

1972

UNITED STATES TARIFF COMMISSION

PANTY HOSE

Report on Investigation No. 337-25
Under the Provisions of Section 337 of Title III
of the Tariff Act of 1930, as Amended



TC Publication 471
Washington, D.C.
March 1972

UNITED STATES TARIFF COMMISSION

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UNITED STATES TARIFF COMMISSION
Washington, D.C.

March 31, 1972

In the matter of an investigation	Ø	Docket No. 25
with regard to the importation	Ø	Section 337
and domestic sale of certain panty	Ø	Tariff Act of 1930, as amended
hose	Ø	

INTRODUCTION

On January 30, 1970, Tights, Inc., of Greensboro, N.C., hereinafter referred to as complainant, filed a complaint with the U.S. Tariff Commission requesting relief under section 337 of the Tariff Act of 1930, as amended (19 U.S.C. 1337), alleging unfair methods of competition and unfair acts in the importation and sale of certain panty hose. Complainant alleges that its U.S. Patent No. Re. 25,360 1/ covers panty hose made with a U-shaped seam, and that the importation and sale of such panty hose by Charles Department Store, Asheboro, N.C., and Brown Hosiery, New York, N.Y., among others, hereinafter referred to as respondents, have the effect or tendency to destroy or substantially injure an efficiently and economically operated industry in the United States.

Notice of receipt of the complaint and the initiation of the preliminary inquiry was published in the Federal Register (35 F.R. 3139) on February 18, 1970. Interested parties were given until April 1, 1970, to file written views pertinent to the subject matter. Upon written request of one of the named respondents, the Commission

1/ A copy of the patent appears in appendix B.

extended the time for filing written views until June 1, 1970. Copies of the complaint, the notice of investigation, and the extension of time for filing written views were served upon all known interested parties. One domestic producer and one selling agent for domestically produced panty hose submitted views.

The Commission conducted a preliminary inquiry in accordance with section 203.3 of the Commission's Rules of Practice and Procedure (19 CFR 203.3) to determine whether a full investigation was warranted and, if so, whether it should recommend to the President that a temporary exclusion order be issued pursuant to 19 U.S.C. 1337(f). The standard adopted by the Commission for deciding whether the issuance of such an order should be recommended (as indicated to the parties by letter notice) is (1) whether a prima facie showing of violation of section 337 has been established and (2) whether immediate and substantial harm to the domestic industry would result if a temporary exclusion order was not issued.

Upon conclusion of the preliminary inquiry, the Tariff Commission, on March 24, 1971, gave notice of ordering a full investigation. It also agreed to recommend to the President that he issue a temporary exclusion order to forbid entry into the United States of panty hose embraced within the claim of U.S. Patent No. Re. 25,360, in accordance with the provisions of section 337(f), until the investigation ordered is completed. 1/ Commissioner Sutton dissented from the

1/ Chairman Bedell, Vice Chairman Parker, and Commissioner Young did not participate in this decision because they were not members of the Commission when the determination was made.

recommendation that the President issue a temporary exclusion order. Notice of the full investigation was given in the Federal Register (36 F.R. 5821) on March 27, 1971.

A public hearing was held on August 10, 1971, and, after recess, was resumed on September 8, 1971. Notice of the hearing was given in the Federal Register (36 F.R. 13071) on July 13, 1971, and notice of the resumption of the hearing was given in the Federal Register (36 F.R. 15769) on August 18, 1971. Copies of the notice of investigation, notice of public hearing, and notice of resumption of the public hearing were served on all persons known to be associated with the importation, sale, or use of the imported panty hose.

On February 17, 1972, the President directed the Secretary of the Treasury to enforce a temporary exclusion order against imports of panty hose manufactured in accordance with the claims of U.S. Patent Nos. 2,826,760 and Re. 25,360. The notice of this restriction of importation was published in the Federal Register (37 F.R. 4456) on March 3, 1972.

FINDINGS AND RECOMMENDATION OF THE COMMISSION 1/

The Commission finds violation of section 337(a) of the Tariff Act of 1930 by unfair methods of competition and unfair acts in the importation and sale of panty hose manufactured in accordance with the claim of U.S. Patent No. Re. 25,360 owned by complainant Tights, Inc., the effect or tendency of which is to destroy or substantially injure an industry, efficiently and economically operated, in the United States.

Accordingly, the Commission recommends that, in accordance with section 337(e) of the Tariff Act of 1930, the President direct the Secretary of the Treasury to instruct customs officers to exclude from entry into the United States panty hose manufactured in accordance with the claim of U.S. Patent No. Re. 25,360 until expiration of the patent, except where the importation is made under license of the registered owner of said patent.

1/ Vice Chairman Parker and Commissioner Young did not participate in the decision.

CONSIDERATIONS IN SUPPORT OF THE
COMMISSION'S FINDINGS

On January 30, 1970, Tights, Inc., of Greensboro, N.C., filed a petition with the U.S. Tariff Commission under section 337 of the Tariff Act of 1930, asking that the Commission recommend to the President that certain panty hose be permanently barred from entry into the United States.

Section 337 of the Tariff Act of 1930 declares unlawful unfair methods of competition and unfair acts in the importation of articles into the United States, or in their sale by the owner, importer, consignee, or agent of either, the effect or tendency of which is (a) to destroy or substantially injure an efficiently and economically operated domestic industry, or (b) to prevent the establishment of such an industry, or (c) to restrain or monopolize trade and commerce in the United States. 1/

The relevant facts are as follows: Tights, Inc., is the owner of U.S. Patent No. Re. 25,360 which was originally issued on March 18, 1958, and expires in March 1975. The patent relates to a unitary garment which serves as stockings and underpants. Tights, Inc., has entered into license agreements with many domestic producers to be effective during the life of the patent. Large numbers of U-seamed panty hose began entering the United States in 1969 and have continued

1/ The effect or tendency of unfair practices to prevent the establishment of an efficiently and economically operated domestic industry or to restrain or monopolize trade and commerce are not at issue here.

to enter ever since. The imported U-seamed panty hose are in direct competition with those being produced in the United States by producers licensed under the patent.

