0
Japan-----	1,360	4,813	9,300	4,628	3,670	4,047
West Germany-----	774	1,130	1,239	977	787	763
Switzerland-----	14	15	0	65	53	48
Canada-----	1,295	1,811	1,411	529	416	481
Sweden-----	60	113	125	125	84	93
United Kingdom-----	252	268	399	389	299	161
France-----	83	80	92	111	80	75
Italy-----	502	503	366	428	362	155
Other-----	96	35	147	229	140	177
Total-----	10,470	15,369	21,119	15,183	11,340	14,848
Unit value						
Dominican Republic----	-	-	-	\$3.17	\$107.28	\$2.73
Hong Kong-----	\$0.32	\$0.64	\$0.87	.91	.94	.95
Mexico-----	2.16	2.23	1.85	2.28	2.42	2.64
Singapore-----	1.11	1.40	1.56	2.01	2.06	-
Japan-----	2.61	1.59	1.90	1.94	2.12	1.19
West Germany-----	10.98	12.15	11.08	15.13	14.85	18.65
Switzerland-----	12.26	26.41	-	22.86	21.34	12.10
Canada-----	3.65	4.69	7.09	5.65	5.60	6.49
Sweden-----	10.38	11.36	15.98	24.89	24.42	29.49
United Kingdom-----	15.97	13.17	14.33	22.01	22.26	9.12
France-----	48.37	9.67	47.45	53.60	61.59	25.87
Italy-----	7.68	9.27	15.44	11.74	11.14	18.50
Other-----	4.52	13.09	6.66	3.92	47.14	5.07
Average-----	2.06	2.01	1.94	2.26	2.45	1.80

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

Table 11.--Electric motors of 1/40 or more but not over 1/10 horsepower (TSUS item 682.30):  
U.S. imports for consumption, by beneficiary developing countries, 1972-75, January-  
September 1975, and January-September 1976

Source	1972	1973	1974	1975	Jan.-Sept.--	
					1975	1976
Quantity (units)						
Dominican Republic-----	0	0	0	33,925	18	105,844
Hong Kong-----	3,920	72,514	1,163,520	988,962	613,794	2,017,060
Mexico-----	1,503,776	1,188,615	1,473,808	2,087,471	1,469,621	2,511,615
Singapore-----	2,508,840	2,768,756	2,936,999	957,150	634,466	0
Brazil-----	0	50	100	0	0	23
Philippine Republic-----	0	547	0	0	0	0
Yugoslavia-----	12,960	0	0	0	0	0
Argentina-----	0	0	0	40	40	0
India-----	0	0	0	5	5	0
Malaysia-----	0	0	0	60	0	0
Republic of Korea-----	0	0	0	1,000	1,000	0
Republic of China-----	3,500	0	500	4,214	114	26,397
Colombia-----	0	0	0	0	0	3,150
Cyprus-----	0	0	0	0	0	4
Total-----	4,032,996	4,030,482	5,574,927	4,072,827	2,719,058	4,664,093
Value						
Dominican Republic-----	0	0	0	\$107,432	\$1,931	\$289,356
Hong Kong-----	\$1,254	\$46,206	\$1,013,593	903,267	574,762	1,917,111
Mexico-----	3,249,427	2,655,866	2,724,253	4,762,897	3,561,634	6,642,304
Singapore-----	2,782,948	3,877,021	4,570,578	1,927,284	1,309,778	0
Brazil-----	0	314	937	0	0	559
Philippine Republic-----	0	1,683	0	0	0	0
Yugoslavia-----	7,901	0	0	0	0	0
Argentina-----	0	0	0	504	504	0
India-----	0	0	0	775	775	0
Malaysia-----	0	0	0	1,786	0	0
Republic of Korea-----	0	0	0	1,950	1,950	0
Republic of China-----	1,750	0	1,183	19,215	1,315	29,518
Colombia-----	0	0	0	0	0	6,623
Cyprus-----	0	0	0	0	0	258
Total-----	6,043,280	6,581,090	8,310,544	7,725,110	5,452,649	8,885,729
Unit value						
Dominican Republic-----	-	-	-	\$3.17	\$107.28	\$2.73
Hong Kong-----	\$0.32	\$0.64	\$0.87	.91	.94	.95
Mexico-----	2.16	2.23	1.85	2.28	2.42	2.64
Singapore-----	1.11	1.40	1.56	2.01	2.06	-
Brazil-----	-	6.28	9.37	-	-	24.30
Philippine Republic-----	-	3.08	-	-	-	-
Yugoslavia-----	.61	-	-	-	-	-
Argentina-----	-	-	-	12.60	12.60	-
India-----	-	-	-	155.00	155.00	-
Malaysia-----	-	-	-	29.77	-	-
Republic of Korea-----	-	-	-	1.95	1.95	-
Republic of China-----	.50	-	2.37	4.56	11.54	1.19
Colombia-----	-	-	-	-	-	2.10
Cyprus-----	-	-	-	-	-	64.50
Average-----	1.50	1.63	1.49	1.90	2.01	1.91

