

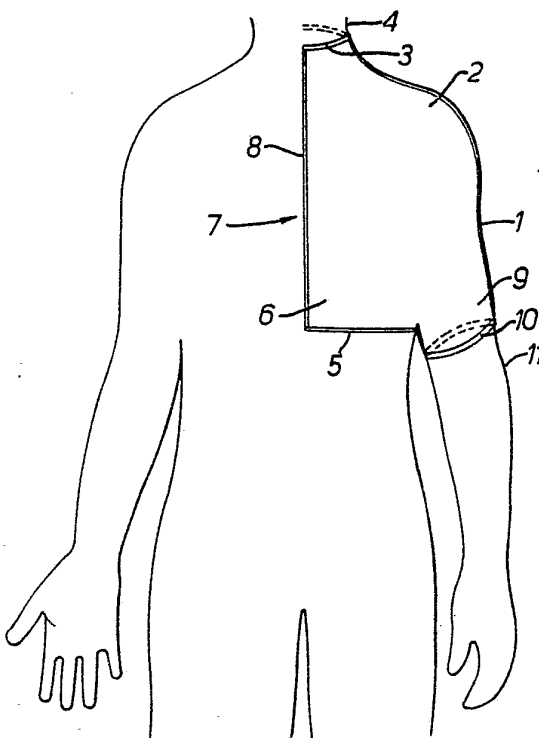
INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

<p>(51) International Patent Classification³ : A61F 13/00, 15/00</p>	<p>A1</p>	<p>(11) International Publication Number: WO 85/ 01439 (43) International Publication Date: 11 April 1985 (11.04.85)</p>
<p>(21) International Application Number: PCT/AU84/00185 (22) International Filing Date: 21 September 1984 (21.09.84) (31) Priority Application Number: PG 1565 (32) Priority Date: 26 September 1983 (26.09.83) (33) Priority Country: AU (71)(72) Applicant and Inventor: BROWN, Dawn, Cynthia [AU/AU]; 86 Valentine Road, Birkdale, QLD 4159 (AU). (74) Agents: DUNCAN, Alan, David et al.; Davies & Collis- on, AMP Building, Hobart place, Canberra City, ACT 2602 (AU). (81) Designated States: AT (European patent), AU, BE (Eu- ropean patent), CH (European patent), DE (European patent), FR (European patent), GB (European pa- tent), JP, LU (European patent), NL (European pa- tent), SE (European patent), US.</p>		<p>Published <i>With international search report.</i></p>

(54) Title: WATERPROOF COVERINGS

(57) Abstract

A protective waterproof covering (1) for an animal body. The covering (1) is a thin, flexible, lightweight waterproof material such as polyethylene and is shaped to conform so that part of the body to be covered. The covering has means for attachment (5, 3, 8, 10) to the body. The covering may be attached using pressure sensitive adhesive applied about the edge region (5, 3, 8, 10) of the covering (1) or by using elasticised bands.



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TITLE:

WATERPROOF COVERINGS

TECHNICAL FIELD

This invention relates to protective covers for
5 an animal body. More particularly, it relates to
waterproof articles for covering various parts of a
body, more specifically, a human body, such as
shoulders, throat, feet, stomach and legs.

BACKGROUND ART

10 When the skin of an animal body is ruptured,
either by an accident, such as by a cut on broken
glass, or as a consequence of a surgical operation on
some internal organ, it is often a requirement that
the resultant wound and its attendant bandaging be
15 kept dry. While it is a relatively simple matter to
keep an animal, such as a cat or a dog, away from
water until the wound has healed, it is inconvenient
if it is a person who wishes to take a shower or a
bath. It is comparatively easy to keep such parts of
20 the body as fingers and toes away from water, but it
is difficult, and often impossible, to keep dry a
shoulder, leg, stomach or the like, and still allow
the person to have a comfortable shower or bath.

