

UNITED STATES TARIFF COMMISSION

FILM AND MICA CAPACITORS:
WORKERS OF THE ELECTRO MOTIVE CORP.,
FLORENCE, S. C.
A SUBSIDIARY OF INTERNATIONAL ELECTRONICS CORP.

Report to the President
on investigation No. TEA-W-245
Under Section 301(c)(2) of the Trade Expansion Act of 1962



TC Publication 698
Washington, D. C.
November 1974

UNITED STATES TARIFF COMMISSION

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REPORT TO THE PRESIDENT

U.S. Tariff Commission,
November 8, 1974.

To the President:

In accordance with section 301 of the Trade Expansion Act of 1962 (TEA)(19 U.S.C. 1901), the U.S. Tariff Commission herein reports the results of investigation No. TEA-W-245 made under section 301(c)(2) of the act to determine whether, as a result in major part of concessions granted under trade agreements, articles like or directly competitive with film and mica capacitors (of the types provided for in items 685.80 and 685.81 of the Tariff Schedules of the United States (TSUS)) produced by the the Electro Motive Corp., Florence, S.C., a wholly owned subsidiary of International Electronics Corp., Melville, N.Y., are being imported into the United States in such increased quantities as to cause, or threaten to cause, the unemployment or underemployment of a significant number or proportion of the workers of such firm or an appropriate subdivision thereof.

The investigation was instituted on September 13, 1974, on the basis of a petition for adjustment assistance filed under section 301(a)(2) of the act by the Communications Workers of America (AFL-CIO) on behalf of the workers and former workers of the Florence, S.C. plant. The petition was received on September 9, 1974.

Public notice of the investigation was published in the Federal Register (39 F. R. 33752) on September 19, 1974. No public hearing was requested, and none was held.

The information herein was obtained from the petitioning workers, Electro Motive Corp., International Electronics Corp., trade associations, and the Commission's files.

Finding of the Commission

On the basis of its investigation, the Commission finds 1/ (Vice Chairman Parker and Commissioner Leonard, dissenting) that articles like or directly competitive with film and mica capacitors (of the types provided for in items 685.80 and 685.81 of the Tariff Schedules of the United States) produced by the Electro Motive Corp., Florence, S.C., a wholly owned subsidiary of International Electronics Corp., Melville, N.Y., are, 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 the unemployment or underemployment of a significant number or proportion of the workers of such firm or an appropriate subdivision thereof.

1/ Commissioner Minchew did not participate in the decision.

Views of Chairman Bedell, Commissioners Moore and Ablondi

The investigation was instituted pursuant to a petition filed under section 301(c)(2) of the Trade Expansion Act of 1962 for a determination of eligibility to apply for adjustment assistance on behalf of certain workers formerly employed at the Florence, S. C., plant of Electro Motive Corp., (hereinafter referred to as "Electro").

The primary articles produced at this plant by Electro were mica and film capacitors. The capacitors produced were primarily sold to U.S. original equipment manufacturers of telephone and telegraph equipment, business machines, and television receivers.

Prior to 1967, Electro produced capacitors at two locations-- Florence, S. C., and Willimantic, Conn. The firm began producing * * * at a plant in Jamaica in 1967 and * * * at a plant in Haiti in 1974. Electro is a wholly owned subsidiary of International Electronics Corp. (hereinafter referred to as "IEC"). In addition, IEC owns a majority interest in a plant in Taiwan from which it has imported * * *.

Under section 301(c)(2) of the Trade Expansion Act of 1962, each of the following criteria must be met before an affirmative finding may be made by the Commission.

- (1) Articles like or directly competitive with those produced by the workers concerned must be imported in increased quantities;

- (2) The increased imports must be a result in major part of concessions granted under trade agreements;
- (3) The workers concerned must be unemployed or underemployed, or threatened with unemployment or underemployment; and
- (4) The increased imports resulting from trade-agreement concessions must be the major factor causing or threatening to cause the unemployment or underemployment.

With respect to the products covered by this investigation, our judgment is that each of the four criteria outlined above has been met. Accordingly, we have made an affirmative determination based on the following considerations.

