

UNITED STATES TARIFF COMMISSION

PAPER CONES FOR LOUDSPEAKERS:
FIBRE FORM CORPORATION
COLUMBIA CITY, INDIANA

Report to the President
Firm Investigation No. TEA-F-16
and
Worker Investigation No. TEA-W-55
Under Sections 301(c)(1) and 301(c)(2) of the Trade Expansion Act of 1962



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UNITED STATES TARIFF 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 would result in the disclosure of the operation of an individual firm. 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.

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REPORT TO THE PRESIDENT

U.S. Tariff Commission
February 16, 1971

To the President:

In accordance with section 301(f)(1) of the Trade Expansion Act of 1962 (76 Stat. 885), the U.S. Tariff Commission herein reports the results of investigations made under section 301(c)(1) and 301(c)(2) of that Act, relating to paper cones for loudspeakers.

On December 16, 1970, the Commission received petitions filed on behalf of the Fibre Form Corporation, Columbia City, Indiana, and the workers of that firm, for determinations of eligibility to apply for adjustment assistance under the Trade Expansion Act. On December 17, 1970, the Commission instituted investigations (TEA-F-16 and TEA-W-55) to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with the paper cones for loudspeakers produced by the aforementioned firm, are being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to such firm, and the unemployment or underemployment of a significant number or proportion of its workers.

Public notice of the investigations was published in the Federal Register (35 F.R. 19546) on December 23, 1970. No public hearing was requested, and none was held.

The information in this report was obtained chiefly from the petitioner, other domestic producers of paper cones, and domestic producers of loudspeakers and end products in which loudspeakers are used.

Findings of the Commission

On the basis of its investigations, the Commission finds (Commissioners Mize and Clubb not participating) that articles like or directly competitive with paper cones for loudspeakers produced by the Fibre Form Corporation, Columbia City, Indiana, are not, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to such firm or the unemployment or underemployment of a significant number or proportion of the workers of that company.

Views of Commissioners Leonard and Moore

The Commission's findings in these investigations relate to two petitions for determinations of eligibility to apply for adjustment assistance under the Trade Expansion Act of 1962--one filed on behalf of a firm, Fibre Form Corporation, and the other on behalf of the workers employed by that firm. We have joined in the Commission's negative determination for the reason that all of the conditions imposed by section 301(c)(1) for the firm investigation and section 301(c)(2) for the worker investigation have not been satisfied.

Before we could find in the affirmative, we would have to determine, inter alia, that an article "like or directly competitive" with an article produced by the Fibre Form Corporation is being imported in increased quantities as a result in major part of concessions granted under trade agreements. We do not so find. First, we have concluded that the identical article with that produced by Fibre Form is not being imported in increased quantities. Indeed, the product produced by Fibre Form--paper cones for loudspeakers--has, to the best of the Commission's knowledge, not been imported into the United States in recent years. Hence, imports of an article identical with that produced by Fibre Form have not only not increased, but

have been nil. Second, we have concluded that imports of articles which at least one of us considers to be "like or directly competitive" with the paper cones for loudspeakers produced by Fibre Form, while increasing, have not risen in major part as a result of trade-agreement concessions. However, each of us has reached this conclusion on the basis of different reasoning.

In these investigations, as in certain other recent investigations under section 301 of the Trade Expansion Act, the identification of the articles that are "like or directly competitive" with those produced at the domestic plant involved has been an issue of concern to the Commission. In the investigations at hand, the question arises whether paper cones contained in imported loudspeakers or paper cones contained in loudspeakers incorporated in imported consumer electronic products are, within the terms of the statute, "like or directly competitive" with the paper cones for loudspeakers produced by Fibre Form.

Commissioner Leonard, on his part, has concluded, as he did in another recent investigation, 1/ that it is not necessary for this question, which may have broad ramifications,

1/ U.S. Tariff Commission, Electronic Transformers: Former Workers of CP Electronics, Inc., Columbus, Indiana, . . . TC Pub. 351, January 1971, p. 13.

to be decided at this time. Even assuming that paper cones in such imported products are "like or directly competitive" with the paper cones produced by Fibre Form, imports of the products involved are not, in Commissioner Leonard's view, being entered in increased quantities as a result in major part of concessions granted under trade agreements. The U.S. rates of duty applicable to loudspeakers and to the major consumer electronic products containing loudspeakers (television receivers, radios, radio phonographs, record players, tape recorders) have been reduced substantially-- from rates of 30 percent to 35 percent ad valorem in 1930 before any trade agreements were negotiated to rates of 6 percent to 10.4 percent ad valorem currently. However, the major concessions, accounting in most instances for about two-thirds of the total duty reductions, occurred more than two decades ago--before most such consumer items had been significant items of trade. The recent Kennedy Round concessions have had only a minor effect on the rates of duty-- generally resulting in duty reductions of no more than 4 percentage points in the ad valorem rates. While U.S. imports of most of these products increased sharply in the late 1960's, such recent increases in trade could not have been caused in major part by trade-agreement concessions which had largely occurred many years before. In keeping with other recent

determinations, 1/ therefore, Commissioner Leonard has concluded that the increased imports of loudspeakers containing paper cones and consumer products containing such loudspeakers could not have been caused in major part by trade-agreement concessions.