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

Table 12.--Electric motors of 1/40 horsepower or more but not over 1/10 horsepower (TSUS item 682.30): U.S. imports for consumption, by types, 1972-75, January-September 1975, and January-September 1976

Type	Jan.-Sept.--					
	1972	1973	1974	1975	1975	1976
Quantity (1,000 motors)						
DC:						
Permanent-magnet---	1,989	3,699	6,071	4,112	2,687	6,932
Other-----	***	***	***	***	***	***
AC-----	***	***	***	***	***	***
Other-----	***	***	***	***	***	***
Total-----	1/ 5,242	1/7,700	9,466	6,369	3,934	1/ 9,077
Value (1,000 dollars)						
DC:						
Permanent-magnet---	2,018	3,645	5,952	4,127	2,743	6,406
Other-----	***	***	***	***	***	***
AC-----	***	***	***	***	***	***
Other-----	***	***	***	***	***	***
Total-----	9,349	12,615	14,273	9,859	5,738	13,062
Unit value						
DC:						
Permanent-magnet---	\$1.01	\$0.99	\$0.98	\$1.00	\$1.02	\$0.92
Other-----	***	***	***	***	***	***
AC-----	***	***	***	***	***	***
Other-----	***	***	***	***	***	***
Average-----	1.78	1.64	1.51	1.55	1.46	1.44

1/ The quantity of motors imported under TSUS 682.30, as reported in responses to questionnaires of the U.S. International Trade Commission, was higher than the quantity reported in official U.S. import statistics in 1972, 1973, and 1976.

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

Table 13.--Permanent-magnet DC motors of 1/40 or more but not over 1/10 horsepower: Imports, GSP and non-GSP, by sources, 1972-75, January-September 1975, and January-September 1976

Source	1972	1973	1974	1975	Jan.-Sept.--	
					1975	1976
Quantity (1,000 motors)						
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Total, GSP----	199	633	2,671	2,118	1,170	3,123
Japan-----	***	***	***	***	***	***
West Germany-----	***	***	***	***	***	***
Total, non-						
GSP-----	1,790	3,066	3,400	1,994	1,517	3,809
Total-----	1,989	3,699	6,071	4,112	2,687	6,932
Value (1,000 dollars)						
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Total, GSP----	150	395	1,956	1,610	847	2,321
Japan-----	***	***	***	***	***	***
West Germany-----	***	***	***	***	***	***
Total, non-						
GSP-----	1,868	3,250	3,996	2,517	1,896	4,085
Total-----	2,018	3,645	5,952	4,127	2,743	6,406
Unit value						
Hong Kong-----	***	***	***	***	***	***
Mexico-----	***	***	***	***	***	***
Average, GSP-----	.75	.62	.73	.76	.72	.74
Japan-----	***	***	***	***	***	***
West Germany-----	***	***	***	***	***	***
Average, non-GSP-----	1.04	1.06	1.18	1.26	1.25	1.07
Average-----	1.01	.99	.98	1.00	1.02	.92

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

Table 14.--Electric motors of 1/40 horsepower or more but not over 1/10 horsepower (TSUS item 682.30): U.S. imports for consumption under TSUS item 807.00, by sources, 1972-75, January-June 1975, and January-June 1976