Increased imports

Based on information available to the Commission, the quantity of imports of film and paper capacitors increased 147 percent between 1971 and 1973, and the quantity of imports of mica capacitors increased 145 percent during the same period.

The total value of all types of electrical capacitors imported into the United States in 1973 was \$107 million, triple the value entered in 1969. The total value of film and paper and mica capacitors imported into the United States in 1973 was also approximately three times the value entered in 1969. During January-June 1974, the value of U. S. imports of all electrical capacitors was 63 percent larger than in the comparable period in 1973; of film and paper capacitors, 67 percent larger; and of mica capacitors, 47 percent larger.

Based on the above information, we conclude that articles like or directly competitive with those produced by the workers of the Florence, S. C., plant of Electro have been imported into the United States in increased quantities.

In major part

The second criterion, that increased imports must be a result in major part of concessions granted in trade agreements has also been met. In 1930, the rate of duty applicable to electrical capacitors was 35 percent ad valorem. By 1971, the rate of duty had been reduced pursuant to trade agreements, to 10 percent ad valorem, a decrease of 25 percentage points.

The duty savings stemming from this substantial reduction afforded an important benefit to imported capacitors by reducing the cost of importation, and thereby making the imported articles substantially more competitive in the U.S. market. If trade-agreement concessions had not been made, imported articles which are like or directly competitive with articles produced by the workers at the Florence plant would have been subject to an increased cost of 25 percentage points times the dutiable value and imports of these articles would not have increased to their current levels.

Unemployment or underemployment

This criterion has also been met. Employment at the Florence plant declined * * *.

Major factor

The fourth criterion is that increased imports resulting from trade-agreement concessions must be the major factor causing or threatening to cause unemployment or underemployment. Although other factors may have contributed in some measure, the concession-generated increased imports were the major factor causing the unemployment or underemployment of Electro's workers. During the period 1969-73 when the share of domestic consumption of electrical capacitors represented by imports more than doubled, Electro's shipments * * *. Like many other U.S. producers of electrical capacitors Electro * * *.

Conclusion

Based on the information available and the foregoing considerations, we find that articles like or directly competitive with the film and mica capacitors produced by the Florence, S. C., plant of Electro, a subsidiary of IEC, are, as a result in major part of concessions granted under trade agreements, being imported into the United States in such increased quantities as to be the major factor causing the unemployment or underemployment of the workers and former workers of such firm.

View of Vice Chairman Parker

I have made a negative determination in this proceeding because the statutory criteria for an affirmative determination clearly have not been met. These criteria, among other things, require that imports of the article in question must be increasing, that such imports must be the result in major part of concessions granted under trade agreements, and that such increased imports resulting from trade-agreement concessions must be the major factor causing or threatening to cause the unemployment or underemployment of the workers.

The evidence developed in the investigation shows that the shipments of electrical capacitors at the Florence, S. C., plant * * *. Although employment declined * * *. There is no evidence whatsoever, however, which relates the decline in employment * * * to imports or to imports resulting in major part from trade-agreement concessions. The record is barren * * *. The record does show that imports of capacitors have increased. It also shows that Electro Motive Corp. imports of capacitors have entered * * *

* * *. In prior proceedings involving the import of capacitors, it was disclosed that the countries from which capacitors are being imported have provided production and export incentives. Such incentives, although clearly an aid to production and export, are not cognizable under the criteria established by the Trade Expansion Act of 1962.

As heretofore indicated, the statute requires that the increased imports must be the result in major part of trade-agreement concessions. The major reduction in duties resulting from the trade agreements occurred 20 to 30 years ago, 1939-1948, when the duties were reduced from 35 percent to 25 percent and 15 percent ad valorem. The duties were further reduced in 1968 from 12-1/2 percent to 10 percent in 1971 in a 4-year staged reduction as a result of the Kennedy Round of Trade Negotiations. There is no evidence showing that the unemployment which occurred * * * has any relation to imports resulting from trade-agreement concessions.

For the reasons stated above I have made a negative determination.