In an attempt to overcome this problem, plastic
25 bags, such as those used as bread wrappers or for
containing garbage, have been cut and the resultant
pieces of plastic have been placed over the
wound/bandaging and retained in position with
adhesive tape. Disadvantages of this prior method
30 include the time it takes to prepare each covering
and the fact that it often requires assistance from



another person in order to affix the covering when the wound is positioned in an inaccessible or hard-to-reach location, for example, in the middle of the back.

5 The latter problem of requiring at least one other person to assist with the application of the covering is of particular significance when the patient is in a hospital or nursing home. It can require at least two nurses on occasions to affix
10 coverings. This is inefficient and takes the nurses away from more important tasks.

OBJECTIVES OF THE INVENTION

It is an object of the present invention to overcome the above problems and to provide ready-made
15 waterproof coverings for various parts of an animal body. It is a further object of the present invention to provide ready-made waterproof coverings for the various parts of the human body which can be affixed and removed easily by the wearer.

20 DISCLOSURE OF THE INVENTION

According to the present invention, there is provided a waterproof covering comprising:

- 25 a) a thin, flexible, lightweight waterproof material shaped to conform to that part of the body to be covered; and
- b) means for attaching said material to the body in such a manner so as to prevent entry of water to the said part of the body.



Conveniently, the waterproof material is manufactured from any one of a number of suitable, commercially available plastics such as polyethylene.

The means for attaching the waterproof material 5 to the body is preferably the application of an adhesive to the edge regions on that side of the waterproof material which will be adjacent to the skin of the body. Suitable adhesives can be selected from any one of the appropriate, readily available 10 pressure-sensitive adhesives, with or without a masking release sheet covering the adhesive to prevent inadvertent adhesion of the covering before use.

Alternatively, the adhesive-coated regions could 15 be replaced by elasticised bands which extend around the appropriate regions of the body to retain the covering against the skin.

Embodiments of the present invention will now be described, by way of example only, with reference to 20 the accompanying drawings.

BRIEF DESCRIPTION OF EMBODIMENTS

Figure 1 illustrates the use of a covering, constructed in accordance with the present invention, to keep a breast or shoulder dry;

25 Figure 2 shows how a covering, constructed in accordance with the present invention, may be applied to the neck of a human;

Figure 3 illustrates the use of a cover, constructed according to the present invention, for a 30 leg and foot;



Figure 4 depicts the use of a stomach cover made according to the present invention; and

Figure 5 illustrates the use of a cover suitable for the protection of a hand and arm.

5 DETAILED DESCRIPTION OF ILLUSTRATED EMBODIMENTS

In the covering illustrated in Figure 1, the thin, flexible, lightweight waterproof material 1 extends down both the front and rear of, for example, the left shoulder and chest to completely cover, in particular, the shoulder 2. A thin band or strip at the edge of the material 1, in an upper region 3 near the neck 4, is coated on the inside thereof with an adhesive to retain the upper region 3 against the skin of the body and to prevent water from reaching the shoulder 2. Similarly, a band or strip of material 5, around the user's chest 6, is also coated on the inside thereof with an adhesive to retain the lower region of the material 1 against the skin of the body. To prevent water from reaching the shoulder from the side 7, the inside of the edge of the material 1, along the band or strip 8, is coated with an adhesive, to ensure that the band on strip 8 is retained against the skin of the body. A similar band or strip of material (not illustrated) is also provided to retain the material 1 against the back of the body. The material 1 partly extends to form a short sleeve 9. A coating of adhesive along the band or strip 10 of sleeve 9 is provided to secure the sleeve 9 to the arm 11.

The neck covering depicted in Figure 2 comprises an essentially cylindrically shaped, thin, flexible, lightweight waterproof material 12 of sufficient dimensions to comfortably encircle and cover the neck



13. Bands or strips 14 and 15, at the top and the bottom of the material 12 respectively, are coated with an adhesive to secure the covering against the skin and prevent water from contacting the neck.