Unfair Act

First to be considered in an attempt to apply section 337 to a fact situation is whether there is the requisite unfair method of competition or unfair act. In the past, the Commission has consistently held (and has been upheld upon court review) that the unauthorized importation of articles or sale of such articles made in accordance with a valid U.S. patent is an unfair method of competition or unfair act within the meaning of section 337. 1/

The Commission has viewed and examined the imported U-seamed panty hose along with the U-seamed panty hose being produced domestically under the patent.

The imported panty hose are formed through the use of a U-seam as claimed by the patent. We find that the imported U-seamed panty hose are made in accordance with the Tights patent and that the importation of these panty hose into the United States constitutes an unfair method of competition and unfair act within the meaning of section 337.

1/ See In re Von Clemm, 43 C.C.P.A. (Customs) 56, 229 F.2d 441, 443 (1955); In re Orion Co., 22 C.C.P.A. (Customs) 149, 71 F.2d 458, 465 (1934); and In re Northern Pigment Co., 22 C.C.P.A. (Customs) 166, 71 F.2d 447, 455 (1934). See also Frischer & Co. v. Bakelite Corp., 17 C.C.P.A. (Customs) 494, 39 F.2d 247, 260, cert. denied 282 U.S. 852 (1930).

Effect or Tendency to Injure

Having found that the importation of U-seamed panty hose constitutes an unfair method of competition and unfair act within the meaning of section 337, we must now consider whether the "effect or tendency" of the importation is "to destroy or substantially injure" a domestic industry. The domestic industry is composed of the patentee and the domestic facilities of its licensees engaged in the manufacture of U-seamed panty hose. 1/

U-seamed panty hose have been imported into the United States in large quantities since 1968. These U-seamed panty hose have been consistently sold at prices lower than those of the domestic industry. The sales of imported U-seamed panty hose have been substantial when compared with licensed domestic sales of such panty hose. The sales of the unauthorized imports represent a loss of potential sales to the domestic industry and loss of potential royalties to Tights, Inc.-- those due on unauthorized imports and those from former domestic licensees which refuse to pay royalties on account of unauthorized imports. While unauthorized imports of U-seamed panty hose dropped in 1970 from their peak in 1969, they have demonstrated the ability to sell at prices below those of such panty hose made by the domestic industry and to achieve a substantial penetration of the U.S. market.

1/ Commissioner Sutton holds that the domestic industry is composed of the domestic facilities of the licensees of the patent engaged in the manufacture of U-seamed panty hose.

With offending imports showing a substantial increase in the first quarter of 1971 over the comparable period in 1970, there is no reason to believe that they will not continue to increase in the future if they are allowed to continue unchecked.

The Commission's investigation disclosed that the domestic industry is economically and efficiently operated. The domestic industry uses modern and efficient manufacturing equipment and continues to introduce up-to-date equipment and procedures when available.

It is clear to us from the evidence that the effect or tendency of the unfair methods of competition and unfair acts in the importation of U-seamed panty hose is to substantially injure an efficiently and economically operated domestic industry.

Conclusion

In view of the foregoing, we conclude that all of the requirements of section 337 have been met; and, therefore, we recommend that the President direct the Secretary of the Treasury to exclude from entry into the United States panty hose embraced within the claim of U.S. Patent No. Re. 25,360 until expiration of said patent, except where the importation is under license of the registered owner.

ARTICLES UNDER INVESTIGATION

Panty hose are a garment for women and girls which are used in lieu of separate panties and hose. Panty hose became popular with the advent of the miniskirt.

Panty hose are made in numerous styles and grades. They differ in the sizes and types of yarns used (e.g., rigid versus stretch yarns), the closeness or openness of the knit construction, the fit and size of the leg portions (boarded versus unboarded), and the method of assembly.

Many panty hose are made from two elongated "stockings" known as panty hose blanks, which are usually produced on a circular hosiery machine. The stockings are slit from the top part way down the leg, and the cut edges are sewn together to form the top or panty portion of the garment. In the patented method, the top parts of the two blanks are slit and sewn together along the slits in a continuous U-shaped seam, forming the panty portion of the garment, without a separate crotch piece or extra panel. The U-shaped seam covered by the patent can be detected by external examination of the garment. In other methods, a diamond-shaped gusset or triangular back panel is inserted between the slits in the two stockings. These panels are claimed by some producers and importers to provide better fit and comfort than the U-seam method.

Panty hose are also made by attaching the hosiery portion to preexisting panties (either permanently or on a replaceable basis); they are also made by a single knitting operation, without any seams,

on machines different from those used in knitting the panty hose blanks. Four types of panty hose were presented to the Commission for inspection. The first was a sample of panty hose produced domestically by a licensee of Tights, Inc., incorporating the U-shaped seam as claimed by the patent. The second sample was a pair of panty hose imported into the United States, also incorporating the U-shaped seam as claimed by the patent. Two other types of panty hose were presented. One was constructed with a panel in the rear portions, and the other with a crotch piece. Neither incorporated the U-shaped seam as claimed in the patent.

Patent Allegedly Violated

The patent under consideration is U.S. Patent No. Re. 25,360, owned by the complainant. This product patent was originally issued March 18, 1958; it expires in March 1975. Complainant alleges (1) that its patent specifically covers all panty hose manufactured with a U-seam, but not those with a separate crotch piece or panel or those that are seamless, and (2) that said patent is being infringed by the importation into, and sale in, the United States of panty hose having a U-seam.

