



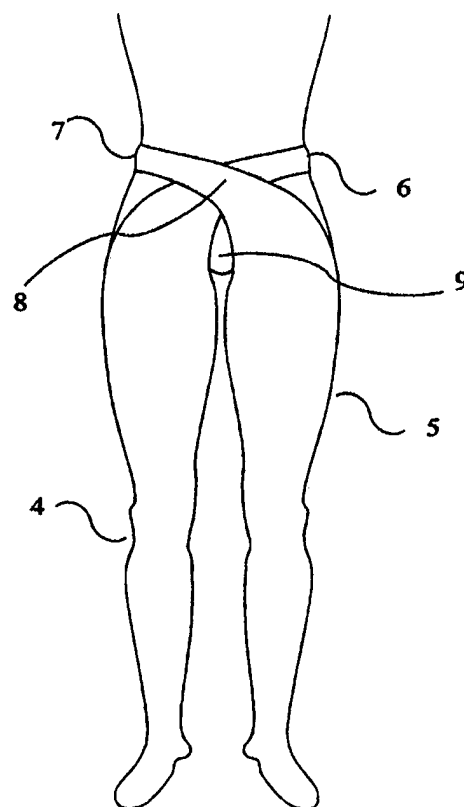
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<p>(21) International Application Number: PCT/IT97/00263 (22) International Filing Date: 24 October 1997 (24.10.97) (30) Priority Data: PI96U000035 5 November 1996 (05.11.96) IT (71)(72) Applicants and Inventors: CONTI, Giuseppe [IT/IT]; Via Maragliano, 137, I-50144 Firenze (IT). BRUSCOLI, Maria, Assunta [IT/IT]; Via Imprunetana per Pozzonatico, 170, I-50023 Impruneta (IT).</p>		<p>(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, ARIPO patent (GH, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).</p> <p>Published <i>With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p>

(54) Title: SYSTEM FOR KEEPING STOCKINGS OR TIGHTS IN PLACE BY RESTING THEM ON THE HIPS, AND THE TIGHTS MANUFACTURED ACCORDINGLY

(57) Abstract

The invention regards stockings or tights which are kept in place by a system resting on the hips and, therefore, do not oblige the wearer to suffer either pressure round the waist, caused by common elastic bands, nor a tight clasping around the thigh. The system resting on the hips (6, 7) allows an equal distribution of the force necessary to keep the stockings in place, which can therefore be worn for a long time since the wearer does not feel any discomfort on the abdomen or the thighs.



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Description

"SYSTEM FOR KEEPING STOCKINGS OR TIGHTS IN PLACE BY RESTING THEM ON THE HIPS, AND THE TIGHTS MANUFACTURED ACCORDINGLY"

Technical Field

5 This invention regards the technical field of hosiery and the manufacture of stockings and tights in general. In particular, it concerns a new product consisting of stockings or tights which are kept in place by resting on the wearer's hips.

Background Art

10 Experts in this field know stockings and tights, normally worn by women and consisting of two moulds which are slipped on the legs and are kept in place in different ways.

The known systems for holding up stockings, e.g. the so-called "self-supporting" stockings, consist of elastic bands which
15 press on the upper part of the thigh. These systems have the drawback of being uncomfortable to wear and of pressing this part of the leg too tightly, sometimes also affecting blood circulation.

Other systems are known, such as garters or similar,
20 consisting of a structure resting on the thigh or round the waist and used to keep the stocking in place by hooking it up. These systems are also not very practical because they can often be seen, especially under a close-fitting dress, and they can be awkward to use.

25 The most widespread system to keep stockings in place is, however, that used for common tights, i.e. a kind of panty forming part of the two moulds of the legs and supplied with

an elastic band around the waist, which keeps the tights in place.

However, this widespread system also has the drawback of pressing the waist too tightly and of therefore being
5 uncomfortable to wear.

Disclosure of invention

This invention principally aims at eliminating the above-mentioned drawbacks and of supplying a stocking which is comfortable to wear, does not press on any part of the body
10 too tightly and does not require any accessories.

This target has been reached with the invention by realising the idea of stockings or tights with the characteristics described in the separate claims.

Other characteristics of the stockings are the object of
15 dependent claims.