5 Figure 3 illustrates a combined covering 28 for a leg and foot which comprises an essentially cylindrically shaped, thin, flexible, lightweight waterproof material 16, closed at the foot end 17 and open at the other end 18. A strip or band 19 of the
10 flexible material, at the end 18, is coated with an adhesive to secure the covering to the skin at the top of the leg.

The stomach covering 29 illustrated in Figure 4 comprises an essentially rectangular shaped, thin, flexible, lightweight waterproof material 20. Bands
15 or strips 21 and 22, at top and bottom of the material 20 respectively, coated with an adhesive, secure the covering to the skin of the body. Each band or strip 23, adjacent to the body, is also
20 coated with an adhesive which allows the covering to be retained against the skin of the body.

Figure 5 depicts a combined covering 30 for a hand and arm which comprises a thin, flexible, lightweight waterproof material 24, shaped at one end
25 25 similar to a conventional glove (or alternatively, a mitten). A band or strip 26, at the other end 27, coated with an adhesive, secures the covering to the skin near the top of the forearm.

It will, of course, be appreciated that the
30 embodiments illustrated above are given by way of exemplification of the invention only, and that modifications to the covering described above are possible without departing from the present inventive concept.

CLAIMS

1. A waterproof covering comprising:
 - a) a thin, flexible, lightweight waterproof material 1,12,16,20,24 shaped to conform to that part of the body to be covered; and
 - b) means for attaching said material to the body in such a manner so as to prevent entry of water to the said part of the body.
2. A waterproof covering as defined in claim 1, wherein the said means for attaching said material to the body comprises a strip or band of adhesive 3,5,8,10,14,15,19,21,22,23,26 applied continuously to that side of the said material which is adjacent to the skin of the body when said covering is worn.
3. A waterproof covering as defined in claim 2, wherein the said adhesive is a pressure-sensitive adhesive.
4. A waterproof covering as defined in claim 2 or claim 3, further comprising a masking release sheet covering said adhesive to prevent inadvertent adhesion of the said covering before use.
5. A waterproof covering as defined in claim 1, wherein the said means for attaching said material to the body is the provision of elasticised bands which extend around the



regions of the body to be protected and are adapted to retain the said covering against the body.

6. A waterproof covering as defined in any preceding claim, wherein the said waterproof material is shaped to cover a breast and shoulder 2.
7. A waterproof covering as defined in any one of claims 1 to 5, wherein the said waterproof material is shaped to cover a neck 13.
8. A waterproof covering as defined in any one of claims 1 to 5, wherein the said waterproof material is shaped to cover a leg and foot.
9. A waterproof covering as defined in any one of claims 1 to 5, wherein the said waterproof material is shaped to cover a stomach.
10. A waterproof covering as defined in any one of claims 1 to 5, wherein the said waterproof covering is shaped to cover a hand and arm.
11. A waterproof covering as defined in any one of claims 1 to 10, wherein the said waterproof material is manufactured from polyethylene.