View of Commissioner Leonard

My determination in the instant case is negative because one of the statutory criteria has not been met, i. e., that the increase in imports of film and mica capacitors like or directly competitive with those produced by the Electro Motive Corp., Florence, S.C., a wholly owned subsidiary of International Electronics Corp., Melville, N.Y., is the result in major part of concessions granted under trade agreements. My reasoning in support of this determination is set forth in statements of my views in earlier Commission investigations on capacitors under the Trade Expansion Act. 1/

1/ Aluminum Electrolytic Capacitors: . . . Report to the President on Investigation No. TEA-W-166 . . . , TC Publication 544, 1973, pp. 9-12.

Radio Frequency Coils, Molded Ceramic Capacitors: . . . Report to the President on Investigation No. TEA-W-157 . . . , TC Publication 524, 1972, pp. 9-12.

Capacitors and Semiconductors: . . . Report to the President on Investigation No. TEA-F-22, TC Publication 394, 1971, pp. 3-4.

Electrolytic Capacitors: . . . Report to the President on Investigation No. TEA-F-11 . . . , TC Publication 335, 1970, pp. 3-5.

INFORMATION OBTAINED IN THE INVESTIGATION

Description and Uses

The articles which are the subject of this investigation include two types of fixed capacitors. The specific types of capacitors involved are film and mica. A capacitor is a device used to store electrical energy. It is composed of two conductors of electrical energy (plates) separated by a nonconducting material (dielectric). When a voltage is applied between the two plates (acting as electrodes), passage of electrons through the dielectric is restricted and they collect at one dielectric-electrode interface. The measure of the capacitor's ability to store electrical energy is its capacitance, expressed in microfarads and picofarads (one-millionth of a microfarad, formerly micromicrofarads). Capacitance depends on the dimensions of the plates and upon the nature and dimensions of the dielectric. A capacitor is designed to a specific voltage rating, indicating the maximum voltage it can withstand without being destroyed.

Most capacitors are fixed, that is, the rated capacitance cannot be altered at will. Some capacitors, however, are variable, that is, the capacitance can be altered by means of a screw, as in trimmers, or by turning a shaft, as in tuning capacitors.

Capacitors are made of various materials, the choice of materials depending on the specific capacitance, voltage rating, and degree of dependability required. The types of capacitors are generally designated by the dielectric material used; subtypes reflect differences

in such features as configuration, method of attachment, and covering material.

Film capacitors utilize thin plastic films of various polymers as the dielectric. The electrodes may be foil or thin coatings of metal deposited directly on the dielectric. The film and foil are wound to form a capacitor of the desired characteristics, and the device is encapsulated with a plastic coating. Paper capacitors are very similar to, and are often interchangeable with, film capacitors. The paper is impregnated with dielectric liquids prior to rolling and packaging.

Mica capacitors utilize thin sheets of mica as the dielectric. The electrodes are foil or thin coatings of metal deposited on the mica. The mica sheets, often quite small, are stacked to obtain the desired characteristics of the capacitor. The stack is usually packaged in a plastic coating. Film capacitors are widely used in television receivers and other electronic products. Mica capacitors are often used in telecommunications equipment and computers where close tolerances and temperature stability are important factors.

Various capacitors (electrolytic, ceramic, glass, and chips) are used in circuits similar to those which use film and mica. There has been an increased usage of chip capacitors with the advent of integrated circuits.

U.S. Tariff Treatment

Electrical capacitors are dutiable under item 685.80 of the Tariff Schedules of the United States at 10 percent ad valorem. In the

Tariff Act of 1930 as originally enacted, these articles were dutiable under paragraph 353 at the rate of 35 percent ad valorem. The effective dates of the various rates of duty applicable to electrical capacitors under the Tariff Act of 1930, as modified by trade-agreement concessions, the Tariff Classification Act of 1962, and the Automotive Products Trade Act of 1965 are given in the following table.