Commissioner Moore, on his part, has concluded that the paper cones imported as integral parts of loudspeakers are, within the terms of the statute, "like or directly competitive" with the paper cones produced by Fibre Form.2/ He has determined, however, that the increased imports of loudspeakers having paper cones were not in major part a result of trade-agreement concessions. For this requirement to be met, in Commissioner Moore's view, he would have to conclude that, but for the trade-agreement concessions, imports would not be at substantially their present levels. The data obtained by the Commission during the course of the investigations establish that imported loudspeakers having paper cones sell in the U.S. market at prices materially below the comparable domestically

1/ In recent cases, Commissioner Leonard held that increased imports of television receivers and hi-fi stereo equipment were not in major part the result of concessions granted under trade agreements. See Electronic Transformers, previously cited; see also U.S. Tariff Commission, High Fidelity Stereo and Related Equipment: H.H. Scott, Inc., Maynard, Mass. . . . TC Pub. 355, January 1971, pp. 3-5; and Electrical Components and Apparatus and Allied Products: . . . F.W. Sickles Division . . . , TC Pub. 329, July 1970, p. 9.

2/ See report of Investigation No. TEA-W-31 on Electronic Transformers, cited above, at p. 9.

produced product, and that they would in most instances still considerably undersell domestic loudspeakers if the pre-trade-agreement rate of duty were applied. Consequently, since imports of loudspeakers having paper cones would likely be substantially at the present level were the 1930 rate of duty in force, Commissioner Moore has concluded that the increased imports of such loudspeakers have not resulted in major part from trade-agreement concessions.

Views of Commissioner Sutton

In this investigation I make a negative determination on the basis of the principles which I set forth in my statement in investigation No. TEA-W-35 (T.C. Publication No. 357, January 1971), on pages 7-15, with regard to rayon staple fibers.

In my earlier statement, I pointed out the legislative and trade-agreement background of the term "like or directly competitive" and the fact that, in such context --

* * * "like" articles are those which are substantially identical in inherent or intrinsic characteristics (i.e., materials from which made, appearance, quality, texture, etc.), and "directly competitive" articles are those which, although not substantially identical in their inherent or intrinsic characteristics, are substantially equivalent for commercial purposes, that is, are adapted to the same uses and are essentially interchangeable therefor.

I also pointed out the very limited extension of the scope of the term "directly competitive" made by section 405(4) of the Trade Expansion Act. ^{1/} The House report clearly shows that the term

^{1/} Sec. 405(4) of the TEA provides, as follows:

(4) An imported article is "directly competitive with" a domestic article at an earlier or later stage of processing, and a domestic article is "directly competitive with" an imported article at an earlier or later stage of processing, if the importation of the imported article has an economic effect on producers of the domestic article comparable to the effect of importation of articles in the same stage of processing as the domestic article. For purposes of this paragraph, the unprocessed article is at an earlier stage of processing.

"earlier or later stage of processing" in section 405(4) "contemplates that the article remains substantially the same during such stages of processing, and is not wholly transformed into a different article".

In the instant investigation, it was apparent at the time the petition was filed that it was not within the contemplation of the statutory provisions for the reason that no articles like or directly competitive with the paper loud speaker cones produced by Fibre Form Corporation were being imported. Neither paper cones, nor articles adapted to the same uses and essentially interchangeable therefor, nor such cones at an earlier or later stage of processing were being imported; and it is clear without question that, within the legislative intent of the statute, it is wholly untenable and impractical to regard loud speakers, radios, television receivers, or other fabricated goods having paper cones as components thereof as being paper cones at a later stage of processing. In the circumstances, the petition might have been dismissed without formal investigation.

As I pointed out in the rayon staple fiber case, the interpretative technique of aggregating comparable components in various assembled articles is of recent origin. The mischief inherent in this new technique, injected into use after almost a quarter of a century of settled interpretation, is incalculable. Throughout the history of the trade agreements program, tariff negotiations,

by all countries, have been conducted on an article-by-article, item-by-item basis on the principle that the import impact would be on like articles or on articles interchangeable therewith or substitutable therefor, i.e., directly competitive articles--not on articles so far removed therefrom in the chain of production as to make them totally unrelated in the market place. In contrast, the interpretation in question commits the Commission to analyses of the trade-off between imports of innumerable components and their effect upon many domestic assemblies and end products of which they are a part, and between imports of various assemblies and end products and their effect upon countless domestic components of the types assembled therein.