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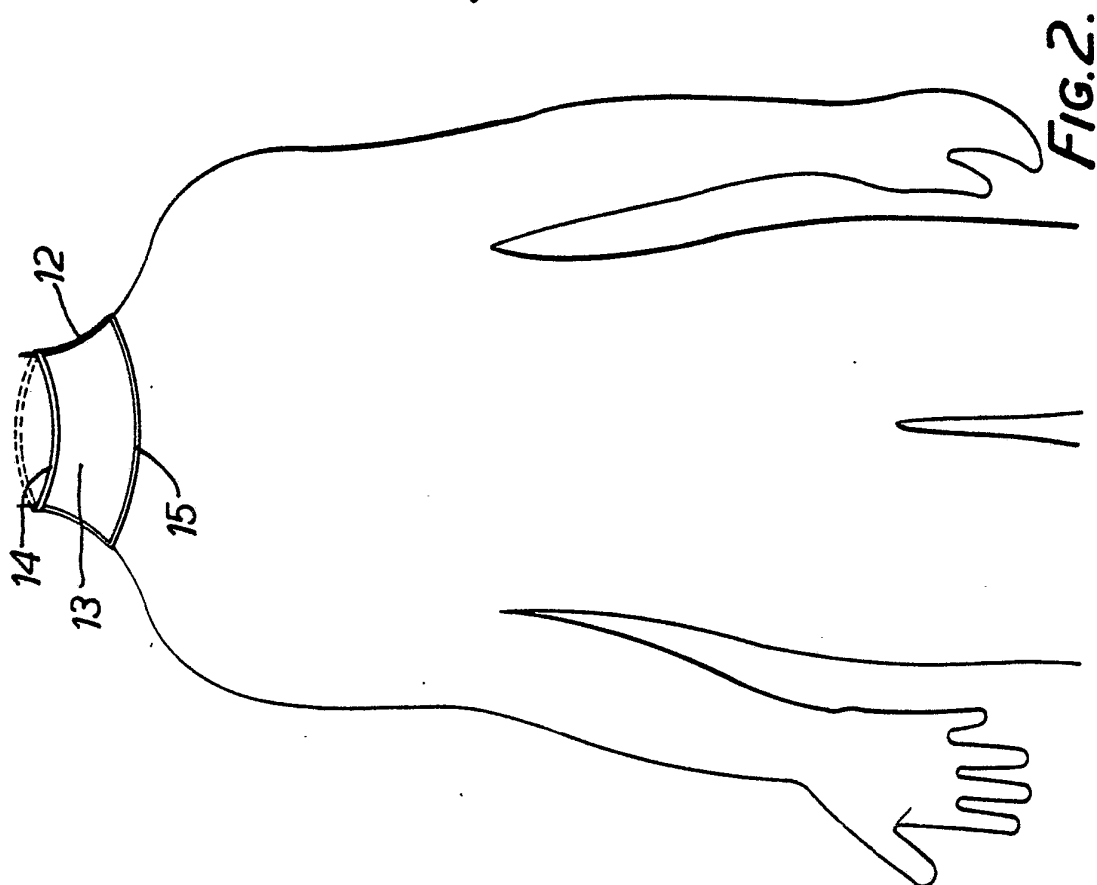


FIG. 2.