Tights, Inc., has no production facilities; it has, however, entered into many license agreements with domestic producers regarding the patent. The present licensees (both producers and importers) under these agreements are Chadbourn, Inc., Hanes Corp. (Hosiery Division), Hanes of Canada, Ltd., Wiscasset Mills Co., Sew Special, Inc.,

Morganton Hosiery Mills, Inc., Variety Knitting Co., Rice Hosiery Corp., Pretty Polly, Ltd., Hamilton Lingerie Co., Ltd., The Lovable Co., Dependable Marketing Agency, Ltd., Bear Brand Hosiery Co., and Indian Head Hosiery Co. Kayser-Roth Corp., a licensee when the complaint was filed, cancelled the licensing agreement effective August 1, 1970.

Claim of U.S. Patent No. Re. 25,360

The patent contains only one claim. 1/ Element (a) provides for a single garment which is a combination panty and stockings. Element (b) calls for the use of a circular knit pair of seamless stockings. These stockings have foot, leg, and welt 2/ portions as specified by element (c). Element (d) provides that the welt portions of the stockings be of stretchable knit yarn and that this welt portion extend from above the knee to the waist. Element (e) specifies that the welts in the upper portion of the stockings have a longitudinal

1/ The claim of U.S. Patent No. Re. 25,360 reads as follows (letter designations have been added for convenience):

- (a) A combination panty and stocking
 - (b) formed from circularly knit fabric comprising a pair of stockings of seamless knit construction
 - (c) having foot, leg, and welt portions
 - (d) said welt portions being knit of stretchable yarn and adapted to extend above the knee to the waist of the wearer
 - (e) said welts each having a longitudinal slit intermediate the front and rear of the stocking
 - (f) said first and second stockings being oriented to position the longitudinal slits adjacent each other
 - (g) and a seam binding the corresponding front and rear edges formed by the longitudinal slits to form a U-shaped seam
 - (h) intermediate a single enlarged welt and defining the panty.
- 2/ The top strip or hem of heavier yarn in machine-knit stockings.

slit between the front and rear of the stockings. Element (f) provides that the stockings are positioned so that the longitudinal slits are adjacent to each other. Element (g) specifies that a U-shaped seam is formed by the binding of the perimeter of one stocking's longitudinal slit to the perimeter of the other stocking's longitudinal slit. Lastly, element (h) provides that the binding together of the welts of both stockings forms one large welt or the panty portion of the garment.

Other Contentions of Complainant

The complainant has also alleged that unfinished panty hose, such as elongated stockings (i.e., panty hose blanks), which are designed for use as parts of panty hose, should be excluded from entry. The basis for this position is 35 U.S.C. 271(c). 1/

The Commission did not consider this allegation for the purpose of its findings and recommendation. This allegation was not raised until the date of the public hearing. Since the issue was not raised until after public notice of the hearing, prospective respondents did not have an opportunity to respond to it.

1/ 35 U.S.C. 271(c) reads as follows:

Whoever sells a component of a patented machine, manufacture, combination or composition, or a material or apparatus for use in practicing a patented process, constituting a material part of the invention, knowing the same to be especially made or especially adapted for use in an infringement of such patent, and not a staple article or commodity of commerce suitable for substantial noninfringing use, shall be liable as a contributory infringer.

The Question of Patent Misuse

Tights, Inc., has licensed all parties who have applied for a license under the patent. Their license agreements are nonexclusive and have been submitted for the record. Initially, Hudson Hosiery Co. entered into a license agreement with Tights which called for a royalty of 5 cents per dozen; later, Hudson Hosiery Co. merged with Chadbourn, Inc., and the same license agreement was effected with Chadbourn, Inc. Later, Tights entered into a license agreement with Hanes Corp. calling for a royalty of 2 cents per dozen. At the time the Hanes agreement was made, Tights reduced the royalties to all licensees from 5 cents to 2 cents per dozen, thus giving equal treatment to all licensees and dispelling any possibility that there was an extension of the patent monopoly by its licensing producers. Finally, in January 1971, Tights entered into a new licensing agreement with Hanes Corp., allowing a lump-sum royalty payment of \$25,000 covering 2-1/2 years with an option to renew. At the time this agreement was made Tights communicated with all of its licensees, offering the same terms to them so as to vitiate any possible antitrust implications.

When the decision in the case of Lear vs. Adkins, 395 U.S. 653 (1969), was handed down by the Supreme Court, 1/ Tights contacted all licensees who did not have the benefit of counsel, stating that Tights would not seek to enforce the licensee estoppel clause in any of the prior license agreements and that it would no longer be included in new agreements.

Concurrent Litigation

Tights, Inc., instituted patent infringement suits against Acme-McCrory Corp. on December 16, 1969, and against Kayser-Roth Corp. on August 1, 1970. These two suits have been consolidated for discovery and trial in the U.S. District Court for the Middle District of North Carolina. The District Court ruling on Tights' request for a jury trial was that infringement of the patent is a proper question for the jury. Certiorari was denied by the Supreme Court on the jury trial question. As soon as discovery is completed the cases will be set for jury trial.

1/ In this case the Supreme Court overturned the patentee estoppel doctrine by declaring that the public interest requires that every patentee should be obliged to defend his patent against invalidity claims by other parties, including licensees of the patent.

The patent was also involved in two actions in the North Carolina General Court of Justice, Superior Court Division for Guilford County. The two cases were Tights, Inc. vs. Indian Head Hosiery Company, a Division of Joseph Bancroft & Sons Co., which was filed in December 1968, and Tights, Inc. vs. Chadbourn, Inc., which was filed in October 1970. Both of these actions were dismissed after a settlement was reached by the parties; as part of the settlement, both of the defendants entered into license agreements with Tights. Chadbourn entered into a license agreement calling for \$25,000 in royalties covering 2-1/2 years, and Indian Head paid a \$10,000 judgment and entered into an agreement calling for payment of \$25,000 in royalties within 30 days from March 31, 1971, to cover royalties due for 2-1/2 years from March 31, 1971, plus \$55,000 in royalties within 30 days after the end of the first 2-1/2 year period to obtain a fully paid-up license for the remaining life of the patent.