Obviously, it is tremendously difficult within a 60-day period to investigate and determine the cause-and-effect relationship between concession-generated imports and domestic output on a one-to-one relationship in terms of a product line. To make a determination as to the causal relationship of each of those classes of imports on the production of each of the domestic firms and related groups of workers that may produce only a single component--the separate identity of which is ultimately completely submerged by the processes employed at the various levels of manufacture--perverts the possibility of validating the economic criteria set forth in the statute. It is estimated, for example, that more than

15,000 separate precision parts are used in the assembly of an auto. To assume that one can adequately evaluate, measure and weigh all of the economic forces involved in the conditions of competition between U.S. and foreign autos of various kinds and then translate these into a direct causal relationship with respect to a given supplier's component (say of a bearing) challenges one's sense of logic as well as the intendment of the Legislature. Under this concept, for many classes of imports, gratuitous determinations not contemplated by law are being made with respect to the statutory criteria for tariff adjustment and adjustment assistance on the basis of an inadequate development of the necessary information and analyses. In addition, if such interpretative technique persists the Commission's investigative and analytical facilities will continue to be unnecessarily taxed beyond their capacity.

Views of Commissioner Young

Paper cones per se are not imported into the United States. Competition from imported paper cones, as experienced by the Fibre Form Corporation, exists only to the extent that such cones enter the United States as a component of loudspeakers. Paper cones represent a small part of the cost of producing loudspeakers (about 10 percent). Thus, to determine whether imports of paper cones contained in loudspeakers have increased and if such increase resulted in major part because of concessions granted under trade agreements, it would be necessary to determine the various causes of increased importation of loudspeakers and their relative importance. Such a determination is not necessary as I have concluded that the injury being suffered by the petitioners is attributable primarily to factors other than imports.

Sales of paper cones by the Fibre Form Corporation peaked in 1966, a year of generally high business activity. The irregular decline thereafter began with the business recession in 1967. Additionally, the company's share of the sales (in terms of value) of the six reporting firms fell from * * * percent in 1965 to * * * percent in 1969. Its failure to get into commercial production of the larger cones (10 to 12 inch), as have its competitors, no doubt accounts for much of its competitive losses to its domestic counterparts. Imports of loudspeakers using cones of this size are insignificant. * * *

In conclusion, it is my finding that there is no basis for adjustment assistance for the petitioners under the provisions of the Trade Expansion Act of 1962; it is inescapable that factors other than the increased imports of loudspeakers containing paper cones are so prevalent

that I cannot conclude that such imports are the major factor in causing or threatening to cause the petitioner's serious injury or unemployment or underemployment.

INFORMATION OBTAINED IN THE INVESTIGATION

Description of article under investigation

The Fibre Form Corporation produces paper cones for loudspeakers (also referred to as "diaphragms"). Loudspeakers generally are manufactured with cones of paper or metal. The article here considered is paper cones which are utilized in the vast majority of loudspeakers, domestically produced or imported. Loudspeakers are mostly used in consumer electronic products, such as in television receivers, radios, and phonographs. The cones are resiliently mounted in the loudspeaker body and are set in motion by an armature (voice coil and magnet) which is energized by the speaker current; the signal from a power amplifier goes to the loudspeaker's voice coil, and the interaction of the energized voice coil and the energy from the magnet causes the paper cone to vibrate in relation to the strength of the signal, thereby giving off sounds recognizable to the human ear.

There are two basic types of paper cones: (1) Formed paper cones * * * and (2) seamed paper cones. The formed cones are made by depositing fibers from a cellulosic pulp slurry onto a mold of the contour and shape desired in the product. To achieve uniform fiber deposition, a vacuum is applied behind the mold. Some machines employ only a single mold; others have multiple molds affixed to a conveyor (normally a rotating

cylinder) so that continuous operation can be achieved. After forming, the wet cones (called preforms) are dried. The dry cones are subsequently treated with special chemicals or lacquers to make them resistant to moisture and at the same time give them additional strength and rigidity necessary for the function intended.

Seamed paper cones are produced from specialty papers; the paper is either chemically treated during the papermaking process or the cone is so treated when it is being produced. The cone manufacturer die-cuts the paper into the required shapes (blanks) and forms the blanks into cone shapes by cementing them at the ends.. The cones are then moistened and molded between heated dies.

Producers of loudspeakers rank both types of paper cones as approximately equal in terms of quality, performance, and cost.

