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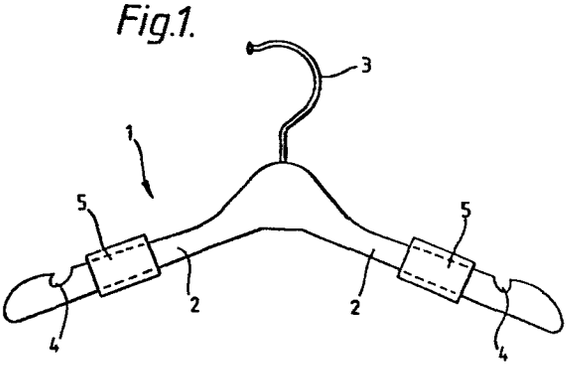
(54) Garment hangers.

(57) A garment hanger (1) is provided on each of its two arms (2) with a respective collar (5) of foamed plastics material which serves to inhibit slippage of a garment off the hanger. The collars (5) are cheap and simple to manufacture, and can readily be fitted to existing hangers (especially moulded plastics hangers), as well as being incorporated during manufacture of hangers. In addition to collars, thin pads (10, 20) of foamed plastics material are also disclosed, either with slits (11 - Figures 2, 3) for engagement by the arms (2) of hangers, or provided with stiffening wires (22 - Figures 4 to 6) such that they may be bent into engagement around the arms (26) of hangers.

Fig.1.



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GARMENT HANGERS

This invention relates to garment hangers, and is concerned particularly although not exclusively with disposable garment hangers of plastics material.

A large percentage of merchandise sold in clothing shops at the present time is displayed on garment hangers. It will be appreciated that clothing shops tend to use a considerable number of such hangers, and accordingly, these are required to be produced as cheaply as possible, such that the shop may regard them as disposable. More often than not, such hangers are made these days of plastics material.

One of the disadvantages of such hangers is that, because of the relatively smooth surface of the plastics material, garments can readily fall from the hangers on to the floor, where they may become damaged. In fact, most shop keepers are only too well aware of this problem, and the amount of stock that is continually spoiled in this way.

The present invention aims to provide garment hangers which may be improved in the above respect.

Of course, as will readily be appreciated by those conversant with the art, there have been many proposals over the years, to assist in retaining garments on hangers, in various different ways.

For example, it has been proposed to cover the entire surface, or at least a major surface, of a garment hanger with a frictional material, to reduce slippage. See, for example, US 4 058 241, US 4 160 516 and GB 229 129, and a recent introduction in the UK of a wire hanger coated almost entirely with a rubbery material. However,

such proposals tend to have two major disadvantages. Firstly, they tend to be expensive, especially for use on a large scale. Secondly, because there is a larger area of frictional material, it can be very difficult to take garments off the hangers and to place garments on the hangers, when it is desired to do so.

Many complicated arrangements have also been proposed, sometimes to avoid slippage, and often to avoid creasing of garments. See, for example, GB 216 800, GB 529 245, GB 769 205, and US 2 107 873. Such hangers are often rather difficult to use and are almost invariably expensive, both of which facts tend to make then unsuitable for large scale and frequent use in the modern store. In particular, such prior hangers almost always require very special manufacture, and provide no facility for modifying existing mass produced hangers.

Certain simpler proposals have been made. For example, GB 214 890 discloses a hanger which is provided on each of a pair of opposite arms with a respective elastic sleeve. However, the purpose of the sleeves is actually to hold open the neck of a garment, and to this end, each sleeve has an upstanding lug which engages within the neck of a garment, to restrict inward and upward movement of the neck. Thus, the sleeve attachments are designed specifically for use with those particular styles of garments which will not slip off a hanger anyway, and would not serve to prevent slippage of other garments.

GB 219 289 discloses elastic rings which are fitted each to a respective one of a pair of arms of a garment hanger. The purpose of the rings is to prevent slippage. However, they are specifically disclosed as having a plurality of radiating projections. Moreover, although stated to be elastic, the rings are specifically shown as

being of rubber, which is a relatively hard material. Thus, the projections are, at best, likely to disfigure the appearance of light garments placed on the hanger and, at worst, likely to cause actual damage to garments. Moreover, the disclosed rings have a large internal diameter and a thin wall, and would not be readily suitable for fitting to hangers of differing dimensions.