U.S. TARIFF TREATMENT

Imports of panty hose, including the ones with U-seams, are classified under item 382.7881 of the Tariff Schedules of the United States Annotated (TSUSA), which provides for women's, girls', or infants' panty hose, tights, and body stockings, not ornamented, of manmade fibers, knit. This statistical breakout under TSUS item 382.78 was established January 1, 1970, and includes panty hose (with U-seam and other), panty hose blanks, tights (including children's heavyweight tights), and body stockings. The current rate of duty on item 382.7881 is 25 cents per pound plus 32.5 percent ad valorem. The average ad valorem equivalent of the rate based on imports in 1970 was 37.1 percent. The rate of duty was not reduced in the Kennedy Round.

U.S. IMPORTS

Total imports of all articles under TSUSA item 382.7881 amounted to 7.8 million dozen in 1970 and 1.5 million dozen in January-March 1971. Corresponding values were \$25.6 million and \$5.0 million (table 1). Imports accounted for 9.2 percent of apparent domestic consumption 1/ in 1970 and 8.5 percent in the first quarter of 1971.

1/ Domestic shipments (a component of apparent consumption) do not include body stockings; however, imports of such stockings were negligible.

The Commission obtained data from most of the importers of U-seamed panty hose. Twenty-three reported imports of U-seamed panty hose in 1970; only four firms are currently licensed to import such panty hose. In 1968, imports of U-seamed panty hose by the reporting firms were negligible; in 1969 they amounted to 2.6 million dozen; in 1970, to 3.3 million dozen; and in the first quarter of 1971 to 0.9 million dozen. In addition, in both 1969 and 1970, imports of panty hose blanks were substantial.

Nonlicensed Imports of U-seamed Panty Hose

The Commission received data on imports of nonlicensed U-seamed panty hose from most of the importers thereof, none of which were named by the complainant as respondents. Nonlicensed imports amounted to 1.6 million dozen in 1969, 865 thousand dozen in 1970, and 152 thousand dozen in January-March 1971, as compared with 99 thousand dozen in January-March 1970.

In 1969, 62 percent of the imports of U-seamed panty hose were nonlicensed; in 1970, 28 percent were nonlicensed; and in the first quarter of 1971, 17 percent were nonlicensed. In 1969, nonlicensed imports of U-seamed panty hose were equivalent to 33 percent of licensed U.S. production of U-seamed panty hose; in 1970, 10 percent; and in January-March 1971, 8 percent, compared with 4 percent in January-March 1970. In 1969, sales of nonlicensed imported U-seamed panty hose were equivalent to 27 percent of the sales of U-seamed panty hose by licensed U.S. producers; in 1970, 9 percent; in January-March 1971, 21 percent, compared with 3 percent in January-March 1970.

One company that significantly influenced the pattern of nonlicensed imports as presented above, ceased importing during January-March 1971. Prior to its discontinuance of imports, the company had already started producing panty hose in Puerto Rico.

Potential Royalty Income Lost by Tights, Inc.

On account of sales of nonlicensed imported U-seamed panty hose, the patent owner lost \$25,420 in potential royalty income, calculated at 2 cents per dozen, in 1969, \$13,080 in 1970, and \$4,780 in January-March 1971.

THE PATENT OWNER, THE LICENSEE, AND U.S. PRODUCERS

Tights, Inc., is the owner of the patent on U-seamed panty hose, but is not a producer of panty hose or any other product. In its capacity as licensor, Tights, Inc., has licensed 12 domestic firms to produce U-seamed panty hose since July 1968---three in 1968, two in 1969, five in 1970, and two in 1971. Four of these domestic producers ceased to pay royalties in 1970. One of the four is the largest producer of U-seamed panty hose in the United States; another is a substantial producer of U-seamed panty hose; and a third is reportedly out of business. One of the licensed producers is also a licensed importer of U-seamed panty hose; three additional firms (not producers) are licensed to import them, but only one of the four has paid royalties consistently.

The production facilities of the domestic licensees are modern and efficiently operated.

Tights, Inc., has received the following royalties on sales of the patented item by licensees since July 1968: 1968, \$37,142; 1969, \$97,636; 1970, \$196,698; January-June 1970, \$144,547; and January-June 1971, \$10,669. The sharp decline in royalties paid to Tights, Inc., from January-June 1970 to January-June 1971 reflects in part the decision by two large licensees to discontinue payment of royalties. In addition, some of the licensees have not made payments on sales during part or all of the first quarter of 1971. One of the large companies which ceased paying royalties in 1970 stated that it was unfair to have to pay royalties when nonlicensed competing importers and domestic producers were not doing so.

The number of nonlicensed producers of U-seamed panty hose is believed to be about 53; this figure includes the 4 producers which were formerly licensees and have ceased to pay royalties.

Potential royalty income lost by Tights, Inc., calculated at 2 cents per dozen on the basis of sales of U-seamed panty hose by nonlicensed U.S. producers which reported to the Commission, amounted to approximately \$29,440 in 1968, \$81,600 in 1969, \$355,580 in 1970, and \$114,220 in the first quarter of 1971.

U.S. PRODUCTION, SALES, AND CONSUMPTION

U.S. Production

All types of panty hose

Total U.S. production of all types of panty hose increased from 16.9 million dozen in 1968 to 89.4 million dozen in 1970. 1/ Production of panty hose, U-seamed and other, by respondents to the Commission's questionnaire accounted for about 66 percent of the total produced in 1970. 2/

U-seamed panty hose

Production of U-seamed panty hose by those manufacturers which responded to the Commission's questionnaire increased from 1.7 million dozen in 1968 to 33.8 million dozen in 1970 and amounted to 9.9 million dozen in January-March 1971, compared with 6.8 million dozen in the corresponding period of 1970.

Production of U-seamed panty hose by licensed producers 3/ amounted to 323 thousand dozen in 1968, 4.8 million dozen in 1969, 9.0 million dozen in 1970, and 1.8 million dozen in January-March 1971, compared to 2.2 million dozen in January-March 1970. The share of production accounted for by licensed producers was lower in 1970 and January-March 1971 than previously because two major licensed

1/ As reported to the National Association of Hosiery Manufacturers.