The quality of imported loudspeakers is equal to the quality of loudspeakers produced in the United States. In fact industry representatives consider the quality of Japanese loudspeakers as excellent; however, they do complain of being unable to compete price-wise.

U.S. tariff treatment

Paper cones for loudspeakers are classified under TSUS item 684.70, as parts of loudspeakers. Loudspeakers also are provided for under that TSUS item. The current rate of duty provided for under item 684.70 is 9 percent ad valorem; it will be further

reduced to 7.5 percent ad valorem effective January 1, 1972. The intermediate rates established by various trade agreements and the reductions scheduled under the Kennedy Round of the General Agreement on Tariffs and Trade (GATT) are indicated in the following tabulation:

<u>Authority</u>	<u>Tariff class</u>	<u>Rate of duty</u> (percent ad valorem)
	<u>Paragraph</u>	
Tariff Act of 1930	353	35
Bilateral with U.K., 1939	"	25
GATT, 1948	"	15
GATT, 1951	"	13.75
	<u>TSUS item No.</u>	
TSUS, 1963	684.70	15
GATT, 1968	"	13
GATT, 1969	"	12
GATT, 1970	"	10
GATT, 1971	"	9
GATT, 1972	"	7.5

The rate of duty effective in 1963 under the TSUS is based upon imports of the several articles entered under par. 353 at various rates of duty but principally at 15 percent ad valorem.

The duties on the principal articles in which loudspeakers with paper cones are incorporated have been reduced from statutory rates ranging from 30.0-35.0 percent ad valorem to rates ranging from 5.0-10.4 percent ad valorem beginning January 1, 1972 (table 1 in the appendix).

U.S. production and consumption

Paper cones.--Presently in the United States there are believed to be 9 to 11 producers of paper cones for loudspeakers. Seven of them produce paper cones for sale to others; four are located in Illinois, two in Wisconsin, and one (the petitioner), in Indiana. In addition, there are at least two, and perhaps four, large manufacturers of consumer electronic products who also produce paper cones for their own use.

For nearly all of the market producers, the manufacture of paper cones is the main source of income. Most of them also produce, however, related components for loudspeakers, mainly secondary suspension springs (also referred to as "spiders") made from resin-impregnated gauze.

* * *

Official data are not available on the annual production of paper cones for loudspeakers. Data supplied by the domestic producers to the Commission indicate that annual market shipments of such cones fluctuated during the period 1965-69. Shipments peaked at about 67 million pieces in 1966 when they were about 7 million pieces higher than in 1965 * * *. They declined substantially to about 46 million pieces in 1967, rose to about 51 million pieces

in 1968 and declined to 49 million pieces in 1969. In the latter year, shipments were 18 percent lower than in 1965 and 27 percent lower than in 1966. During the period January-November 1970, shipments were about 32 percent lower than in the corresponding period in 1969. No data are available on captive production of paper cones.

In general, the cost of paper cones represents about 10 percent of the cost of loudspeakers and varies according to such factors as cone specifications, speaker size, and magnet weight. According to information received from market producers, prices of cones ex factory range generally from about 5 cents to 25 cents per piece.

For most market producers the production of 10-inch and 12-inch size cones now constitutes a substantial share of the value of their business; imports of loudspeakers utilizing these sizes of cones are presently very small.

Loudspeakers.--Some 22 firms are known to manufacture loudspeakers for sale that contain paper cones. The number of firms which produce loudspeakers for their own use is not known but believed to be small, perhaps about four; these firms, however, are believed to produce about 30 to 40 percent of annual domestic output of loudspeakers.

Data received from U.S. producers of loudspeakers (with paper cones) for sale (noncaptive) show that the quantity of loudspeakers shipped annually during the period 1965-69 peaked at about 41 million in 1966; this quantity was about 9 million pieces higher than in 1965

(table 3). Shipments declined to about 34 million pieces in 1967, and then rose to 38 million pieces in 1969. In the latter year shipments were 19 percent higher than in 1965, but 7 percent lower than in 1966. During the period January-November 1970 the quantity shipped was about 24 percent lower than in the corresponding period in 1969.

The unit value of shipments of loudspeakers increased each year during 1965-69--from \$1.69 in 1965 to \$2.50 in 1969 (table 3). Consequently, in 1969 the value of shipments was 76 percent higher than in 1965 and 31 percent higher than in 1966. During the period January-November 1970 the value of shipments was 18 percent lower than in the corresponding period in 1969, despite the increase in the unit value of shipments to \$2.62 in 1970.

The increase in the unit values of shipments during 1965-70 reflects in large part a shift of U.S. noncaptive production from smaller to larger loudspeakers.