Source	1972	1973	1974	1975	January-June --	
					1975	1976
Quantity (units)						
Dominican Republic-----	0	0	0	33,925	0	59,294
Mexico-----	1,502,440	1,182,719	1,473,808	2,087,471	786,433	1,282,068
Singapore-----	2,308,600	2,768,756	2,936,999	957,150	403,702	0
Canada-----	200,583	172,158	58,288	30,206	20,931	19,385
Total-----	4,011,893	4,123,633	4,469,095	3,108,752	1,211,066	1,360,747
Value						
Dominican Republic-----	0	0	0	\$107,432	0	\$151,465
Mexico-----	\$3,246,122	\$2,642,295	\$2,724,253	4,762,897	\$2,142,700	4,221,284
Singapore-----	2,480,520	3,877,021	4,570,578	1,927,284	822,266	0
Canada-----	732,768	745,713	230,411	145,402	100,848	108,870
Total-----	6,459,410	7,265,329	7,525,242	6,943,015	3,065,814	4,481,619
Dutiable value						
Dominican Republic-----	0	0	0	\$22,899	0	\$28,177
Mexico-----	\$1,245,869	\$1,162,308	\$1,152,104	2,157,248	\$970,260	1,800,876
Singapore-----	2,021,433	3,335,737	4,000,182	1,633,955	703,907	0
Canada-----	690,623	690,556	215,457	134,475	94,219	93,893
Total-----	3,957,925	5,188,601	5,367,743	3,948,577	1,768,386	1,922,946
Value of U.S. products						
Dominican Republic-----	0	0	0	\$84,533	0	\$123,288
Mexico-----	\$2,000,253	\$1,480,287	\$1,572,149	2,605,649	\$1,172,440	2,420,408
Singapore-----	459,087	541,284	570,396	293,329	118,359	0
Canada-----	42,145	55,157	14,954	10,927	6,629	14,977
Total-----	2,501,485	2,076,728	2,157,499	2,994,438	1,297,428	2,558,673

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

APPENDIX B

PROBABLE EFFECTS STATEMENT OF TRADE  
AGREEMENT DIGEST NO. 60276

\* \* \* \* \*

\* \* \* \* \*

APPENDIX C

GENERAL HEADNOTE 3(C) OF THE TARIFF SCHEDULES  
OF THE UNITED STATES ANNOTATED

TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1976)  
GENERAL HEADNOTES AND RULES OF INTERPRETATION

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1. Tariff Treatment of Imported Articles. All articles imported into the customs territory of the United States from outside thereof are subject to duty or exempt therefrom as prescribed in general headnote 5.

2. Customs Territory of the United States. The term "customs territory of the United States", as used in the schedules, includes only the States, the District of Columbia, and Puerto Rico.

3. Rates of Duty. The rates of duty in the "Rates of Duty" columns numbered 1 and 2 of the schedules apply to articles imported into the customs territory of the United States as hereinafter provided in this headnote:

(a) Products of Insular Possessions.

(i) Except as provided in headnote 6 of schedule 7, part 2, subpart E, [and] except as provided in headnote 4 of schedule 7, part 7, subpart A, articles imported from insular possessions of the United States which are outside the customs territory of the United States are subject to the rates of duty set forth in column number 1 of the schedules, except that all such articles the growth or product of any such possession, or manufactured or produced in any such possession from materials the growth, product, or manufacture of any such possession or of the customs territory of the United States, or of both, which do not contain foreign materials to the value of more than 50 percent of their total value (or more than 70 percent of their total value with respect to watches and watch movements), coming to the customs territory of the United States directly from any such possession, and all articles previously imported into the customs territory of the United States with payment of all applicable duties and taxes imposed upon or by reason of importation which were shipped from the United States, without remission, refund, or drawback of such duties or taxes, directly to the possession from which they are being returned by direct shipment, are exempt from duty.

(ii) In determining whether an article produced or manufactured in any such insular possession contains foreign materials to the value of more than 50 percent, no material shall be considered foreign which, at the time such article is entered, may be imported into the customs territory from a foreign country, other than Cuba or the Philippine Republic, and entered free of duty.

(iii) Subject to the limitations imposed under section 533(b) and 504(c) of the Trade Act of 1974, articles designated eligible articles under section 503 of such Act which are imported from an insular possession of the United States shall receive duty treatment no less favorable than the treatment afforded such articles imported from a beneficiary developing country under title V of such Act.

(b) Products of Cuba. Products of Cuba imported into the customs territory of the United States, whether imported directly or indirectly, are subject to the rates of duty set forth in column numbered 1 of the schedules. Preferential rates of duty for such products apply only as shown in the said column 1. <sup>1/</sup>

<sup>1/</sup> By virtue of section 401 of the Tariff Classification Act of 1962, the application to products of Cuba of either a preferential or other reduced rate of duty in column 1 is suspended. See general headnote 3(e), *infra*.