The advantages resulting from this utility model essentially consist of the fact that the stockings are self-supporting and can be worn without the use of elastic bands which press on the waist or the thigh, and without any accessories; that
20 these stockings can be manufactured as one unit comprising the two moulds of the legs integrated in the supporting pants, and that the same supporting system can be used when the two moulds are separate; that it looks attractive and does not feel awkward for the person wearing it; that the type with the
25 two separate moulds for the legs is easy and comfortable to wear as it allows the wearer to keep the stockings on and wear a normal pair of pants which can be put on and taken off without taking off the stockings; that it keeps the stockings

perfectly in place and that the supporting force is proportionally distributed so that the wearer does not feel any pressure on the skin.

These and other advantages and features of this model can be easily understood by every expert in this field by reading the following description and looking at the drawings enclosed.

Reduced to its essential structure and with reference to the figures of the drawings enclosed, a stocking resting on the hips, and which has a supporting system according to the invention, comprises:

- means to support the stocking or tights with one part of the stocking resting on one or both hips, specifically on the top of the hipbone;
- means allowing a proportional distribution of the force necessary to keep the stockings in place, with the same stockings forming a "V" in the abdominal region once they are put on;

Expediently, the stockings resting on the hips can be manufactured in the form of tights supplied with pants which do not have the usual form with an elastic band around the waist, typical of currently existing tights, but have a "V" shape (3) so that they do not press on the waist or the abdomen and exert a proportional force on both hips.

Another advantage lies in the fact that the V-shaped part of the stockings is thickened with elastic material (3) generating various tensions thus eliminating the necessity of a common elastic band.

In addition, the said V-shaped part can be bordered by a thicker zone (2) or may be trimmed with lace or other trimmings.

Expediently, the stockings in question can be manufactured by constructing the two moulds of the stockings so that each
5 single stocking forms an elongated, obliquely cut cylinder; once the two stockings have been crossed and sewed together (Fig.1), a thicker front zone (2) is obtained, thanks to the crossing of the two moulds of the legs, which is closed at the
10 bottom and open at the top so that the wearer can adjust the rest on the hips according to her body structure.

Another advantage of the tights consists in the fact that they can be supplied with an insert of cotton or other suitable material in the vaginal region, which may be attached or
15 detachable so that it can be replaced.

Expediently, as part of the manufacture there will be an insert of cotton or other suitable material, with the same shape as the actual crossing (2) or designed shapes around the back and the front of the stocking, and, however, so that it
20 can be attached or removed with self-adhesive systems or similar according to specific requirements.

The system of resting on the hips can expediently be realized by manufacturing both, tights (1) with the above described features and two single stockings (4, 5), each of them resting
25 on one hip (6, 7), which are pulled onto the legs separately and, once they are put on, form a crossing over the abdomen, which corresponds to the "V" zone of the tights and has the same effects and characteristics.

Another advantage lies in the fact that the two separate stockings (4, 5) can be made of different shapes, i.e. so that they cover the groin or keep it free (9) according to specific requirements. In the latter form, the stockings are particularly easy to wear as the pants can be put on after the stockings have been put on and can be taken off without having to lower the stockings each time.

Expediently, the stockings in question can be manufactured in various sizes and yarns according to the specific manufacture and market requirements.

The rest on the hips has been expediently designed so that both ends of the stockings rest on the hipbone thus guaranteeing that the stockings are perfectly kept in place.

Another advantage consists of the fact that the back and the front of the stockings have the same form.

In practice, the manufacturing details may, however, vary as regards shape, size, position of elements, and type of materials used, but still remain within the range of the idea proposed as a solution and, consequently, within the limits of the protection granted by this patent for a utility model.

Brief description of drawings

Figure 1, table 1/2 shows a schematic drawing of a stocking (1) supplied with a thicker zone (2) formed by the crossing of the slightly V-shaped two moulds, in order to obtain a distribution of the force by keeping the stocking on the hips and not on the waist.

Figure 2 is a scheme of another model of stockings using the system in question, in which the stockings (1) rest on the

hips thanks to a thicker part of different tensions (3) forming a "V" at the top of the tights.

Table 2/2 shows a schematic drawing of tights according to the system in question, composed of two separate moulds which are
5 put on one after the other.