The value of U.S. apparent consumption of loudspeakers of all types (based on statistics of the U.S. Department of Commerce) has fluctuated in recent years. In 1968 (the last year for which data are available) the value of consumption was 7 percent higher than in 1965 (table 4). The ratio of imports to consumption increased from 6.4 percent in 1965 to 14.6 percent in 1968. Since the value of imports used in the calculation is the f.o.b. value foreign port (thus not comparable to the valuation of U.S. factory shipments),

the foregoing ratios are smaller than they would be if the imported articles had been valued at their wholesale prices in the United States.

Consumer electronic products.--The sales in the United States of consumer electronic products, which contain an average of about $1\frac{1}{2}$ loudspeakers each, have increased markedly in recent years (tables 5-9). Consumption of such products increased during the 1965-69 period, as shown below, in thousands of units:

<u>Item</u>	<u>Consumption</u>	
	<u>1965</u>	<u>1969</u>
Televisions-----	10,756	12,791
Radios-----	40,737	51,458
Radio phonographs-----	1,927	3,516
Record players-----	<u>1/</u>	9,273
Tape recorders-----	<u>1/</u>	11,874
Total-----	<u>2/</u>	<u>88,912</u>

1/ Quantity data for these items are not available for 1965; however, based on value, consumption of record players by 1969 is known to have been about 11 percent larger than in 1965, and consumption of tape recorders to have nearly tripled.

2/ Not available.

For U.S. manufacturers' shipments, imports, exports, and apparent consumption for each of the above products, see tables 5-9.

U.S. imports

Paper cones.--So far as can be determined, paper cones for loudspeakers have not been imported into the United States in recent years.

Loudspeakers.--U.S. imports of loudspeakers of all types were first separately reported in U.S. import statistics for the year 1960. The quantity and the value of such imports, as compiled from official statistics of the U.S. Department of Commerce, the calculated average unit value, and the rate of duty for specified years and periods, 1960 to January-November 1970, are shown in the following tabulation:

<u>Year</u>	<u>Quantity</u> <u>(1,000</u> <u>units)</u>	<u>Value</u> <u>(1,000</u> <u>dollars)</u>	<u>Average</u> <u>unit</u> <u>value</u> <u>(dollars)</u>	<u>Rate of</u> <u>duty</u> <u>(Percent ad</u> <u>valorem)</u>
1960-----	601	1,747	2.91	13.75
1961-----	809	2,320	2.87	13.75
1962-----	1,738	2,994	1.72	13.75
1963:				
Jan.-Aug---	1,942	2,055	1.06	13.75
Sept.-Dec--	1,104	1,440	1.31	15
1964-----	8,164	4,744	.58	15
1965-----	11,759	6,757	.57	15
1966-----	19,593	10,358	.53	15
1967-----	15,585	10,557	.68	15
1968-----	23,061	16,298	.71	13
1969-----	30,787	26,086	.85	12
Jan.-Nov.:				
1969-----	27,888	23,296	.84	12
1970-----	28,662	30,182	1.05	10

The bulk of U.S. imports of loudspeakers come from Japan. According to the Bureau of Customs, production of loudspeakers in Japan is heavily concentrated among three of their largest manufacturers; they account for about three quarters of total Japanese loudspeaker production. During 1964-69, annual imports from Japan accounted for 84 percent to 97 percent of total U.S. imports in

terms of quantity and for 72 percent to 86 percent in terms of value (table 10). The United Kingdom, Canada, West Germany, and Ireland also have been regular suppliers.

The average annual unit values of imports from Japan rose gradually from \$0.46 in 1964 to \$0.78 in 1969 and amounted to \$1.01 for the January-November 1970 period (tables 10 and 11). According to industry sources, the increase in the average unit value of Japanese loudspeakers during 1964-70 is due to a gradual switch in the product mix toward larger and more expensive speakers. Prices of Japanese speakers of a given type and size are believed to have remained essentially unchanged during the period under review.

The great bulk of loudspeakers sold in the United States, both imported and domestically produced, are in the 8-inch and smaller sizes. Japanese exports to the United States of large speakers (over 8 inches), unlike their exports of smaller speakers, are hampered by the dual freight rate system applied for ocean freight rates (weight versus displacement, whichever renders the carrier the greater revenue). Ocean freight rates for the larger and bulkier loudspeakers are substantially higher than for the smaller loudspeakers and can constitute a much greater share of the duty-paid landed price in the United States.