Finally, GB 448 228 discloses flexible attachments for the ends of the arms of garment hangers. Specifically disclosed are rubber tubes and lengths of springs, pushed onto the ends of the hanger arms. The purpose of the invention is to soften the ends of the hanger arms - that is, to prevent the ends of the hanger arms from pushing a garment out of shape. If rubber is used, a frictional surface to inhibit slipping of a garment is also obtained. However, the rubber tubing is evidently thin walled, and must grip the hanger arms fairly tightly. This leads to two disadvantages which, in practical terms, can be very significant, especially when dealing with hangers in large numbers. The first disadvantage is that a given size of rubber tubing would not readily accommodate hangers of greatly differing dimensions. The second disadvantage is that the rubber tubing does not readily lend itself to being quickly and easily fitted to a hanger. Moreover, the rubber tubing is evidently unsuitable for being positioned on the hanger inwardly of the ends of the arms, which is essential to inhibit slipping of certain styles of garments.

Preferred embodiments of the present invention aim to provide garment hangers which can be improved in the foregoing respects.

According to a first aspect of the present invention, there is provided a garment hanger comprising

at least one arm on which to hang a garment, and a portion of material which is disposed on said arm and affords a local friction surface to inhibit garments falling off the hanger, wherein said portion of material comprises a pad of resilient material which engages around at least an upper portion and a side portion of the arm.

According to a second aspect of the present invention, there is provided a method of modifying a garment hanger having at least one arm on which to hang a garment, comprising the step of fitting to the arm a pad of resilient material which engages around at least an upper portion and a side portion of the arm, thereby to afford a local friction surface to inhibit garments falling off the hanger.

Preferably, the hanger has a pair of arms, and a respective said pad of soft, resilient material disposed on each said arm.

In an especially advantageous arrangement, the or each said pad of material is provided by a collar of foamed plastics material which is fitted around the respective arm.

It will be appreciated that foamed plastics material has a coefficient of friction which is significantly greater than that of the usual smooth surface of plastics material of which garment hangers are often moulded. Thus, such collars may serve to reduce any tendency of a garment to slip off the hanger, without in any way affecting adversely the material of the garment.

The or each collar may be formed with a longitudinal slit, to allow the collar to be opened and

fitted around a respective arm of a garment hanger. This may be of particular advantage where the hanger has enlarged ends, or is otherwise of a shape which does not facilitate insertion of the end of an arm through a respective collar.

As an alternative to collars, the or each said pad may be provided with a self-adhesive backing, by means of which the pad may be secured to a respective arm of the hanger.

In one embodiment, the or each said pad may comprise a thin pad of material, formed with a pair of apertures through which an arm of the hanger passes.

Said thin pad of material preferably has a thickness of 5 mm or less.

In another embodiment, the or each said pad of material is reinforced with stiffening means, such that the pad may be bent to various shapes, which shapes tend to be retained by the stiffening means.

For example, such a pad may comprise a thin pad of foamed plastics material in which are embedded thin wires.

For a better understanding of the invention and to show how the same may be carried into effect, reference will now be made, by way of example, to the accompanying diagrammatic drawing, in which:

Figure 1 illustrates in side elevation a garment hanger embodying the invention;

Figure 2 illustrates in plan view a foam pad for use with a garment hanger;

Figure 3 is a partial perspective view of a garment hanger fitted with the pad of Figure 2;

Figures 4 and 5 show another foam pad for use with a garment hanger, respectively in plan view and end elevation; and

Figure 6 is a partial perspective view of a garment hanger fitted with the pad of Figures 4 and 5.

In Figure 1, the illustrated garment hanger 1 is moulded of plastics material, and has a pair of arms 2 on which to hang a garment, and a hook 3 by means of which the hanger may be hung on a rail. The hanger 1 may be used to hang many different types of garment - e.g. blouses, jackets, jumpers, and each arm 2 is provided with a respective hook 4, from which a skirt or a pair of slacks may be suspended, by means of loops. Thus far, the garment hanger 1 is conventional.

As the plastics material of which the hanger 1 is moulded is of a smooth finish, there is a tendency for garments hung thereon (other than via the hooks 4) to slip off the hanger. However, to prevent this, a respective collar 5, of foamed plastics material, is fitted onto each of the arms 2. The relatively rough surface of the collars 5 reduces the risk of garments slipping off the hanger 1, but as the material of the collars 5 is soft, there is virtually no risk of any damage to the garments.