2/ Eighteen U.S. producers of panty hose did not respond to the Commission's questionnaire, many of whom are believed to have been producers of U-seamed panty hose.

3/ All licensed producers reported to the Commission except one licensee who had ceased to pay royalties; production for this licensee was estimated.

producers discontinued their payments of royalties to Tights, Inc., in 1970 and their production was considered nonlicensed for part of that year and January-March 1971.

In 1969 and 1970 one nonlicensed producer imported panty hose blanks and did the slitting, sewing, dyeing, and finishing operations in Puerto Rico. The volume sold and the price at which the panty hose were sold by this producer probably forced many other producers to lower their prices.

U.S. Sales

All types of panty hose

Sales of all types of panty hose increased from 13.9 million dozen in 1968 to 77.3 million dozen in 1970, and amounted to 16.5 million dozen in the first quarter of 1971. 1/

U-seamed panty hose

U.S. sales of U-seamed panty hose by responding producers 2/ increased from 1.8 million dozen in 1968 to 25.1 million dozen in 1970 and amounted to 6.9 million dozen in the first quarter of 1971. Sales by licensed producers increased from less than 500,000 dozen in 1968 to 7.3 million dozen in 1970 and amounted to 1.2 million dozen in the first quarter of 1971 compared to 2.1 million dozen in the first quarter of 1970. Licensed producers' share of total sales was lower in 1970 and the first quarter of 1971 than previously because two

1/ As reported to the National Association of Hosiery Manufacturers.

2/ See footnote 2 on p. 20.

major licensed producers discontinued their payments of royalties to Tights, Inc., in 1970 and their sales became nonlicensed.

U.S. Consumption

U.S. apparent consumption (domestic production plus imports) of all types of panty hose amounted to 97.2 million dozen in 1970, 1/ and 17.5 million dozen in the first quarter of 1971, compared with 25 million dozen in the first quarter of 1970. U.S. apparent consumption (U.S. producers' sales plus sales of imported panty hose) of U-seamed panty hose 2/ amounted to 1.8 million dozen in 1968, 10.3 million dozen in 1969, 27.3 million dozen in 1970, and 7.3 million dozen in January-March 1971, compared with 6.4 million dozen in January-March 1970.

1/. Official data on imports of panty hose are not available for years prior to 1970.

2/ Based on data reported to the Commission; see footnote 2 on p. 20.

PRICES

All Panty Hose

On the basis of data submitted to the Commission, it appears that between 1968 and the first quarter of 1971 the prices of both U-seamed and non-U-seamed panty hose, mainly to retailers, 1/ declined significantly--the decline ranging from about a tenth to a third of the price levels that existed in 1968. The U.S. wholesale price index in March 1971 for apparel was about 12 percent above that in 1967.

Prices of U-Seamed Panty Hose 2/

From data reported to the Commission, it appears that for a certain type of best-selling U-seamed panty hose 3/ the prices of two domestic producers in 1968 were about \$7 per dozen and \$9.80 per dozen; the price charged by two significant nonlicensed importers was about \$6.60 per dozen.

On April 1, 1971, prices charged for such panty hose by four U.S. producers ranged from \$5 per dozen to \$8.70 per dozen; the prices of the two producers mentioned earlier were \$5 per dozen and \$8.70 per dozen. The prices of imported panty hose also declined considerably from April 1, 1969, to April 1, 1971.

1/ Some sales were to distributors, either wholesalers or jobbers.

2/ One of the largest licensed producers, which ceased to pay royalties in 1970, did not submit data to the Commission.

3/ Yarn in leg less than 30 denier, sheer, tube type, other than one size, other than nonrun, other than support, boarded, and sold to retailers.

Two other U.S. producers also began to sell comparable panty hose in the second half of 1969, but to wholesalers. Their prices declined from \$7.11 and \$7.10 per dozen on October 1, 1969, to \$5.70 and \$4.60 per dozen on April 1, 1971. These producers were also significant sources of U-seamed panty hose.

Data available to the Commission indicate that the prices charged for U-seamed panty hose by licensed U.S. producers and one significant licensed importer tended to be higher, on the average, than those charged by nonlicensed producers and importers. Nevertheless, prices charged by the licensed U.S. producers also declined and those charged by the licensed importer remained unchanged during the period considered.

Average Unit Value of Sales

The trend in average unit value of sales, which reflects, in part, changes in prices as well as changes in the composition of goods sold, is shown in the following table for both U.S. producers and importers. Differences in the levels of average unit sales values are also partly attributable to differences in the channels of marketing, i.e., sales to retailers versus wholesalers.

Panty hose: Average unit value of sales of U.S. producers and importers, 1968-70, January-March 1970, and January-March 1971

(Per dozen)					
Item	1968	1969	1970	Jan.-Mar.	
				1970	1971
All panty hose, <u>1/</u> U.S. producers-----	\$11.76	\$10.87	\$9.39	\$9.78	\$7.97
All U-seamed panty hose:					
U.S. producers-----	9.07	9.27	7.87	8.13	7.19
U.S. importers-----	11.63	6.99	8.28	8.86	7.15
Licensed U-seamed panty hose:					
U.S. producers-----	9.79	10.15	9.54	8.75	9.57
U.S. importers-----	-	8.26	8.62	8.98	8.95
Nonlicensed U-seamed panty hose:					
U.S. producers-----	8.93	8.23	7.18	7.80	6.71
U.S. importers-----	11.63	6.79	7.50	8.29	5.59
Panty hose other than U-seamed:					
U.S. producers-----	12.28	11.71	11.18	11.42	9.57
U.S. importers-----	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>	<u>2/</u>

1/ Virtually all of the imported panty hose sold were U-seamed.

2/ Data for importers deemed to be inaccurate.

Source: Compiled from data submitted to the Tariff Commission by the producers and importers.