(c) Products of Countries Designated Beneficiary Developing Countries for Purposes of the Generalized System of Preferences (GSP).

(i) The following countries and territories are designated beneficiary developing countries for purposes of the Generalized System of Preferences, provided for in Title V of the Trade Act of 1974 (88 Stat. 2066, 19 U.S.C. 2461 *et seq.*):

Independent Countries

Afghanistan	Malawi
Angola	Malaysia
Argentina	Maldives Islands
Bahamas	Mali
Bahrain	Malta
Bangladesh	Mauritania
Barbados	Mauritius
Benin	Mexico
Bhutan	Morocco
Bolivia	Mozambique
Botswana	Nauru
Brazil	Nepal
Burma	Nicaragua
Burundi	Niger
Cameroon	Oman
Cape Verde	Pakistan
Central African Republic	Panama
Chad	Papua New Guinea
Chile	Paraguay
Colombia	Peru
Congo (Brazzaville)	Philippines
Costa Rica	Portugal
Cyprus	Republic of China
Dominican Republic	Romania
Egypt	Rwanda
El Salvador	Sao Tome and Principe
Equatorial Guinea	Senegal
Ethiopia	Sierra Leone
Fiji	Singapore
Gambia	Somalia
Ghana	Sri Lanka
Grenada	Sudan
Guatemala	Surinam
Guinea	Swaziland
Guinea Bissau	Syria
Guyana	Tanzania
Haiti	Thailand
Honduras	Togo
India	Tonga
Israel	Trinidad and Tobago
Ivory Coast	Tunisia
Jamaica	Turkey
Jordan	Upper Volta
Kenya	Uruguay
Korea, Republic of	Western Samoa
Lebanon	Yemen Arab Republic
Lesotho	Yugoslavia
Liberia	Zaire
Malagasy Republic	Zambia

## TARIFF SCHEDULES OF THE UNITED STATES ANNOTATED (1976)

## General Headnotes and Rules of Interpretation

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Non-Independent Countries & Territories

Afars and Issas, French Territory of the	Hong Kong
Antigua	Macao
Belize	Montserrat
Bermuda	Netherlands Antilles
British Indian Ocean Territory	New Caledonia
British Solomon Islands	New Hebrides Condominium
Brunei	Niue
Cayman Islands	Norfolk Island
Christmas Island (Australia)	Pitcairn Island
Cocos (Keeling) Islands	Portuguese Timor
Comoro Islands	Saint Christopher-Nevis-Anguilla
Cook Islands	Saint Helena
Dominica	Saint Lucia
Falkland Islands (Malvinas) and Dependencies	Saint Vincent
French Polynesia	Seychelles
Gibraltar	Spanish Sahara
3 Gilbert Islands	Tokelau Islands
Heard Island and McDonald Islands	Trust Territory of the Pacific Islands
	Turks and Caicos Islands
	3 Tuvalu
	Virgin Islands, British
	Wallis and Futuna Islands

(ii) Articles for which the designations "A" or "A\*" appear in the column entitled "GSP" of the schedules are those designated by the President to be eligible articles for purposes of the GSP pursuant to Section 503 of the Trade Act. The designation "A" signifies that all beneficiary developing countries are eligible for preferential treatment with respect to all articles provided for in the designated TSUS item, while the designation "A\*" indicates that certain beneficiary developing countries, specifically enumerated in subdivision (c)(iii) of this headnote, are not eligible for such preferential treatment with regard to any article provided for in the designated TSUS item. Whenever an eligible article is imported into the customs territory of the United States directly from a country or territory listed in subdivision (c)(i) of this headnote, it shall receive duty-free treatment, unless excluded from such treatment by subdivision (c)(iii) of this headnote, provided that, in accordance with regulations promulgated by the Secretary of the Treasury:

(A) the sum of (1) the cost or value of the materials produced in the beneficiary developing country plus (2) the direct costs of processing operations performed in such country is not less than 35 percent of the appraised value of such article at the time of its entry into the customs territory of the United States; or

(B) the sum of (1) the cost or value of the materials produced in two or more beneficiary developing countries which are members of the same association of countries which is treated as one country under Section 502(a)(3) of the Trade Act, plus (2) the direct cost of processing operations performed in such countries is not less than 50 percent of the appraised value of such article at the time of its entry into the customs territory of the United States; and provided further that, for the purposes of (A) above, the term "country" does not include an association of countries which is treated as one country under Section 502(a)(3) of the Trade Act, but does include a country which is a member of any such association.