Electrical capacitors, TSUS items 685.80 and 658.81:
U.S. rates of duty, 1930-72

Effective date	Authority	Rate of duty in percent ad valorem	
		TSUS item 685.80	TSUS item 685.81
June 18, 1930-----	Tariff Act of 1930	35.0	
Jan. 1, 1939-----	Bilateral agreement with the United King- dom.	25.0	
Jan. 1, 1948-----	GATT <u>1</u> / concession	15.0	
June 6, 1951-----	do-----	12.5	
Aug. 31, 1963-----	Tariff Classification Act of 1962.	12.5	
Jan. 18, 1965-----	Automotive Products Trade Act of 1965	12.5	Free
Jan. 1, 1968-----	GATT concession	12.0	do.
Jan. 1, 1969-----	do-----	11.0	do.
Jan. 1, 1970-----	do-----	11.0	do.
Jan. 1, 1971 <u>2</u> /-----	do-----	10.0	do.
Jan. 1, 1972-----	do-----	10.0	do.

1/ General Agreement on Tariffs and Trade.

2/ An additional 10-percent import duty was imposed from Aug. 16 to Dec. 19, 1971 (by Presidential Proclamations 4074 and 4098). On July 8, 1974, the United States Customs Court held that Presidential Proclamation 4074 was invalid (Yoshida International, Inc. v. United States, Customs Decisions 4550). This ruling has been appealed to the United States Court of Customs and Patent Appeals.

Electrical capacitors are incorporated in many products, such as electronic equipment, business machines, telephone and telegraph equipment, and instruments for measurement, analysis, and control.

The duties on these products were generally 35 to 40 percent ad valorem in 1930 and are now 6 to 10.4 percent ad valorem.

Certain imports of electrical capacitors and articles in which they are used are provided a partial duty exemption when entered under TSUS items 806.30 and 807.00. Under tariff item 807.00, imported articles assembled in foreign countries with fabricated components that have been manufactured, in whole or in part, in the United States are subject to duty on the full value of the imported article less the value of U.S.-fabricated components contained therein. No further processing in the United States is required for articles imported under item 807.00. The duty exemption on the U.S. materials contained in the imported articles has not been the subject of a trade-agreement concession, but the rate of duty applicable to the dutiable value of the imported articles may have been the subject of such concessions.

Under tariff item 806.30 articles of metal (except precious metal) that have been manufactured, or subjected to a process of manufacture, in the United States and exported for processing and return to the United States for further processing, are subject to duty only on the value of the foreign processing. The remaining value is duty exempt. Again, the duty exemption has not been the subject of a trade-agreement concession.

The rates of duty applicable since 1964 and the total value of U.S. imports for consumption, total value of wholly foreign imports, total value, dutiable value, and duty exempt value under TSUS items

806.30 and 807.00, and the total value entered duty exempt under the Automotive Products Trade Act of 1965 are shown in table 1.

U.S. Producers

The number of major firms that produce electrical capacitors in the United States has not changed significantly in recent years, remaining at approximately 100. Of these, about 10 firms produce mica capacitors and some 30 manufacture film capacitors. Electro Motive Corp. provides about * * * percent of U.S. apparent consumption of mica capacitors; * * *. Electro Motive Corp. supplies about * * * percent of U.S. apparent consumption of film capacitors. Many of the major producers import some capacitors or subassemblies of capacitors from foreign subsidiaries.

U.S. Trade

U.S. apparent consumption and shipments. --The value of U.S. apparent consumption of electrical capacitors which amounted to \$413 million in 1969 dropped to about \$355 million in 1970 and 1971 and then increased to an estimated \$570 million in 1973 (table 2). Shipments by U.S. producers followed the same trend.

Each year from 1969 to 1973, film and paper capacitors accounted for approximately 25 percent of the value of U.S. apparent consumption of electrical capacitors. The value of U.S. apparent consumption of film and paper capacitors was \$117 million in 1969. Consumption declined to \$88 million in 1971, but thereafter increased to \$136

million in 1973 (table 3). Shipments by U.S. producers followed a similar trend.

The value of U.S. apparent consumption of mica capacitors declined from \$20 million in 1969 to \$17 million in 1970 before rising to \$30 million in 1973 (table 4). Such consumption accounted for approximately 5 percent of U.S. apparent consumption of electrical capacitors. The annual value of shipments by U.S. producers of mica capacitors followed the same trend as U.S. apparent consumption of such capacitors.