Between 1968 and the first quarter of 1971, the domestic producers' average unit value of sales of all panty hose declined from \$11.76 to \$7.97. This decline was attributable in part to a change in the composition of sales; in 1968, the more expensive 1/ non-U-seamed panty hose accounted for about four-fifths of sales, while in January-March 1971 they accounted for less than half. The decline was also attributable

1/ According to information from the industry, it costs an average of 25 cents a dozen more to apply a separate crotch piece to the panty portion of the panty hose than to use the U-seam method.

in part to reductions in the prices of specific products occasioned by intensified competition for the U.S. market by both U.S. producers and importers.

Nonlicensed imports

The table below shows that average unit values of sales of nonlicensed imports were, except for 1968, consistently below average unit values of licensed domestic sales.

U-seamed panty hose: Average unit values ^{1/} of sales of licensed U.S. producers and nonlicensed importers, 1968-70, January-March 1970, and January-March 1971

(Per dozen)			
Year	:	Average unit values of sales by--	
		Licensed U.S. producers	Nonlicensed importers
1968-----	:	\$9.79 :	^{2/} \$11.63
1969-----	:	10.15 :	6.79
1970-----	:	9.54 :	7.50
January-March--	:	:	:
1970-----	:	8.75 :	8.29
1971-----	:	9.57 :	5.59

^{1/} Based on the wholesale price to the retailer.

^{2/} Not a representative figure; the importer which caused the high unit value reduced its imports to a negligible amount in subsequent years.

Nonlicensed U.S. producers

Licensed U.S. producers of U-seamed panty hose appear to have been affected not only by price competition from nonlicensed importers, but also by price competition from nonlicensed domestic producers.

Average unit values of sales of panty hose by nonlicensed domestic producers were generally lower than those of sales by licensed producers (see table on p. 25). It should be noted that the former importing concern which became a U.S. producer continued to exert a downward pressure on prices after 1969.

The Position of Importers

Some importers contended that in the first quarter of 1971 the price at which they could still be competitive with U.S. producers was too low to make sales of imported panty hose profitable for them. Some importers also claimed that the duty on panty hose (37 percent ad valorem equivalent 1/) more than offset all the cost advantages imported panty hose may have over the U.S.-produced merchandise. The switch of one of the significant nonlicensed importers to domestic production tends to support this contention.

1/ Based on 1970 imports.

PROFIT-AND-LOSS EXPERIENCE OF LICENSED PRODUCERS

Questionnaires requesting financial data were sent to 12 domestic producers of U-seamed panty hose. Of the 12, only four supplied adequate profit-and-loss data relating to the establishments where panty hose are produced and to panty hose operations separately. The remaining eight did not supply profit-and-loss information for various reasons, such as being in litigation with the complainant, no longer producing panty hose, and unable to segregate panty hose operations from total operations.

The four firms which submitted financial data accounted for approximately 41 percent of the quantity and 37 percent of the value of the licensed domestic sales of U-seamed panty hose in 1970. The questionnaire covered the 3-year period 1968-70 and all four producers submitted information for these years.

The net sales of all products of the four establishments showed an uninterrupted increase during the period, from \$116 million in 1968 to \$129 million in 1969 and to \$146 million in 1970. The net operating profit (before income taxes) was \$14.1 million in 1968; \$11.3 million in 1969; and \$13.6 million in 1970. The ratio of net operating profits to net sales was 12.1 percent in 1968; 8.8 percent in 1969; and 9.3 percent in 1970.

The respondents were unable to segregate financial data covering operations on U-seamed panty hose only. The financial data pertaining

to operations on all types of panty hose showed an increase in net sales, going from \$31 million in 1968 to \$60 million in 1969, and to \$102 million in 1970. The net operating profit (before income taxes) also rose steadily, increasing from \$4.4 million in 1968 to \$8.4 million in 1969, and to \$12.1 million in 1970. However, the ratio of net operating profit to net sales declined from 14.2 percent in 1968 to 11.6 percent in 1970.



APPENDIX A
STATISTICAL TABLE



Table 1.--Panty hose, tights, and body stockings: U.S. imports for consumption, by principal sources, 1970, January-March 1970, and January-March 1971

Source	1970	Jan.-Mar. 1970	Jan.-Mar. 1971
Quantity (1,000 dozen)			
West Germany-----	3,665	1,130	100
Israel-----	2,597	404	1,125
France-----	491	53	6
Canada-----	237	59	18
Brazil-----	213	-	179
Philippine Republic-----	100	60	52
All other-----	456	72	49
Total-----	7,759	1,778	1,529
Value (1,000 dollars)			
West Germany-----	9,103	3,757	123
Israel-----	10,569	1,796	3,979
France-----	2,006	182	21
Canada-----	1,088	281	74
Brazil-----	662	-	519
Philippine Republic-----	255	156	130
All other-----	1,870	319	166
Total-----	25,553	6,491	5,012

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

Note.--Item was not separately classified prior to 1970.



APPENDIX B
COPY OF U.S. PATENT NO. RE. 25,360



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25,360

COMBINATION STOCKINGS AND PANTY

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1 Claim. (Cl. 2--224)

Matter enclosed in heavy brackets [] appears in the original patent but forms no part of this reissue specification; matter printed in italics indicates the additions made by reissue.

The present invention relates to ladies' knitted articles and more particularly to a combination garment in which a pair of stockings and underpants are unitarily formed.

Separate garter belts or hosiery supporter attachments to ladies' foundation garments are necessary in order to provide a fastening means for the welt of a stocking to obtain a stocking in a taut condition while on the wearer's leg. Frequently snags or runs are produced in the stockings by improper garter fastening means or by occasional adjustment to the stockings.

It is an object of this invention to provide a unitary garment which includes a pair of stockings and a pair of underpants that eliminates the need for garter attachments and belts.

Another object of this invention is the provision of a combination garment which includes a pair of ladies' seamless stockings and a panty formed together with the stockings.

Yet another object of the present invention is the provision of a unitary knitted panty-stockings garment in which the panty portion may be separated from the stockings when the stockings are to be discarded.