(iii) The following designated eligible articles provided for in TSUS item numbers preceded by the designation "A\*", if imported from a beneficiary developing country set opposite the TSUS item numbers listed below, are not entitled to the duty-free treatment provided for in subdivision (c)(ii) of this headnote:

TSUS item Number	Country or territory	TSUS item Number	Country or territory
107.45	Brazil	3176.15	Brazil
110.45	Argentina	176.33	Malaysia
121.52	India	186.40	Republic of China
121.54	India	192.85	Mexico
130.40	Mexico	202.60	Thailand
130.63	Mexico	202.62	Mexico
131.35	Hong Kong	203.20	Singapore
132.55	Mexico	206.45	Philippine Republic
135.80	Nicaragua	206.60	Mexico
135.90	Mexico	206.95	Haiti
135.94	Mexico	3220.10	Portugal
136.00	Dominican Republic	3220.15	Portugal
136.80	Mexico	3220.20	Portugal
136.98	Dominican Republic	3220.25	Portugal
136.99	Republic of China	3220.35	Portugal
137.75	Costa Rica	3220.37	Portugal
138.05	Mexico	3220.41	Portugal
140.09	Thailand	3220.48	Portugal
140.14	Thailand	3220.50	Portugal
141.35	Turkey	222.10	Hong Kong
141.55	Dominican Republic	222.32	Republic of China
141.70	Republic of China	222.42	Hong Kong
145.09	Dominican Republic	240.02	Philippine Republic
145.24	Mexico	240.10	Republic of Korea
3145.52	Portugal	240.12	Brazil
145.53	Turkey	240.38	Philippine Republic
145.60	Republic of China	240.40	Philippine Republic
146.12	Argentina	251.30	Mexico
146.44	Philippine Republic	256.60	Republic of Korea
3146.66	Portugal	256.85	Mexico
147.33	Jamaica	304.40	Thailand
147.80	Mexico	304.48	Republic of China
147.85	Brazil	304.58	India
147.92	India	305.20	India
148.72	Chile	305.22	India
148.77	Republic of Korea	305.28	India
149.15	Dominican Republic	305.40	Philippine Republic
149.50	Dominican Republic	3305.50	Portugal
152.43	Dominican Republic	306.53	Peru
152.58	India	308.80	Thailand
152.72	Honduras	319.01	India
153.02	Dominican Republic	319.03	India
3153.28	Portugal	319.05	India
154.40	Republic of China	319.07	India
	Argentina	335.50	India
	Brazil	347.28	Hong Kong
	Republic of China	347.30	India
	Colombia	360.35	India
	Dominican Republic	364.18	Republic of China
	El Salvador	416.10	Turkey
155.20	Guyana	419.60	Chile
	India	420.24	Israel
	Jamaica	420.78	Argentina
	Nicaragua	420.84	Romania
	Panama	421.06	Colombia
	Peru	422.76	Mexico
	Philippine Republic	425.74	Brazil
	Thailand	425.84	Netherlands Antilles
155.35	Barbados	426.78	Israel
161.83	Mexico	437.16	India
162.11	India	437.51	Brazil
166.30	Israel	437.64	Brazil
166.40	Mexico	455.16	Mexico
168.15	Trinidad	455.30	Mexico
168.23	Peru	460.60	India
3175.51	Romania	460.70	Republic of China