U.S. imports. --The annual value of U.S. imports of electrical capacitors increased steadily from \$32 million in 1969 to \$108 million in 1973. These imports accounted for an increasing share of U.S. apparent consumption; in 1969 the share was 7.7 percent and in 1973, 18.8 percent. The value of the imports exceeded the value of U.S. exports of electrical capacitors in 1971-1973. During January-June 1974, the value of U.S. imports of electrical capacitors was \$75 million, 63 percent larger than in the corresponding period in 1973.

Film and paper capacitors represented approximately 15 percent of the value of U.S. imports of electrical capacitors during 1969-1973. U.S. imports of film and paper capacitors increased in every year during 1969-1973, except 1971 when there was a slight decline. Imports accounted for 4 percent of the value of U.S. apparent consumption of film and paper capacitors in 1969, and that share increased, irregularly, to 10 percent in 1973. Imports exceeded exports each year during 1969-1973. During January-June 1974, the

value of U.S. imports of film and paper capacitors were valued at \$10 million, 67 percent greater than in the corresponding period in 1973.

Mica capacitors represented approximately 4 percent of the value of U.S. imports of electrical capacitors during 1969-1973. The value of U.S. imports of mica capacitors increased annually during 1969-1973. The share of U.S. apparent consumption of mica capacitors represented by such imports increased from 6 percent in 1969 to 12 percent in 1971, decreased to 11 percent in 1972, and increased to 13 percent in 1973. The value of U.S. imports of mica capacitors has exceeded the value of U.S. exports of such capacitors each year during 1969-1973. During January-June 1974, the value of U.S. imports of mica capacitors was \$2.5 million, 47 percent larger than in the corresponding period in 1973.

The annual value of U.S. imports of electrical capacitors entered under TSUS items 806.30 and 807.00 increased steadily from \$6.6 million in 1969 to \$32 million in 1973 (table 5). Such imports accounted for an increasing share of the total value of imports of capacitors. The share rose from 21 percent in 1969 to 30 percent in 1973. Imports under item 807.00 were more than 5 times the value of those imported under item 806.30; however, the value entered under each item increased each year during 1970-1973. The value of U.S. components contained in the imports under TSUS item 807.00 increased from 45 percent in 1969 to 53 percent in 1970 and then decreased to 40 percent in 1973.

U.S. imports of film and paper and mica capacitors were negligible under TSUS item 806.30. The value of U.S. imports of film and paper capacitors entered under item 807.00 increased from 3 percent of the total value of imports of such capacitors in 1971 to 10 percent in 1973. The value of U.S. components of film and paper capacitors returned duty exempt under TSUS item decreased rapidly from an unusually high percentage of 68 percent in 1971 to 16 percent in 1973.

Imports entered under TSUS item 807.00 accounted for 78 percent of the total value of U.S. imports of mica capacitors in 1971 and decreased to 65 percent in 1973. The value of U.S. components returned duty exempt represented an unusually high 51 percent of the value entered under item 807.00 in 1971; that share declined abruptly to 12 percent in 1973.

U.S. exports. -- U.S. exports of electrical capacitors increased from \$33 million in 1969 to \$40 million in 1970, decreased to \$30 million in 1971, and then increased to \$56 million in 1973. They represented about 10 percent of the value of U.S. producers' total shipments throughout the period. Film and paper capacitors accounted for approximately 10 percent of the total and mica capacitors accounted for about 1 percent.

The Market

The market for capacitors encompasses nearly all industries that manufacture electrical products. The major markets * * * are the industries producing electronic equipment,

business machines, telephone and telegraph equipment, and instruments for measurement, analysis, and control. The value of shipments of these industries and the percentage increase in value of shipments over the previous year is shown in table 6. According to the latest information available to the Department of Commerce, the electronic equipment industry and the telephone and telegraph industry will experience declines from the projected shipments in 1974. The electronic equipment industry will experience a decrease in shipments of 6 percent in 1974 (a 10 percentage point change in the projection) and the telephone and telegraph industry will not achieve 2 percentage points of the expected growth. The business machines industry, according to the Department of Commerce, will achieve a growth in value of shipments of 7 percentage points more than that projected and the instruments industry 3 percentage points more than that expected.