Still a further object of this invention is the provision of an economical combination garment which includes a pair of seamless stockings and a panty girdle.

The present invention contemplates a combination garment in which a pair of circular knit seamless stockings, preferably of nylon, having foot, leg and individual welt portions is integrally combined with an upper enlarged tubular or welt section that is knit as a continuation of the stocking welts to form a pair of underpants having a crotch portion therebetween.

Other and further objects and many of the attendant advantages of this novel garment combination will become more readily apparent as the invention becomes better understood from the following detailed description taken in conjunction with the accompanying drawings in which like characters of reference designate corresponding parts throughout the several views, and wherein:

FIG. 1 is a front perspective view of one embodiment of the combination stocking-panty garment of the present invention;

FIG. 2 is a partial transverse sectional view taken substantially along the plane of section line 2--2 of FIG. 1;

FIG. 3 is a transverse sectional view taken substantially along the plane of section line 3--3 of FIG. 1;

FIG. 4 illustrates the top portion of a single stocking with an elongated welt having a partial longitudinal slit therein;

FIG. 5 is a greatly enlarged view of a knitted fabric for the upper portion of the garment having elastic yarn laid into the knitted fabric without interknitting with the loop stitches; and

FIG. 6 is a greatly enlarged view of a modified knitted fabric for the upper portion of the garment in which the

1 there is illustrated a combination garment 10 in which individual ladies' stockings 11 and 12 are provided with the upper portions of the stockings united so as to form a pair of underpants 13. The invention will be described specifically with reference to a preferred embodiment, however, it is to be understood that it is not intended in any limitative sense. The stockings 11 and 12 are conventional seamless sheer stockings, preferably formed of nylon yarn, produced on a standard "400" needle circular knitting machine. Each stocking is constituted by a foot portion 14, preferably having reinforced toe and heel pockets 15, 16, respectively, a leg portion 17, a lower welt portion 18 and an upper elongated welt portion 19. Customarily a 15 denier continuous monofilament nylon yarn is used to form the sheer portion of the stocking and 30 denier yarn is desirable for use in combination with the 15 denier yarn in those regions where reinforcement is desirable including the lower welt portion 18. However, finer or coarser yarn may be employed at various knitted positions in the knitted fabric. Furthermore, it is also contemplated that stretch nylon yarn may also be employed to knit each of the stockings throughout.

The upper elongated welt portion 19 is preferably knit on the same circular knitting machine as the leg of the stocking with a plied multifilament yarn, such as 70 or 100 denier. Yarn in the elongated welt portion 19 may be of stretch nylon type, if desirable, or of one of a combination knitted constructions as will be described hereinafter. In the fabrication of the tubular knitted fabric, the welt is formed in the usual manner as is the remainder of the stocking with the exception that the upper welt portion is considerably longer than a conventional welt.

Upon completion of the tubular fabric constituting a single stocking, a transverse seam or line of sewing stitches 21 is sewn in the stocking on the inside portion of the leg with the stitches being in spaced relation to the welt 22. By making the stitches in the sewn line 21 sufficiently small to catch the knitted loops a run and ravel in the fabric may be eliminated at the juncture between the flaps. A longitudinal cut 23 is then made in the welt of the fabric which cut extends just short of the transverse stitches 21 thereby dividing the top welt portion of a right leg stocking 11 into a front and a rear flap 24 and 25, respectively, and the top welt portion of a left leg stocking 12 is divided in front and rear flaps 26 and 27, respectively.

A pair of stockings, one right and one left leg, in which the elongated welts are slit may be placed together in the correct oriented position with the front flaps 24 and 26 and the rear flaps 25 and 27 of the stockings placed together and the exposed flap sides sewn together by a continuous seam 28. The seam 28 forms a U-shaped configuration in end view, as more clearly illustrated in FIG. 2, for securing the two stocking welts together along the cut portions to form a single enlarged welt at the top of the stockings that resembles a pair of underpants or a panty. As will be apparent, the perimeter of the single welt for panty portion will be equal substantially to twice the perimeter of the tubular welt portion at the corresponding position of measurement.

The medial portion 29 of the seam 28 formulates a crotch area of the panty above the welt line 20. Obviously, a reinforced panel may be sewn to the crotch area, if necessary. Thus, each elongated welt 19 provides a half panel for the panty portion of the garment which panel reaches from the front center portion of the front of the garment of the center portion at the rear of the garment. A woven elastic tape 30 is sewed adjacent to

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below the terminal point of the longitudinal slit 23, as shown in FIGS. 1, 2 and 3. When the garment is provided with the seams 32 the stockings, when no longer serviceable, may be separated, as by cutting below the seam 32, from the panty portion of the garment and discarded. The seam 32 will reduce the possibility of runs occurring from the selvage remaining below the seam.

Although stretch nylon yarn from 70 to 100 denier has been employed in the elongated welt portions of the stockings, and found to be satisfactory, inelastic yarns may be employed with very satisfactory results. It is also contemplated that with an inelastic yarn being fed to the needles in the usual manner, added elasticity may be provided in the upper welt fabric by either knitting or laying in without interknitting a highly elastic yarn into the fabric at selected courses or in all the courses of the welt knitted fabric.

As illustrated in FIG. 5, the knitted fabric 35 for the upper welt may be formed in the usual manner with an inelastic yarn forming the loops 36 with an interlaid highly elastic strand 37 placed in each course, alternating in front of one wale and to the rear of the next wale. Obviously, the number of wales and the sequence for the elastic yarn distribution may be varied as well as the number of strands which are to be interlaid in each course. It may be desirable to include several courses of the fabric illustrated in FIG. 5 intermediate the length of each stocking above the knee to provide an added means for supporting each stocking.