Figure 3 shows the stocking (4) worn on the right leg, supplied with an extension resting on the left hip (6).

Figure 4 shows the stocking (5) worn on the left leg, supplied with an extension resting on the right hip (7).

10 Finally, Figure 5 shows the result obtained once both stockings (4, 5) are put on and rest on the left (6) and right (7) hip respectively, forming a slight crossing (8) over the abdominal region and leaving the groin (9) free.

CLAIMS

1) System for keeping stockings or tights in place by resting them on the hips, and the tights manufactured accordingly, characterised by the fact that they comprise:

5 - means to support the stocking or tights with the upper part of the stocking or tights resting on one or both of the wearer's hips;

- means allowing a proportional distribution of the force necessary to keep the stockings in place, with the same stockings or tights forming a "V", or however a crossing, in
10 the abdominal region once they have been put on, thus preventing pressure round the waist.

2) System according to claim 1, characterised by the fact that the stockings or tights, with the supporting system on the
15 hips, can be manufactured in the form of one single unit supplied with pants with a V-shaped upper part (2, 3), or of two stockings (4, 5) which also form a V-shaped crossing (8) over the abdominal region and, on the backside, each stocking resting on the opposite hip compared to the leg on which it is
20 worn, so that it does not press on the waist but exerts a proportional force on both hips.

3) System according to claim 1, characterised by the fact that the V-shaped crossing zone of the stockings can be made of thicker elastic material compared to the tights, thus
25 generating different tensions which keep the stockings in place without the use of an elastic band.

- 4) System according to claim 1, characterised by the fact that the stocking rests on the upper part of the hip, on one or both hipbones.
- 5) System according to claim 1, characterised by the fact that a unit of tights is preferably supplied with an internal, attached or removable cotton insert.
- 6) Removable insert of cotton or other suitable materials, of the same shape as the crossing (2), attached to the back or front part of the tights and which can be attached to the inside, removed and replaced according to specific requirements, thus eliminating the necessity of traditional pants in addition to the stockings.
- 7) Self-supporting (4, 5) stockings or tights supplied with an extension (6, 7) which rests on the opposite hip compared to the leg on which the stocking is worn.
- 8) System according to claim 7, characterised by the fact that the two self-supporting stockings (4, 5), once they have both been pulled onto the legs separately, form a crossing (8) over the abdomen and the back, corresponding to the "V" zone of the tights and presenting the same effects and characteristics.
- 9) System according to claims 7 and 8, characterised by the fact that the two separate stockings (4, 5) can be manufactured in various shapes, i.e. so that they cover the groin or keep it free (9).
- 10) System according to claim 1, characterised by the fact that the two stockings (4, 5) can be manufactured separately, crossed and sewed together or joined by another method (Fig.1) so that a thicker zone is formed at the back and the front

side thanks to the overlapping tissue the two moulds of the stockings (2) are made of, which is closed at the lower part and open at the upper part so that the wearer can adjust the rest on the hips according to her body structure.

5 11) System according to the above claims, characterised by the fact that the stockings or tights can be manufactured in various sizes and yarns according to the specific manufacture and market requirements.

12) System according to the above claims, characterised by all
10 the features claimed as described and shown on the tables enclosed.