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TSUS item Number	Country or territory	TSUS item Number	Country or territory
421.90	Peru	685.90	Mexico
422.76	Mexico	686.30	Republic of China (Taiwan)
425.32	Mexico	688.10	Republic of China (Taiwan)
426.94	Israel	689.40	Hong Kong
428.92	Mexico	692.27	Mexico
437.16	India	694.60	Mexico
437.64	Brazil	696.35	Republic of China (Taiwan)
446.10	Malaysia	702.08	Republic of China (Taiwan)
455.16	Nicaragua	702.14	Hong Kong
461.05	Israel	702.35	Mexico
461.15	Bermuda	702.45	Mexico
465.70	Argentina	703.20	Mexico
470.57	Argentina	703.65	Mexico
472.48	Cyprus	706.40	Hong Kong
473.36	Cyprus	708.41	Hong Kong
473.52	Mexico	710.30	Mexico
473.56	Mexico	713.05	Israel
493.20	Republic of China (Taiwan)	713.19	Mexico
493.21	Republic of China (Taiwan)	722.14	Hong Kong
511.31	Mexico	725.20	Pakistan
511.41	Mexico	726.70	Mexico
511.51	Mexico	730.27	Brazil
512.44	Mexico	730.39	Brazil
514.11	Dominican Republic	730.41	Brazil
514.54	Mexico	730.65	Yugoslavia
516.71	India	731.30	Republic of China (Taiwan)
516.73	India	731.50	Republic of Korea
516.76	India	734.10	Republic of China (Taiwan)
517.21	Malagasy Republic	734.25	Hong Kong
517.24	Malagasy Republic	734.30	Hong Kong
518.41	Mexico	734.34	Hong Kong
520.35	Thailand	734.40	Republic of China (Taiwan)
520.37	Hong Kong	734.51	Republic of China (Taiwan)
523.61	Mexico	734.54	Republic of Korea
531.04	Yugoslavia	734.56	Haiti
535.31	Mexico	734.60	Republic of China (Taiwan)
540.47	Mexico	737.40	Hong Kong
544.11	Republic of China (Taiwan)	737.50	Hong Kong
545.53	Mexico	737.95	Hong Kong
545.65	Mexico	740.05	Mexico
547.51	Mexico	740.30	Hong Kong
602.30	Peru	740.70	Yugoslavia
	Philippine Republic	741.20	Hong Kong
603.45	Republic of Korea	745.08	Hong Kong
605.60	Mexico	748.20	Hong Kong
610.56	India	748.40	Republic of China (Taiwan)
612.03	Chile	750.05	Hong Kong
	Peru	750.35	Republic of China (Taiwan)
612.06	Chile	750.40	Hong Kong
	Yugoslavia	751.05	Republic of China (Taiwan)
613.18	Israel	751.20	Republic of China (Taiwan)
618.29	Republic of Korea	760.65	Republic of China (Taiwan)
624.42	Mexico	771.05	Mexico
628.90	Chile	772.03	Hong Kong
646.06	Hong Kong	772.35	Republic of China (Taiwan)
646.82	Republic of China (Taiwan)	772.97	Hong Kong
646.86	Hong Kong	773.10	Hong Kong
646.98	Mexico	773.20	Republic of Korea
647.10	Mexico	774.20	India
649.37	Mexico	774.60	Hong Kong
650.87	Hong Kong	790.07	Hong Kong
651.01	Hong Kong	790.39	Republic of China (Taiwan)
652.36	Hong Kong	790.70	Republic of Korea
653.85	Republic of China (Taiwan)	791.20	Brazil
656.20	Hong Kong	792.50	Philippine Republic
661.65	Israel	792.60	Hong Kong
672.10	Hong Kong	792.75	Hong Kong
676.20	Mexico		
676.52	Mexico		
678.50	Republic of China (Taiwan)		
683.80	Hong Kong		
684.50	Hong Kong		
685.24	Republic of China (Taiwan)		
	Hong Kong		
	Republic of Korea		
	Singapore		

## (d) Products of Canada.

(i) Products of Canada imported into the customs territory of the United States, whether imported directly or indirectly, are subject to the rates of duty set forth in column numbered 1 of the schedules. The rates of duty for a Canadian article, as defined in subdivision (d)(1) of this headnote, apply only as shown in the said column numbered 1.

(ii) The term "Canadian article", as used in the schedules, means an article which is the product of Canada, but does not include any article produced with the use of materials imported into Canada which are products of any foreign country (except materials produced within the customs territory of the United States). If the aggregate value of such imported materials when landed at the Canadian port of entry (that is, the actual purchase price, or if not purchased, the export value, of such materials, plus, if not included therein, the cost of transporting such materials to Canada but exclusive of any landing cost and Canadian duty) was --

(A) with regard to any motor vehicle or automobile truck tractor entered on or before December 31, 1967, more than 60 percent of the appraised value of the article imported into the customs territory of the United States; and

(B) with regard to any other article (including any motor vehicle or automobile truck tractor entered after December 31, 1967), more than 50 percent of the appraised value of the article imported into the customs territory of the United States.