U.S. imports under TSUS item 807.00.--Imports of loudspeakers assembled abroad in part from U.S. components amounted to about 4 percent of total imports of loudspeakers in 1969; annual imports

for 1966-69 of such loudspeakers are shown as follows, in thousands of units and thousands of dollars:

<u>Year</u>	<u>Quantity</u>	<u>Total value</u>	<u>Dutiabale value</u>	<u>U.S. value</u>
1966-----	1,594	797	381	416
1967-----	808	264	179	85
1968-----	164	305	262	43
1969-----	299	1,121	827	294

In 1966 and 1967 Ireland was by far the leading source of supply. In 1968-69 Canada was the leading supplier with Ireland an important source; in 1969 Japan and Mexico became suppliers of note. The leading suppliers for January-November 1970 were Canada, Mexico, and the Republic of China.

* * * * *

Consumer electronic products.--Imports of consumer electronic products, each containing about 1½ speakers, have substantially increased during the 1965-69 period (tables 5-9), in thousands of units:

<u>Item</u>	<u>Imports</u>	
	<u>1965</u>	<u>1969</u>
Televisions-----	1,048	4,034
Radios-----	19,351	36,468
Radio phonographs-----	275	1,658
Record players-----	1/	4,260
Tape recorders-----	1/	11,493
Total-----	<u>2/</u>	<u>57,913</u>

1/ Quantity data for these items are not available for 1965; however, based on value, imports of record players by 1969 are known to have been about 31 percent larger than in 1965 and imports of tape recorders more than quadrupled.

2/ Not available.

An estimate of the number of loudspeakers contained in U.S. imports of consumer electronic products is shown in table 12.

Prices

* * * * *

The Fibre Form Corporation

* * * * *

APPENDIX

Table 1.--Television receivers, radio receivers, phonographs, and tape recorders: U.S. tariff-rate history, 1930-72

(Rates in percent ad valorem)						
Tariff act or trade agreement	Effective date	Tariff rate for--				
		Tele- vision re- ceivers	Radio receivers	Radio phono- graphs	Phono- graphs	Tape re- corders
Tariff Act of 1930-----	1930 .	35	35	35	30	30-35
Bilateral agreement with United Kingdom-----	1939	25	25	25	30	25-30
GATT-----	1948	15	15	15	15	15
Do-----	1951	12.5	12.5	13.75	15	13.75-15
Do-----	1956	11.5	12.5	13.75	15	13.75-15
Do-----	1957	11	12.5	13.75	15	13.75-15
Do-----	1958	10.5	12.5	13.75	15	13.75-15
Do-----	1962	10	12.5	13.75	13.5	13.75-15
TSUS-----	1963	10	12.5	13.75	^{1/} 12.0	11.5-15
Do-----	1966	10	12.5	13.75	^{2/} 11.5	11.5-15
Do-----	1967	10	12.5	13.75	11.5	11.5
			Not Solid state	solid state		
GATT-----	1968	9	12	11	12	10
Do-----	1969	8	11.5	10	11	9
Do-----	1970	7	11	8.5	9.5	8
Do-----	1971	6	10.4	7	8	6.5
Do-----	1972	5	10.4	6	6.5	5.5

^{1/} Effective July 1-August 30, 1963. ^{2/} Effective December 7, 1965

Table 3.--Loudspeakers with paper cones: U.S. producers' shipments,
1965-69 and January-November 1969 and 1970

Year or period	Quantity	Value	Unit
	<u>1,000</u>	<u>1,000</u>	<u>Per</u>
	<u>pieces</u>	<u>dollars</u>	<u>piece</u>
1965-----	32,025	54,115	\$1.69
1966-----	41,055	72,264	1.76
1967-----	33,617	68,896	2.05
1968-----	36,974	89,880	2.43
1969-----	38,037	95,046	2.50
Jan.-Nov.:			
1969-----	33,561	82,265	2.45
1970-----	25,660	67,146	2.62

Source: Compiled from questionnaire data reported to the Tariff Commission by domestic producers.

Table 4.--Loudspeakers of all types: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1964-69

Year	Shipments <u>1/</u>	Imports	Exports	Apparent consumption <u>1/</u>	Ratio (percent) imports to consumption
Quantity (1,000 units)					
1964-----	-	8,164	286	-	-
1965-----	-	11,759	346	-	-
1966-----	-	19,593	<u>1/</u>	-	-
1967-----	-	15,585	<u>1/</u>	-	-
1968-----	-	23,061	<u>1/</u>	-	-
1969-----	-	30,787	<u>1/</u>	-	-
Value (1,000 dollars)					
1964-----	80,365	4,744	2,069	83,040	5.7
1965-----	101,170	6,757	3,060	104,867	6.4
1966-----	107,524	10,358	4,373	113,509	9.1
1967-----	94,472	10,557	5,281	99,748	10.6
1968-----	101,749	16,298	6,337	111,710	14.6
1969-----	<u>2/</u>	26,086	9,138	<u>2/</u>	-

1/ Comparable quantity data not available.

2/ Not available.

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

Note.--Data in this table may include small quantities and values of loudspeakers not used in consumer electronic products.