A modified treatment of the highly elastic fabric is illustrated in FIG. 6 in which a plurality of highly elastic yarns 38, under suitable tension, are laid in the initial course of the selvage edge loops 39 and retained therein without interknitting with the loops as performed in a recognized manner. The elastic yarn 40 in the tubular fabric is laid in under tension without interknitting with the loops 41 by interlacing engagement with the loop stitches in alternate needle wales and passed behind the loops in the intermediate needle wales. The extent of insertion of the highly elastic yarn may vary from several courses at the band or top of the garment to a full highly elastic fabric in the upper welt portion. Obviously, other knitted structures are contemplated in which highly elastic yarns or strands may be employed in this combination garment to form a highly elastic band member as well as a highly elastic panty.

It will be appreciated that upon making the longitudinal cut in the welt of each stocking there may be a

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tendency for the interlaid highly elastic yarn to pull out, however, adequate relaxation of the elastic strands and frictional engagement with the knitted loop structure prevents the cut ends from contracting. Upon sewing the flaps together the cut elastic strand ends are gathered within the seam and will not pull out.

Obviously many modifications and variations may be made in the construction and arrangement of the upper welt portions of the stockings to form the underpants of the combination garment as well as a transfer operation of the pair of stockings to obtain a variation of the fabric for the upper portion in the light of the above teachings without departing from the real spirit and purpose of this invention. It is, therefore, to be understood that within the scope of the appended claim many modified forms of knitted structure may be reasonably included and modifications are contemplated.

What is claimed is:

A combination panty and stocking formed from circularly knit fabric comprising a pair of stockings of seamless knit construction having foot, leg and welt portions, said welt portions being knit of stretchable yarn and adapted to extend above the knee to the waist of the wearer, said welts each having a longitudinal [seam] slit intermediate the front and rear of the stocking, said first and second stockings being oriented to position the longitudinal [seams] slits adjacent each other, and a seam binding the corresponding front and rear edges formed by the longitudinal slits to form a U-shaped seam intermediate a single enlarged welt and defining the panty.

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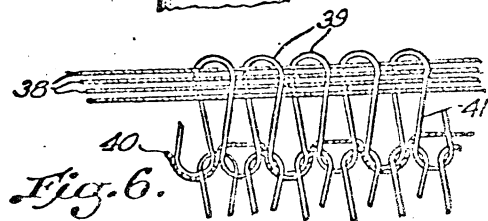
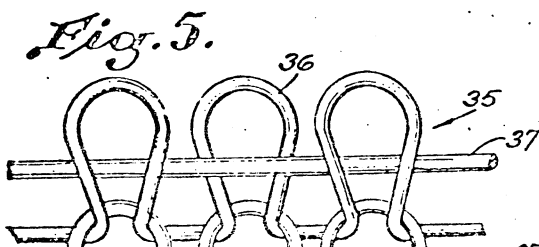
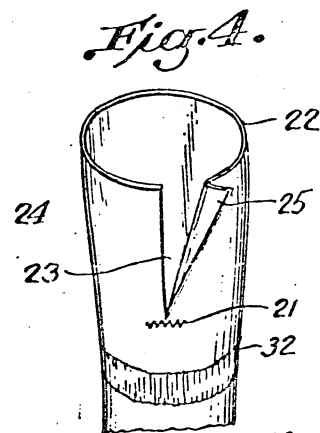
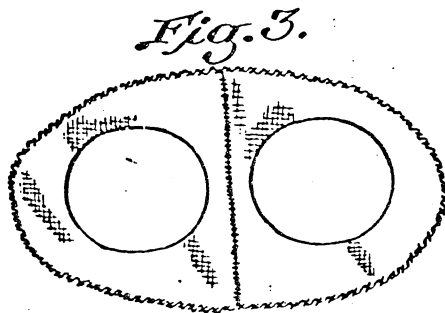
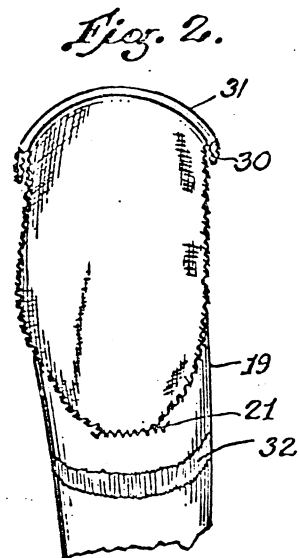
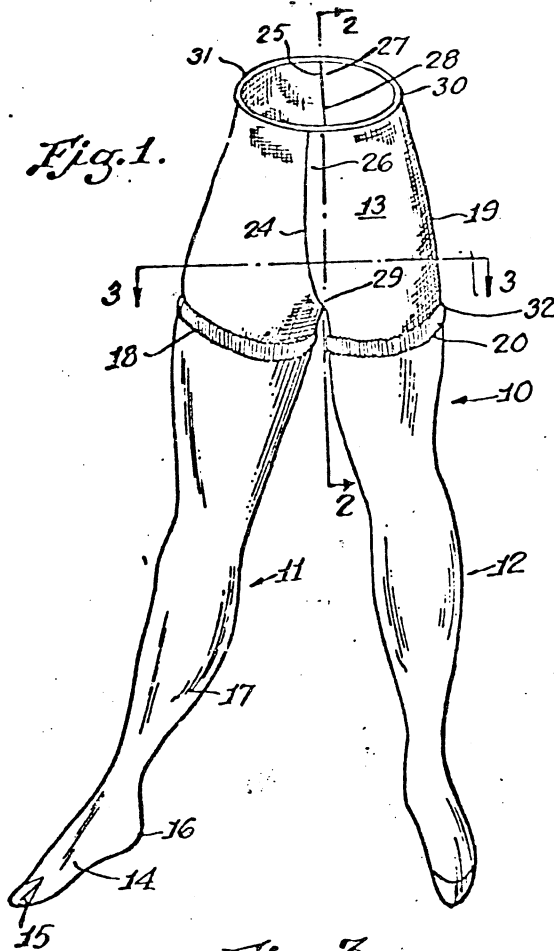
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COMBINATION STOCKINGS AND PANTY

Original Filed Nov. 9, 1956



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