In further uses, collars 5 may be fitted at the ends of the arms 2, to reduce the risk of the arms 2 damaging a garment on the hanger 1. It will be appreciated, moreover, that in the illustrated positions, the collars 5 inhibit a respective garment from moving sideways, and thus reduce anyway the likelihood of the

arms 2 penetrating through the garment.

If the collars 5 are placed towards the insides of the arms 2 (i.e. towards the centre of the hanger 1), they may serve to keep the neckline of a garment in a proper position, not only to display the garment better, but also to reduce the risk of the neck of the garment being stretched (this being especially important for knitted garments).

Conveniently, the collars 5 may be simply manufactured of continuous tubular material, cut to appropriate lengths. The resilience of the material allows the collars readily to be expanded, such as to accept the arms 2 of the hanger 1, with which they resiliently engage.

It will be appreciated that the collars 5 are of a relatively small length, as compared to the length of the arms 2, but in tests, I have found that, perhaps surprisingly, the length of the collars 5 does not make a great deal of difference to their effectiveness. Because the collars 5 may be produced in relatively short lengths, this helps to minimise their cost.

Garment hangers come in various different shapes, and in certain cases, it may not be practicable to insert the arms 2 completely through the collars 5. This may apply, for example, where a trouser rail extends between the lower end of the arms 2, such that the garment hanger is of substantially A-configuration. In such cases, the collars 5 may be formed with a longitudinal split, such that they may be opened out and readily placed around the arms of a respective garment hanger, at appropriate positions. Alternatively the collars may be of spiral configuration.

Thus, it may be appreciated that the embodiment of Figure 1 affords an extremely simple and inexpensive way of reducing the risk of garments slipping off a garment hanger. A particularly important advantage is that this improvement may be obtained without requiring any change at all to the design or construction of existing hangers. Indeed, a particular advantage is that collars such as 5 may be used immediately to modify existing hangers, at very low cost. It will readily be appreciated that, in a typical clothes shop, the cost of modifying garment hangers in accordance with the invention will be negligible, as compared to the likely savings on spoiled garments.

It is preferred that the collars 5 are of a resilient material, such that they may readily be fitted onto garment hangers of differing configurations. However, if desired, it is also possible to produce collars having a particular desired internal cross-section, to conform to the cross-section of the arm of a particular hanger.

In the foregoing, the collars 5 are stated to be of foamed plastics material. However, more generally, the collars could be of any other soft, resilient material which provides a relatively high coefficient of friction, compared to that of the material of the garment hanger.

Where it is desired to use the hanger 1 with particularly delicate garments, it may be desired to make the collars 5 less prominent. This may be achieved simply by using collars 5 of relatively thin material. Alternatively, the arms 2 of the hanger may be formed with recesses in which the collars 5 engage, so that they do not protrude prominently above the top surfaces of the arms 2. If the hooks 4 are made of appropriate dimensions, the collars 5 may engage therein, so that

they do not protrude prominently above the top surface of the hanger arms 2 and thereby appear unsightly.

Figures 2 and 3 illustrate another arrangement which may be particularly suitable for use with delicate garments. In Figures 2 and 3, a foam pad 10 is provided with transverse slits 11 extending therethrough. The pad 10 is of a relatively thin foam plastics material - by way of example, having a thickness in the range 1 to 3 mm. By way of further example, the foam pad 10, which is rectangular in plan, may have a length of about 8 cm. and a width of about 4 cm.

In use, the foam pad 10 is fitted onto an arm 2 of a garment hanger as illustrated in Figure 3. The foam pad 10 deforms readily to allow the passage of the arm 2 through the slits 11, and the foam pad 10 is positioned at a desired location on the arm 2. Being very thin, the foam pad 10 may be virtually imperceptible in use, such that it does not appear unsightly when underneath a delicate garment.

It will be appreciated that foam pads 10 may be provided very cheaply, and readily fitted to garment hangers as desired. The fact that there is little foam underneath the arm 2 is of little significant. However, it will be appreciated that the foam pad 10 tends to provide a significant surface area on the sides of the arm 2, which is of importance.

The foam pad 20 that is shown in Figures 4 and 5 may be used with particular advantage with plastics coat hangers which are of somewhat broader cross-section. For example, coat hangers which are used for suits often have arms which are of arcuate cross-section, such that they have a recess that opens downwardly, and form a significantly larger surface area to support a garment,

than a conventional thin plastics hanger.