Table 5.--Television receivers and combinations: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1964-69

Year	Shipments	Imports	Ex-ports ^{1/}	Apparent consumption	Ratio (percent) imports to consumption
Quantity (1,000 units)					
1964-----	8,713	^{2/} 715	203	9,225	7.8
1965-----	9,889	^{2/} 1,048	181	10,756	9.7
1966-----	11,673	1,524	168	13,024	11.7
1967-----	9,701	1,614	139	11,170	14.4
1968-----	10,328	2,711	144	12,892	21.0
1969-----	8,914	4,034	157	12,791	31.5
Value (1,000 dollars)					
1964-----	1,271,206	^{2/} 39,225	23,422	1,287,009	3.0
1965-----	1,685,479	^{2/} 59,586	21,261	1,723,804	3.5
1966-----	2,349,564	115,733	26,291	2,437,793	4.7
1967-----	2,191,509	125,582	23,577	2,291,781	5.5
1968-----	2,222,492	203,771	27,771	2,392,772	8.5
1969-----	1,859,484	295,855	33,287	2,121,978	13.9

^{1/} Data may not be fully comparable with data on shipments and imports.

^{2/} Excludes data on imports of television receiver combinations entered under item 685.50.

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

Table 6.--Radio receivers: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1964-69

Year	Shipments	Imports	Exports ^{1/}	Apparent consumption	Ratio (percent) imports to consumption
Quantity (1,000 units)					
1964-----	17,542	13,604	61	31,085	43.8
1965-----	21,738	19,351	352	40,737	47.5
1966-----	22,956	25,129	342	47,743	52.6
1967-----	17,527	24,200	437	41,290	58.6
1968-----	17,510	30,161	644	47,027	64.1
1969-----	15,760	36,468	770	51,458	70.9
Value (1,000 dollars)					
1964-----	337,695	92,964	1,630	429,029	21.7
1965-----	395,444	125,017	8,668	511,793	24.4
1966-----	434,149	144,107	8,001	570,255	25.3
1967-----	362,297	172,135	9,410	525,022	32.8
1968-----	394,920	254,798	11,595	638,123	39.9
1969-----	375,479	336,136	15,258	696,357	48.3

^{1/} Data may not be fully comparable with data on shipments and imports.

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

Table 7.--Radio phonographs: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1964-69

Year	Shipments	Imports	Exports ^{1/}	Apparent consumption	Ratio (percent) imports to consumption
Quantity (1,000 units)					
1964-----	1,346	153	7	1,492	10.3
1965-----	1,662	275	10	1,927	14.3
1966-----	1,702	828	17	2,513	33.0
1967-----	1,730	1,315	18	3,027	43.4
1968-----	1,982	1,611	19	3,574	45.1
1969-----	1,886	1,658	28	3,516	47.2
Value (1,000 dollars)					
1964-----	217,261	10,571	1,024	226,808	4.7
1965-----	278,363	11,890	1,506	288,667	4.1
1966-----	311,509	16,771	2,288	325,992	5.1
1967-----	324,185	25,731	2,606	347,310	7.4
1968-----	378,682	29,712	3,008	405,386	7.3
1969-----	336,842	36,313	3,819	369,336	9.8

^{1/} Data may not be fully comparable with data on shipments and imports.

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

Table 8.--Phonographs and record players: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1964-69

Year	Shipments	Imports	Exports ^{1/}	Apparent consumption	Ratio (percent) imports to consumption
Quantity (1,000 units)					
1964-----	2,547	<u>2/</u>	58	-	-
1965-----	3,956	<u>2/</u>	69	-	-
1966-----	4,686	<u>2/</u>	64	-	-
1967-----	4,285	<u>2/</u>	61	-	-
1968-----	4,748	3,820	71	8,497	45.0
1969-----	5,083	4,260	70	9,273	45.9
Value (1,000 dollars)					
1964-----	144,120	24,276	17,683	150,713	16.1
1965-----	205,522	36,079	18,922	222,679	16.2
1966-----	219,657	54,452	16,981	257,128	21.2
1967-----	201,178	37,795	17,128	221,845	17.0
1968-----	222,696	42,604	20,817	244,483	17.4
1969-----	218,249	47,318	18,088	247,479	19.1

^{1/} Data may not be fully comparable with data on shipments and imports.

^{2/} Comparable data not available.