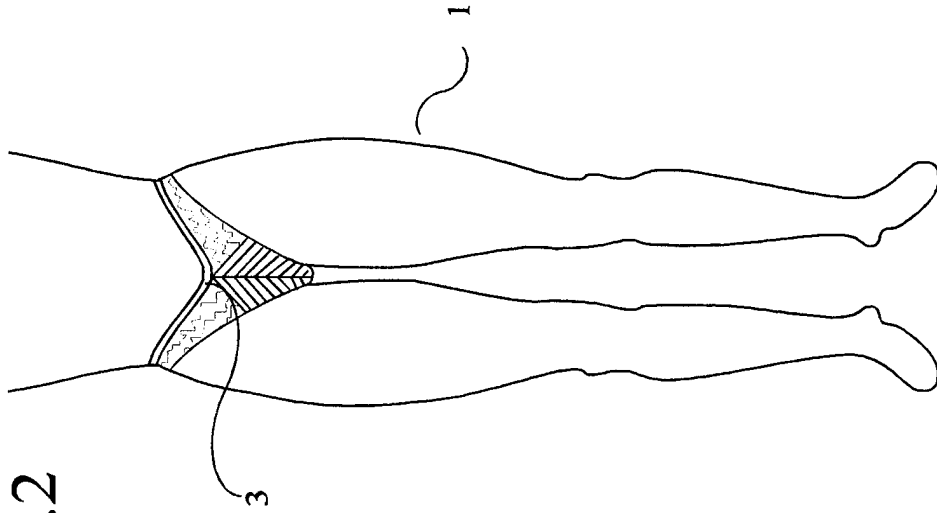


Fig. 2

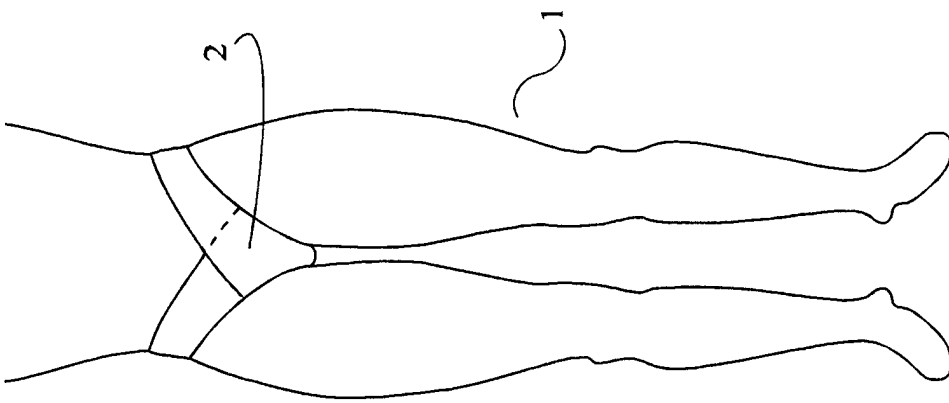


Fig. 1

Fig.3

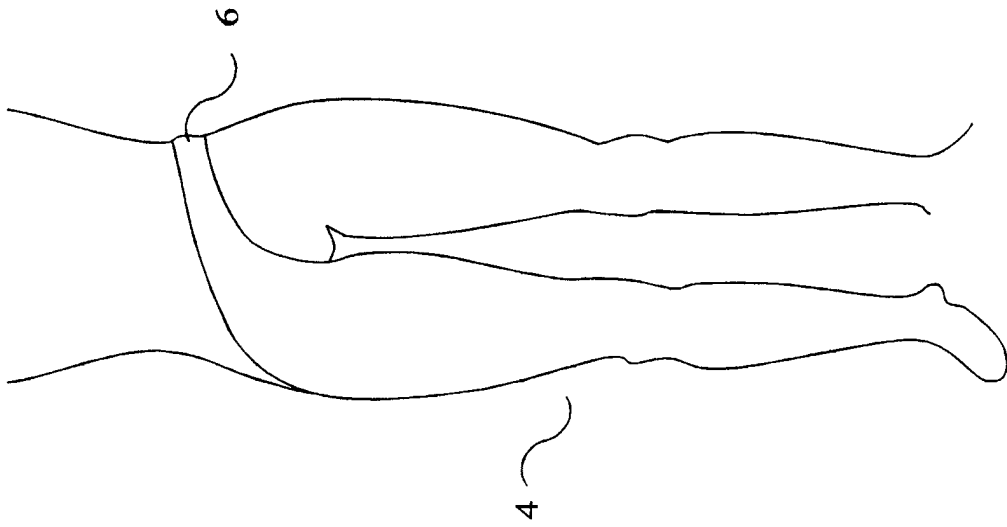


Fig.4

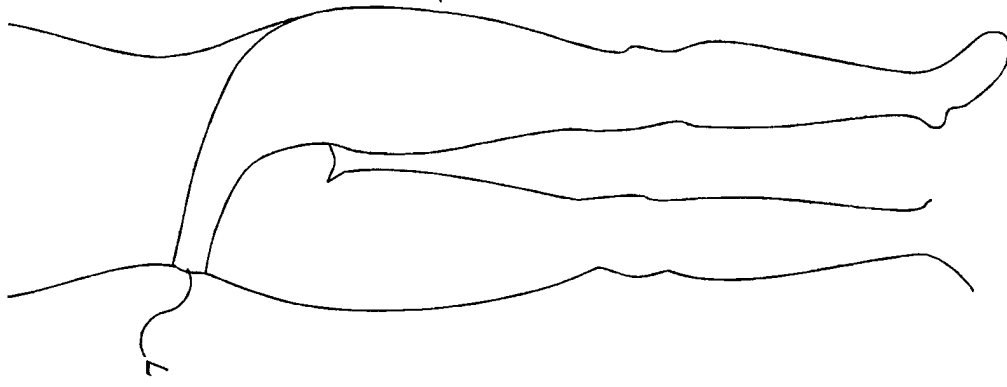
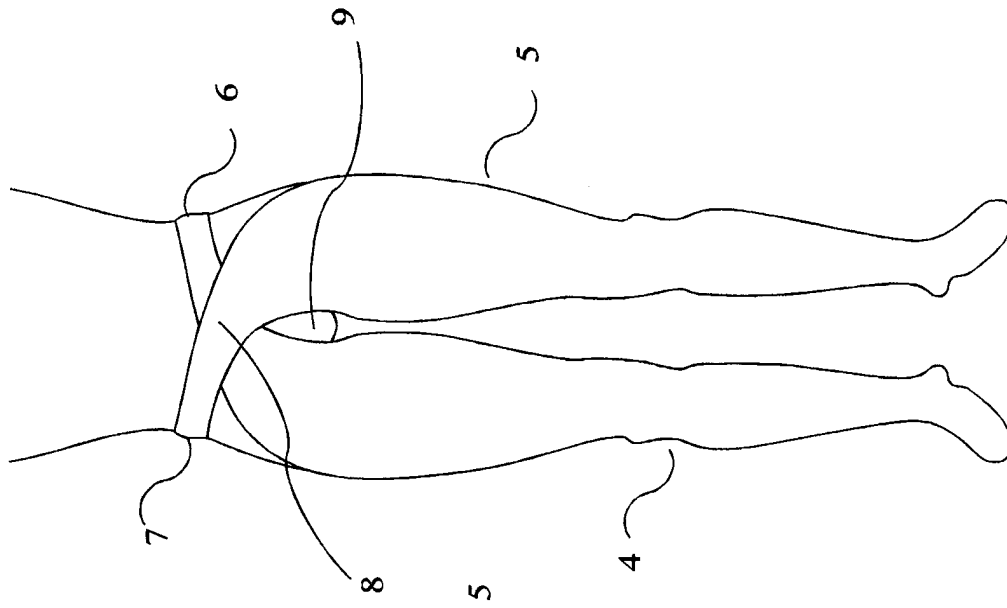


Fig.5



INTERNATIONAL SEARCH REPORT

International Application No
PCT/IT 97/00263

A. CLASSIFICATION OF SUBJECT MATTER
IPC 6 A41B11/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC 6 A41B

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 3 547 128 A (R. O. KELLNER) 15 December 1970 see column 1, line 66 - column 3, line 30 see column 3, line 51 - column 4, line 16; figures 1-8 ---	1-4, 7-9, 11, 12
X	US 4 019 208 A (J. G. WALSER JR.) 26 April 1977 see column 2, line 28 - column 4, line 6; figures 1-6 ---	1-4, 7, 8, 11, 12
X	GB 1 217 220 A (RIDLEY SPRIGGS & JOHNSON LIMITED) 31 December 1970 see page 2, line 28 - page 3, line 11; figures 1-7 ---	1, 2, 4, 7-9, 11, 12
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X	US 3 487 473 A (J. JANHSEN) 6 January 1970 see column 2, line 52 - column 3, line 33; claims 1,6; figures 1-9 -----	1,2,4, 10-12
X	US 5 014 364 A (D. R. ORR) 14 May 1991 see column 3, line 55 - column 5, line 15 see column 5, line 45 - column 6, line 7; figures 1-3 -----	1,4,7, 10-12

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Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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US 4019208 A	26-04-77	NONE	
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US 3487473 A	06-01-70	NONE	
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