The pad 20 comprises a thin body 21 of foamed plastics material, within which there are embedded a plurality of thin, parallel wires 22. It may be appreciated that the pad 20 may be bent to any desired shape, and the stiffness of the wires 22 tends to retain the pad 20 in a shape into which it is bent.

Thus, for example, as illustrated in Figure 6, the pad 20 may readily be fitted to the arm 26 of one of the broader types of plastics garment hangers. The ends of the pad 20 may be conveniently tucked up into the recess afforded underneath the arm 26.

It will be appreciated that pads such as 20 may readily be used on all types of hangers, and may be especially advantageous for use with hangers in which the arms do not have free ends - for example, as in Figure 6, where a trouser rail 27 extends between the ends of the hanger 25.

The wires 22 may be embedded within the foam body 21 during manufacture thereof. Alternatively, pads such as 20 may be made by securing together two thin layers of foamed plastics material, with the wires 22 disposed therebetween. The wires 22 may be in any suitable arrangement - e.g. a mesh rather than individual parallel wires. Stiffening means other than wires may be employed. The foam pad 20 preferably has a thickness of less than 10 mm, and preferably a thickness in the range 3 to 6 mm.

A particular advantage of the illustrated embodiments is that, although the foamed plastics (or other relatively rough) material serves usefully to retain a garment on a hanger, it does not make it

difficult to place garments on and take garments off a hanger. This is in marked contrast to previously proposed hangers of which I am aware, in which almost the entire surface of the hanger is provided with a high friction material. Apart from being relatively expensive, such hangers suffer the disadvantage that there is excessive frictional contact between the hanger and the garment, making the hanger rather difficult to use. Thus, it is an important feature of the illustrated embodiments that the total surface area of the relatively high friction material is small compared to the overall surface area of the hanger arms with which a garment may engage.

Although the illustrated embodiments envisage the use of portions of material which are fixed to a hanger after the manufacture thereof, the invention may also extend to garment hangers which have portions of relatively rough material provided thereon, during the manufacturing process of the hanger.

With further reference to the embodiment of Figure 1, there may be provided an apparatus to facilitate the fitting of the collars 5 to the hanger arms 2. To this end, the apparatus may comprise means for holding a collar 5 in a predetermined position, means for receiving an arm of a garment hanger such that it passes through the collar 5, and means for releasing the arm of the garment hanger together with the collar, when fitted thereto. Thus, in use, an operator may insert the arm of a garment hanger into the apparatus until a collar is frictionally engaged upon the arm, in a desired position, and then simply withdraw the hanger arm, with the collar fitted thereto.

By way of example, the apparatus may comprise means for gripping a collar so as to permit movement only in

one direction axially of the collar.

The invention is not restricted to the details of the foregoing embodiment(s). The invention extends to any novel one, or any novel combination, of the features disclosed in this specification and/or drawings, or to any novel one, or any novel combination, of the steps of any method or process disclosed herein.

CLAIMS:

1. A garment hanger (1) comprising at least one arm (2) on which to hang a garment, and a portion (5) of material which is disposed on said arm and affords a local friction surface to inhibit garments falling off the hanger,

characterised in that said portion (5) of material comprises a pad of soft resilient material which engages around at least an upper portion and a side portion of the arm.

2. A garment hanger according to Claim 1, having a pair of arms, and a respective said pad of soft, resilient material disposed on each said arm.

3. A garment hanger according to Claim 1 or 2, wherein said material comprises a foamed plastics material.

4. A garment hanger according to Claim 1, 2 or 3, wherein the or each said pad is positioned at or adjacent an end of its respective arm.

5. A garment hanger according to any preceding claim, wherein the or each said pad is formed as a removable collar, which engages around its respective arm.

6. A garment hanger according to Claim 1, 2, 3 or 4, wherein the or each said pad comprises a substantially flat pad formed with a pair of apertures through which said arm passes.

7. A garment hanger according to Claim 1, 2, 3 or 4, wherein the or each said pad is reinforced with stiffening means, such that the pad may be bent to various shapes, which shapes tend to be retained by the stiffening means.

8. A garment hanger according to any preceding claim, wherein the or each said arm is formed with means for engaging its respective said pad.

9. A garment hanger according to any preceding claim, wherein the hanger is, at least principally, of a moulded plastics material.

10. A garment hanger according to any preceding claim, wherein the or each said pad is adjustable in position alongs its respective arm.

11. A garment hanger according to Claim 1, 2, 3 or 4, or to Claim 9 as appendant thereto, wherein the or each said pad is formed integrally with the hanger.