* * * * *

Data are available for the TV set market for January-June 1973 and January-June 1974, and are shown in the following table.

Television receivers, monochrome and color: Sales in the United States of U.S. produced and imported units, January-June 1973 and January-June 1974

(Units in thousands, except as noted)

Item	January-June		Percentage increase (decrease)
	1973	1974	
Color sets:			
U.S. produced-----	4,310	4,050	(6.0)
Imported-----	682	623	(8.7)
Monochrome sets:			
U.S. produced-----	1,263	1,019	(19.3)
Imported-----	2,410	2,349	(2.5)
Total sets:			
U.S. produced-----	5,573	5,069	(9.0)
Imported-----	3,092	2,972	(3.9)

Source: Production data published in Television Digest, August 12, 1974. Import data published in official statistics of the U.S. Department of Commerce.

The television receiver industry, * * *, has experienced a significant decline in sales of domestically-produced, as well as imported, television sets in the first half of calendar 1974. Further, press reports indicate a significant decline in inventories held by domestic producers of television sets.

Electro Motive Corp.

Electro Motive Corp. was founded and incorporated as Electro Motive Manufacturing Corp. in Connecticut in the early 1930's by the late Mr. Philip Lauter. The firm manufactured mica, film, and ceramic capacitors at Willimantic, Conn. until 1960 when it ceased producing ceramic capacitors. The Florence, S.C., plant was constructed during 1959-1960 and the manufacture of film capacitors was transferred

to Florence from the Willimantic plant upon completion of the new facility. Some production of mica capacitors was transferred to the Florence plant in 1961 shortly before the death of Mr. Lauter. Ownership of the firm passed to Mrs. Lauter and to a foundation in the Lauter name. * * *. In 1973 the firm, which had been privately held, was purchased by International Electronics Corp. (IEC) of Melville, N. Y., * * *. The firm recently changed its name to Electro Motive Corp.

IEC was founded and incorporated in New York in 1950 by Benjamin Grossman. The firm was an import-export operation, importing receiving tubes from the United Kingdom and exporting sundry items. * * *. As the Japanese became major producers of electronic components, imports by IEC came increasingly from Japan.

* * * * *

* * *. In July 1973, IEC, which is publicly-owned, purchased Electro Motive Corp. for \$8 million. * * *.

IEC's net sales for its fiscal year ending January 31, 1973, were \$11 million and do not reflect sales of Electro Motive Corp. For the fiscal year ending Jan. 31, 1974, the net sales of IEC were \$34 million of which \$23 million were accounted for by Electro Motive Corp.'s operations from March 1, 1973, through Jan. 31, 1974.

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STATISTICAL APPENDIX

Table 1.--Electrical capacitors: U.S. rates of duty and imports for consumption, total, U.S. articles processed or assembled abroad and entered under tariff items 806.30 and 807.00, and imports entered under the provisions of the Automotive Products Trade Act of 1965 (APTA), 1/ 1964-73 and January-June 1974

Period	Rate of duty	Imports						Entered under APTA (not dutiable)
		Total	Wholly foreign articles	U.S. articles processed or assembled abroad			U.S. value (not dutiable)	
			Total value	Total value	Dutiable value	U.S. value (not dutiable)		
Percent ad valorem	<u>1,000</u> dollars	<u>1,000</u> dollars	<u>1,000</u> dollars	<u>1,000</u> dollars	<u>1,000</u> dollars	<u>1,000</u> dollars		
1964-----	12.5	8,356	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	-	
1965-----	12.5	15,541	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	-	
1966-----	12.5	24,525	24,076	324	174	150	125	
1967-----	12.5	23,579	22,465	849	557	291	265	
1968-----	12	26,930	23,301	3,391	1,944	1,447	238	
1969-----	11	32,237	25,193	6,608	3,651	2,957	436	
1970-----	11	33,223	23,276	9,222	4,717	4,505	725	
1971-----	10	40,193	26,607	12,242	5,927	5,747	1,344	
1972-----	10	60,736	40,363	18,362	9,933	8,429	2,021	
1973-----	10	107,501	73,179	31,669	18,877	12,792	2,653	
1974 (January-June)-----	10	75,102	50,266	24,123	13,210	10,913	713	

1/ Under the provisions of the Automotive Products Trade Act, which went into effect Dec. 7, 1965, certain imports from Canada are exempt from duty.