(e) Products of Communist Countries. Notwithstanding any of the foregoing provisions of this headnote, the rates of duty shown in column numbered 2 shall apply to products, whether imported directly or indirectly, of the following countries and areas pursuant to section 401 of the Tariff Classification Act of 1962, to section 231 or 257(e)(2) of the Trade Expansion Act of 1962, or to action taken by the President thereunder: 1/

Albania  
Bulgaria  
China (any part of which may be under Communist domination or control)  
Cuba 2/  
Czechoslovakia  
Estonia  
Germany (the Soviet zone and the Soviet sector of Berlin)  
Hungary  
Indochina (any part of Cambodia, Laos, or Vietnam which may be under Communist domination or control)  
Korea (any part of which may be under Communist domination or control)  
Kurile Islands  
Latvia  
Lithuania  
Outer Mongolia  
Southern Sakhalin  
Tanna Tuva  
Tibet  
Union of Soviet Socialist Republics and the area in East Prussia under the provisional administration of the Union of Soviet Socialist Republics.

(f) Products of All Other Countries. Products of all countries not previously mentioned in this headnote imported into the customs territory of the United States are subject to the rates of duty set forth in column numbered 1 of the schedules.

1/ In Proclamation 4369, dated April 24, 1975, the President, acting under authority of section 403(a) of the Trade Act of 1974 (80 Stat. 1970) amended general headnote 3(o) by deleting "Rumania", effective August 3, 1975, the date on which written notices of acceptance were exchanged, following adoption on July 28, 1975 by the Congress of a concurrent resolution of approval extending nondiscriminatory treatment to the products of the Socialist Republic of Rumania.

2/ In Proclamation 3447, dated February 3, 1962, the President, acting under authority of section 620(a) of the Foreign Assistance Act of 1961 (75 Stat. 445), as amended, prohibited the importation into the United States of all goods of Cuban origin and all goods imported from or through Cuba, subject to such exceptions as the Secretary of the Treasury determines to be consistent with the effective operation of the embargo.

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(g) Effective Date; Exceptions - Staged Rates of Duty. 1/ Except as specified below or as may be specified elsewhere, pursuant to section 501(a) of the Tariff Classification Act of 1962 (P.L. 87-456, approved May 24, 1962), the rates of duty in columns numbered 1 and 2 become effective with respect to articles entered on or after the 10th day following the date of the President's proclamation provided for in section 102 of the said Act. If, in column numbered 1, any rate of duty or part thereof is set forth in parenthesis, the effective date shall be governed as follows:

(i) If the rate in column numbered 1 has only one part (i.e., 8¢ (10¢) per lb.), the parenthetical rate (viz., 10¢ per lb.) shall be effective as to articles entered before July 1, 1964, and the other rate (viz., 8¢ per lb.) shall be effective as to articles entered on or after July 1, 1964.

(ii) If the rate in column numbered 1 has two or more parts (i.e., 5¢ per lb. + 50% ad val.) and has a parenthetical rate for either or both parts, each part of the rate shall be governed as if it were a one-part rate. For example, if a rate is expressed as "4¢ (4.5¢) per lb. + 8% (9%) ad val.", the rate applicable to articles entered before July 1, 1964, would be "4.5¢ per lb. + 9% ad val."; the rate applicable to articles entered on or after July 1, 1964, would be "4¢ per lb. + 8% ad val."

(iii) If the rate in column numbered 1 is marked with an asterisk (\*), the foregoing provisions of (i) and (ii) shall apply except that "January 1, 1964" shall be substituted for "July 1, 1964", wherever this latter date appears.

4. Modification or Amendment of Rates of Duty. Except as otherwise provided in the Appendix to the Tariff Schedules --

(a) a statutory rate of duty supersedes and terminates the existing rates of duty in both column numbered 1 and column numbered 2 unless otherwise specified in the amending statute;

(b) a rate of duty proclaimed pursuant to a concession granted in a trade agreement shall be reflected in column numbered 1 and, if higher than the then existing rate in column numbered 2, also in the latter column, and shall supersede but not terminate the then existing rate (or rates) in such column (or columns);

(c) a rate of duty proclaimed pursuant to section 336 of the Tariff Act of 1930 shall be reflected in both column numbered 1 and column numbered 2 and shall supersede but not terminate the then existing rates in such columns; and

(d) whenever a proclaimed rate is terminated or suspended, the rate shall revert, unless otherwise provided, to the next intervening proclaimed rate previously superseded but not terminated or, if none, to the statutory rate.