12. A method of modifying a garment hanger having at least one arm on which to hang a garment, comprising the step of fitting to the arm a pad of material as recited in any one of Claims 1 to 10, thereby to provide a hanger in accordance with any one of Claims 1 to 10.

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Fig.1.

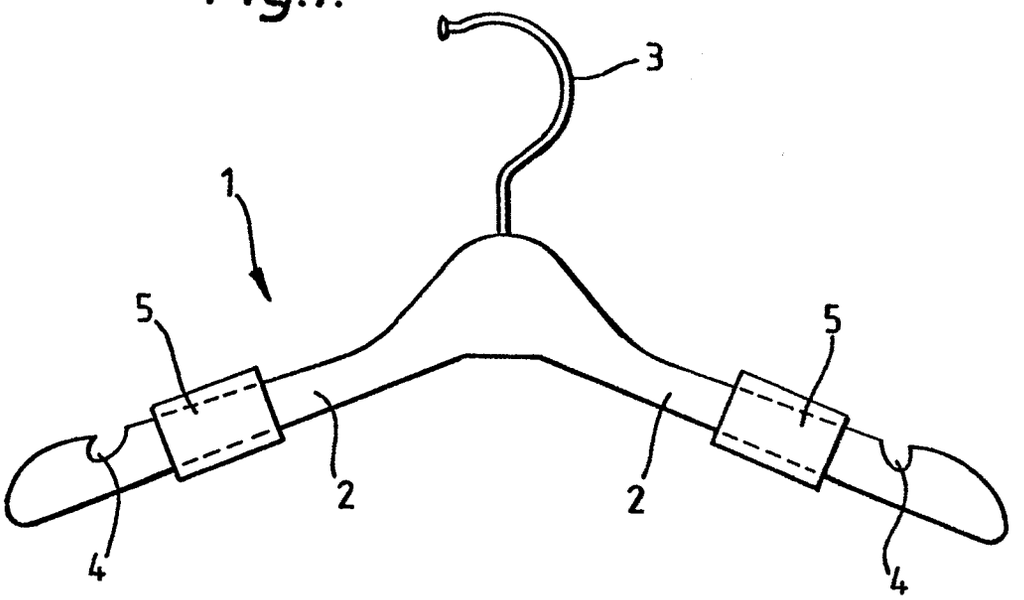


Fig.2.

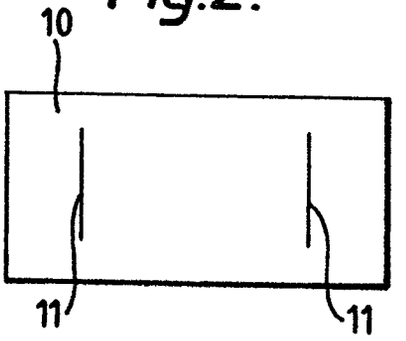
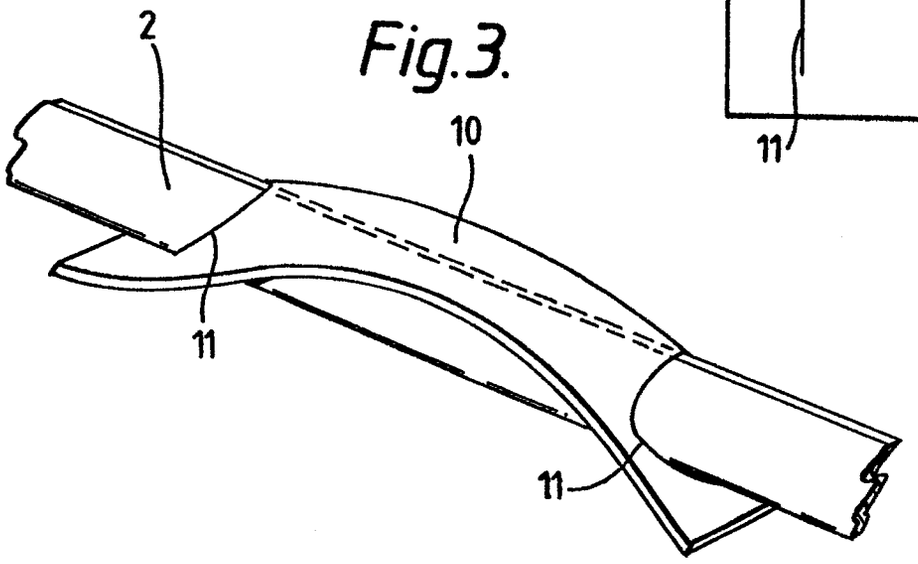


Fig.3.