2/ Not available.

Source: Compiled from data in official publications of the U.S. Department of Commerce and the U.S. Tariff Commission.

Table 2.--Electrical capacitors: U.S. shipments, imports for consumption, exports of domestic merchandise, apparent domestic consumption, and ratio of imports to consumption, 1969-73

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>Percent</u>
1969-----	418,537	32,237	32,765	418,009	7.7
1970-----	361,755	33,223	40,421	354,557	9.4
1971-----	343,921	40,193	30,425	353,689	11.4
1972-----	401,708	60,736	39,978	422,466	14.4
1973-----	^{1/} 520,000	107,501	56,236	571,265	18.8

^{1/} Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 3.--Film and paper capacitors: U.S. shipments, imports for consumption, exports of domestic merchandise, apparent consumption, and ratio of imports to consumption, 1969-73

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>Percent</u>
1969-----	114,790	^{1/} 4,707	2,895	116,602	4.0
1970-----	91,232	^{1/} 6,332	3,022	94,542	6.7
1971-----	84,751	5,244	2,518	87,477	6.0
1972-----	97,102	8,951	4,136	101,917	8.8
1973-----	^{1/} 125,000	14,321	3,745	135,576	10.6

^{1/} Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 4.--Mica capacitors: U.S. shipments, imports for consumption, exports of domestic merchandise, apparent consumption, by value, and ratio of imports to consumption, 1969-73.

Year	Shipments	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>1,000</u> <u>dollars</u>	<u>Percent</u>
1969-----	19,621	<u>1/</u> 1,150	<u>1/</u> 235	20,536	5.6
1970-----	16,230	<u>1/</u> 1,200	<u>1/</u> 194	17,236	7.0
1971-----	17,714	2,489	<u>1/</u> 212	19,991	12.5
1972-----	20,096	2,532	<u>1/</u> 241	22,387	11.3
1973-----	<u>1/</u> 26,000	3,795	313	29,482	12.9

1/ Estimated by the U.S. Tariff Commission.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table 5.--Electrical capacitors: U.S. imports, by type, under TSUS items 806.30 and 807.00 by total value and value of U.S. components returned, 1969-73 and January-June 1974

(In thousands of dollars)

Item	1969	1970	1971	1972	1973	Jan.-June 1974
Film and paper capacitors:						
Total-----	1/	1/	130.5	641.2	1,385.5	981.8
U.S. component-----	1/	1/	88.0	127.3	227.2	148.3
Mica capacitors:						
Total-----	1/	1/	1,944.3	1,827.8	2,450.8	1,797.3
U.S. component-----	1/	1/	987.2	241.6	288.4	244.6
Other capacitors:						
Total-----	1/	1/	10,166.8	15,893.0	27,832.8	21,343.6
U.S. component-----	1/	1/	4,790.6	8,058.9	12,275.9	10,519.8
All capacitors:						
Total-----	6,608.1	8,573.5	12,241.6	18,362.0	31,669.1	24,122.7
U.S. component-----	2,957.3	4,505.9	5,865.8	8,427.8	12,791.5	10,912.7

1/ Data are not available.

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

Table 6.--Selected industries: Value of shipments and percent increase over those in the preceding year, 1973 and 1974

Industry	Shipments, 1973		Shipments projected, 1974		Revised shipments projected, 1974	
	Value	Percent increase from 1972	Value	Percent increase from 1973	Value	Percent increase or decrease from 1973
	Million dollars		Million dollars		Million dollars	
Electronic equipment-----	23,455	7.4	24,400	4.0	22,048	(6.0)
Business machine-----	8,445	6.8	9,580	13.4	10,134	20.0
Telephone and telegraph-----	4,960	13.0	5,560	12.0	5,456	10.0
Instruments for measurement, analysis, and control-----	1,800	6.0	1,920	7.0	1,980	10.0

Source: Compiled from data supplied by the U.S. Department of Commerce, Office of Business Research and Analysis.

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