5. Intangibles. For the purposes of headnote 1 --

- (a) corpses, together with their coffins and accompanying flowers,
- (b) currency (metal or paper) in current circulation in any country and imported for monetary purposes,
- (c) electricity,
- (d) securities and similar evidences of value, and
- (e) vessels which are not "yachts or pleasure boats" within the purview of subpart D, part 6, of schedule 6,

are not articles subject to the provisions of these schedules.

6. Containers or Holders for Imported Merchandise.

For the purposes of the tariff schedules, containers or holders are subject to tariff treatment as follows:

(a) Imported Empty: Containers or holders if imported empty are subject to tariff treatment as imported articles and as such are subject to duty unless they are within the purview of a provision which specifically exempts them from duty.

(b) Not Imported Empty: Containers or holders if imported containing or holding articles are subject to tariff treatment as follows:

(i) The usual or ordinary types of shipping or transportation containers or holders, if not designed for, or capable of, reuse, and containers of usual types ordinarily sold at retail with their contents, are not subject to treatment as imported articles. Their cost, however, is, under section 402 or section 402a of the tariff act, a part of the value of their contents and if their contents are subject to an ad valorem rate of duty such containers or holders are, in effect, dutiable at the same rate as their contents, except that their cost is deductible from dutiable value upon submission of satisfactory proof that they are products of the United States which are being returned without having been advanced in value or improved in condition by any means while abroad.

(ii) The usual or ordinary types of shipping or transportation containers or holders, if designed for, or capable of, reuse, are subject to treatment as imported articles separate and distinct from their contents. Such holders or containers are not part of the dutiable value of their contents and are separately subject to duty upon each and every importation into the customs territory of the United States unless within the scope of a provision specifically exempting them from duty.

(iii) In the absence of context which requires otherwise, all other containers or holders are subject to the same treatment as specified in (ii) above for usual or ordinary types of shipping or transportation containers or holders designed for, or capable of, reuse.

7. Commingling of Articles. (a) Whenever articles subject to different rates of duty are so packed together or mingled that the quantity or value of each class of articles cannot be readily ascertained by customs officers (without physical segregation of the shipment or the contents of any entire package thereof), by one or more of the following means:

(i) sampling,

(ii) verification of packing lists or other documents filed at the time of entry, or

(iii) evidence showing performance of commercial settlement tests generally accepted in the trade and filed in such time and manner as may be prescribed by regulations of the Secretary of the Treasury, the commingled articles shall be subject to the highest rate of duty applicable to any part thereof unless the consignee or his agent segregates the articles pursuant to subdivision (b) hereof.

(b) Every segregation of articles made pursuant to this headnote shall be accomplished by the consignee or his agent at the risk and expense of the consignee within 30 days (unless the Secretary authorizes in writing a longer time) after the date of personal delivery or mailing, by such employee as the Secretary of the Treasury shall designate, of written notice to the consignee that the articles are commingled and that the quantity or value of each class of articles cannot be readily ascertained by customs officers. Every such segregation shall be accomplished under customs supervision, and the compensation and expenses of the supervising customs officers shall be reimbursed to the Government by the consignee under such regulations as the Secretary of the Treasury may prescribe.

(c) The foregoing provisions of this headnote do not apply with respect to any part of a shipment if the consignee or his agent furnishes, in such time and manner as may be prescribed by regulations of the Secretary of the Treasury, satisfactory proof --

(i) that such part (A) is commercially negligible, (B) is not capable of segregation without excessive cost, and (C) will not be segregated prior to its use in a manufacturing process or otherwise, and

(ii) that the commingling was not intended to avoid the payment of lawful duties.

Any article with respect to which such proof is furnished shall be considered for all customs purposes as a part of the article, subject to the next lower rate of duty, with which it is commingled.

(d) The foregoing provisions of this headnote do not apply with respect to any shipment if the consignee or his agent shall furnish, in such time and manner as may be prescribed by regulations of the Secretary of the Treasury, satisfactory proof --

(i) that the value of the commingled articles is less than the aggregate value would be if the shipment were segregated;

1/ The purpose of headnote 3(g) was to provide for an effective date for the rates of duty initially contained in the Tariff Schedules of the United States. By Presidential Proclamation 3548 of August 21, 1963, these rates of duty, except as noted in subparagraphs (i), (ii), and (iii) of headnote 3(g), became effective on August 31, 1963.

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1. Electric motors, direct current I Title

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INTERNATIONAL TRADE COMMISSION  
WASHINGTON, D.C. 20436

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