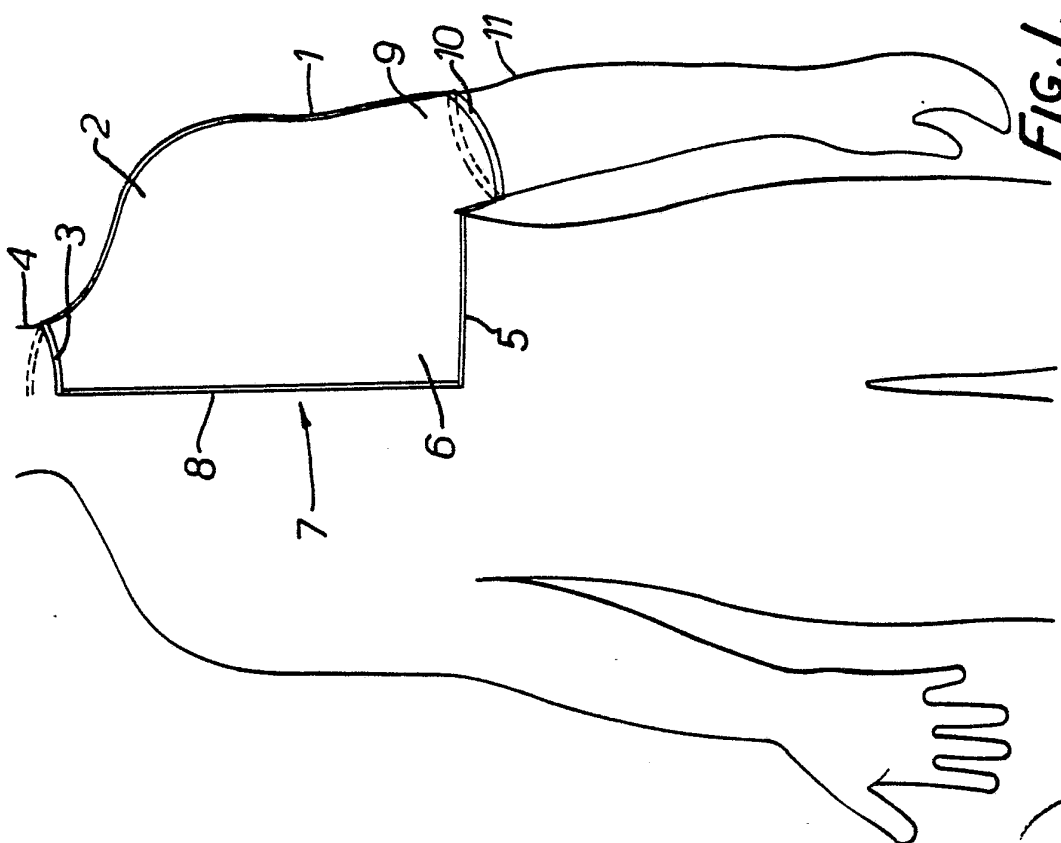


FIG. 1.