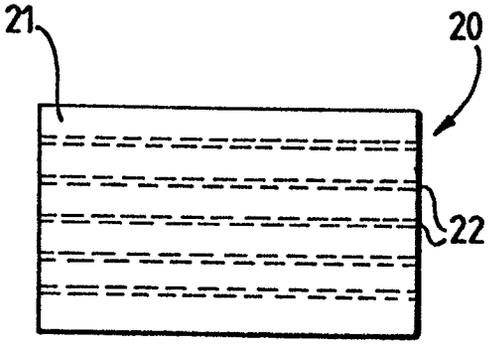


Fig.4

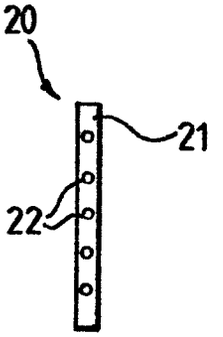


Fig.5.

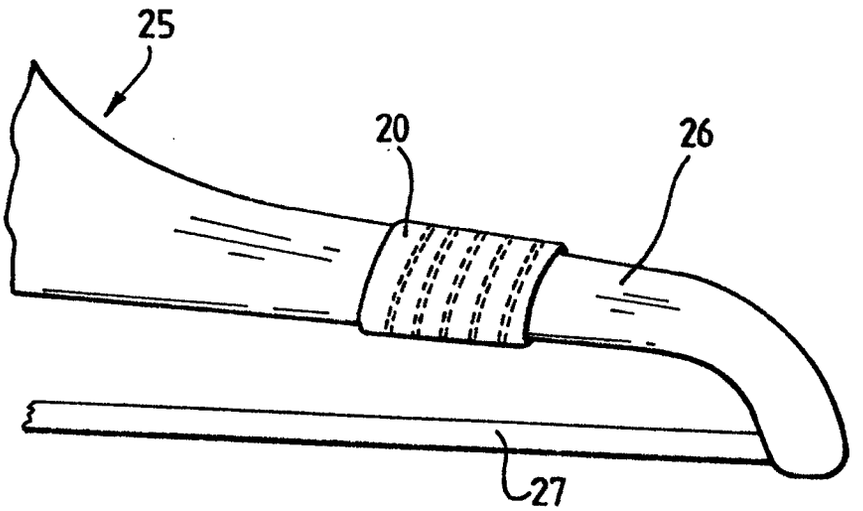


Fig.6.

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EUROPEAN SEARCH REPORT

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Application number

EP 86 30 0618

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl 4)
X	US-A-2 835 422 (STUARD) * Figures 3,4 * ---	1,2,4, 8,9,12	A 47 G 25/30
X	US-A-3 168 970 (WILSON) * Figures 1-7 * ---	1,2,4, 8-10, 12	
X	FR-A- 693 766 (SOCIETE DU CAOUTCHOUC MANUFACTURE) * Figures 1-6; page 2, lines 11-20 * ---	1,2,4, 5,8,10 ,12	
X	NL-A-6 812 110 (FA. ALBERT WESTEBBE) * Figure 1; claim 1 * & DE - U - 1 972 649 ---	1-4,12	TECHNICAL FIELDS SEARCHED (Int. Cl.4)
X	FR-A-2 473 949 (LAGUELLE) * Claim 1 * ---	1,2,4, 8,9,11 ,12	A 47 G
X,D	GB-A- 219 289 (VON DER HAYDEN) * Figures 1,2; lines 23-39 * ---	1,2,4, 5,8,10 ,12	
X,D	GB-A- 448 228 (WITZ) * Figure 2; page 1, lines 59-66 * --- -/-	1,2,4, 12	

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	12-05-1986	BEUGELING G.L.H.

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
O : non-written disclosure
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D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

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EUROPEAN SEARCH REPORT

0192362
Application number

EP 86 30 0618

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.4)
X,D	US-A-4 160 516 (RICE) * Figure 1; column 2, lines 35-43 * ---	1-4	
X,D	GB-A- 769 205 (ELSTON) * Figure 1; page 1, lines 53-57 * ---	1,2	

			TECHNICAL FIELDS SEARCHED (Int. Cl.4)

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
THE HAGUE	12-05-1986	BEUGELING G.L.H.

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