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

Table 9.--Tape players and tape recorders: U.S. factory shipments, imports for consumption, exports of domestic merchandise, and apparent consumption, 1964-69

Year	Shipments	Imports	Exports ^{1/}	Apparent consumption	Ratio (percent) imports to consumption
	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	<u>1,000 units</u>	
1964-----	385	<u>2/</u>	<u>3/</u>	-	-
1965-----	566	<u>2/</u>	126	-	-
1966-----	608	<u>2/</u>	163	-	-
1967-----	846	<u>2/</u>	204	-	-
1968-----	679	7,737	321	8,095	95.6
1969-----	650	11,493	269	11,874	96.8

^{1/} Data may not be fully comparable with data on shipments and imports.

^{2/} Comparable data not available.

^{3/} Not available.

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

Table 10.--Loudspeakers of all types: U.S. imports for consumption, by principal sources, 1964-69

Country	1964	1965	1966	1967	1968	1969
	Quantity (1,000 pieces)					
Japan-----	7,444	9,889	17,433	14,175	22,419	28,870
United Kingdom---	136	178	274	133	193	244
Canada-----	9	10	9	19	15	28
West Germany-----	10	20	19	35	94	83
Ireland-----	493	1,493	1,736	994	194	102
Denmark-----	23	37	28	17	23	110
Republic of China 1/-----	-	6	20	16	31	792
Netherlands-----	7	43	39	124	37	228
Mexico-----	-	-	-	2	-	153
All other-----	3	83	35	70	54	178
Total-----	8,164	11,759	19,593	15,585	23,061	30,787
	Foreign value (1,000 dollars)					
Japan-----	3,393	4,829	7,932	8,463	14,087	22,576
United Kingdom---	831	867	1,254	949	1,089	1,120
Canada-----	57	51	53	125	316	551
West Germany-----	112	162	140	299	508	525
Ireland-----	242	663	740	272	53	374
Denmark-----	54	42	39	27	36	283
Republic of China 1/-----	-	26	64	38	45	275
Netherlands-----	7	40	82	291	79	172
Mexico-----	-	-	-	2	1	118
All other-----	48	77	52	91	84	93
Total-----	4,744	6,757	10,358	10,557	16,298	26,086
	Unit value (per piece)					
Japan-----	\$0.46	\$0.49	\$0.45	\$0.60	\$0.63	\$0.78
United Kingdom---	6.11	4.87	4.58	7.14	5.64	4.59
Canada-----	6.45	5.33	5.63	6.75	20.44	19.65
West Germany-----	11.53	7.96	7.43	8.43	5.42	6.35
Ireland-----	.49	.44	.43	.27	.27	3.65
Denmark-----	2.31	1.12	1.42	1.58	1.53	2.57
Republic of China 1/-----	-	4.72	3.24	2.32	1.45	.35
Netherlands-----	1.10	.94	2.10	2.35	2.16	.75
Mexico-----	-	-	-	.80	2.56	.77
All other-----	1.13	.92	1.49	1.31	1.55	.52
Average-----	.58	.57	.53	.68	.71	.85

1/ Country designation changed from Taiwan to Republic of China, effective January 1, 1968.

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

Note.--Unit values computed from unrounded figures.

Table 11.--Loudspeakers of all types: U.S. imports for consumption, January-November 1969 and January-November 1970

Country	January-November--					
	1969			1970		
	Quantity	Value	Unit	Quantity	Value	Unit
	<u>1,000</u>	<u>1,000</u>	value	<u>1,000</u>	<u>1,000</u>	value
	<u>pieces</u>	<u>dollars</u>		<u>pieces</u>	<u>dollars</u>	
Japan-----	26,453	20,334	\$0.77	25,570	25,859	\$1.01
United Kingdom---	147	1,001	6.80	153	708	4.64
Canada-----	26	486	18.71	19	526	27.10
West Germany---	78	500	6.42	88	479	5.42
Ireland-----	47	172	3.64	21	82	3.99
Denmark-----	98	272	2.77	160	788	4.92
Republic of China-----	525	199	.38	1,077	528	.49
Netherlands---	210	151	.72	665	394	.59
Mexico-----	136	102	.75	441	267	.61
All other---	167	79	.48	467	548	1.17
Total---	27,888	23,296		28,662	30,182	
Average---			.84			1.05

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

Note.--Unit values computed from unrounded figures.

Table 12.--Loudspeakers and consumer electronic products: U.S. imports for consumption, and the estimated number of speakers included in the imports of consumer electronic products, 1965-69

(In thousands of units)

Year	Consumer electronic products		Loudspeakers		
	entered as such	as such	Entered as such	Estimate of all others entered ^{1/}	Estimated total imports
1965-----	25,674	11,759	38,511	50,270	
1966-----	34,481	19,593	51,722	71,315	
1967-----	35,729	15,583	53,594	69,177	
1968-----	46,040	23,061	69,060	92,121	
1969-----	57,915	30,000	86,870	116,870	

^{1/} Based on the estimated average of 1.5 loudspeakers per imported unit of consumer electronic products.