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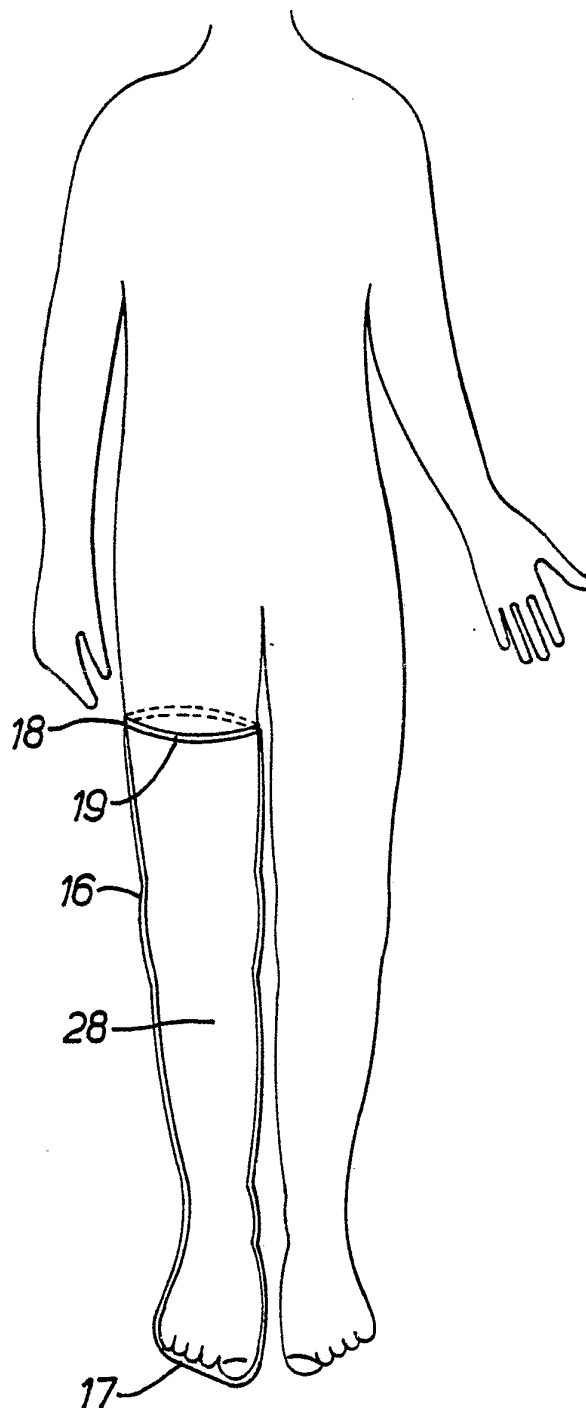
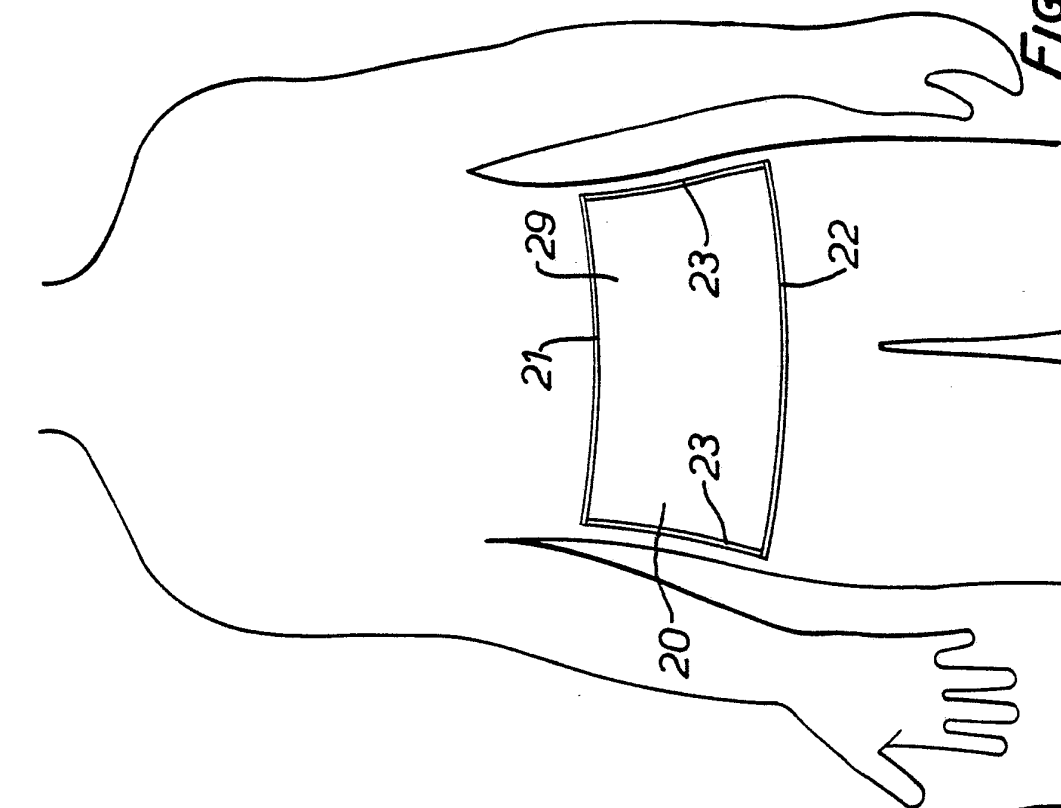
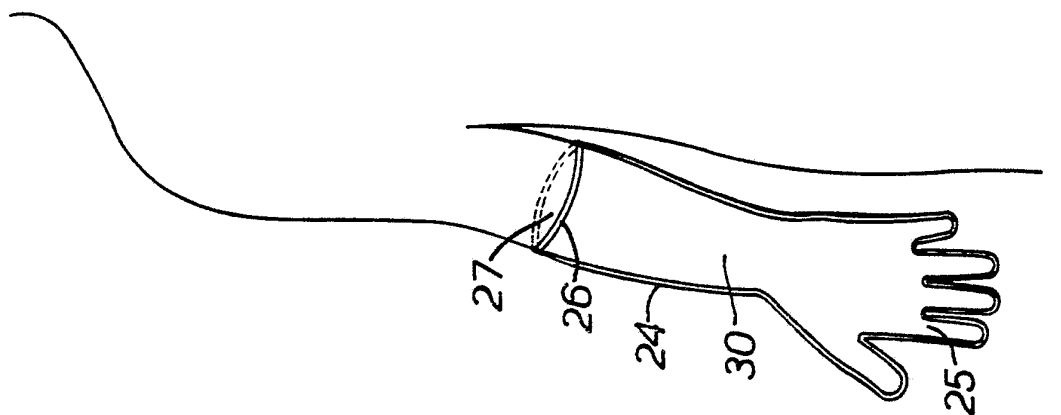
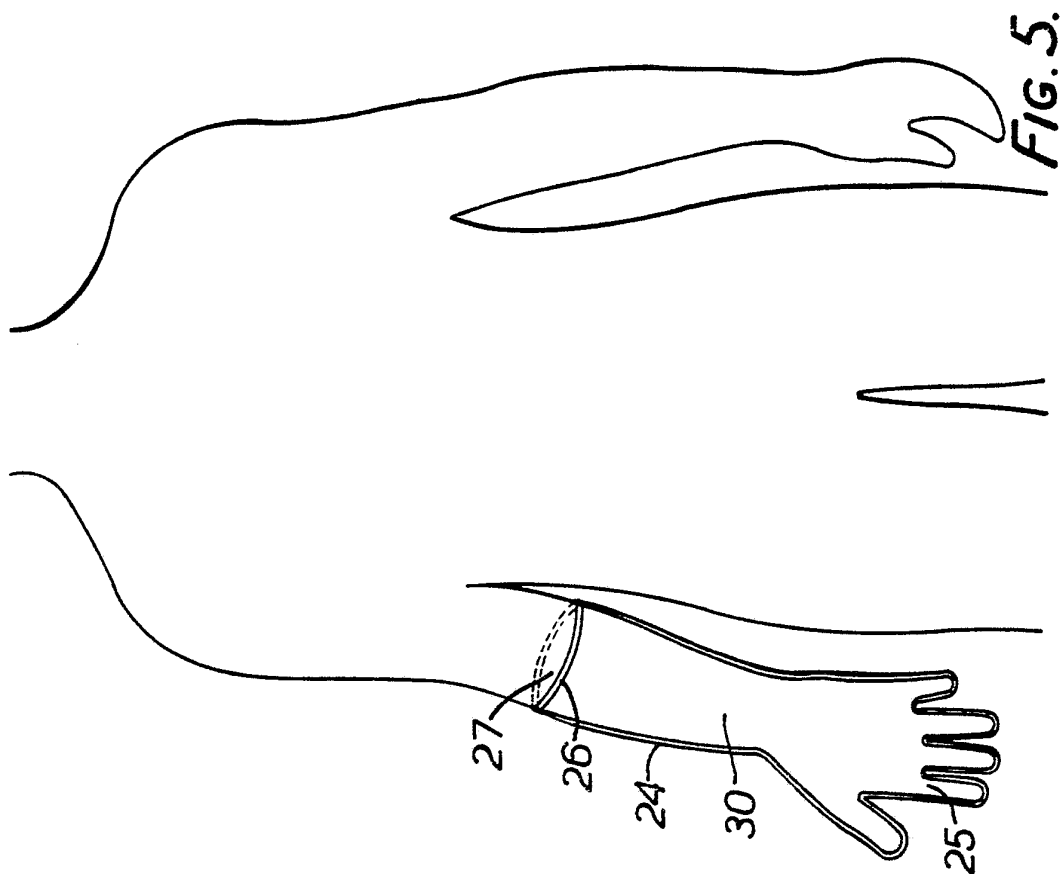


Fig. 3.



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INTERNATIONAL SEARCH REPORT

International Application No PCT/AU 84/00185

I. CLASSIFICATION OF SUBJECT MATTER (If several classification symbols apply, indicate all) ³ According to International Patent Classification (IPC) or to both National Classification and IPC Int. Cl. ³ A61F 13/00, 15/00						
II. FIELDS SEARCHED <div style="text-align: center;">Minimum Documentation Searched ⁴</div> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <th style="width: 25%;">Classification System</th> <th style="width: 75%;">Classification Symbols</th> </tr> <tr> <td style="text-align: center; padding: 10px;">IPC</td> <td style="text-align: center; padding: 10px;">A61F 13/00, 15/00</td> </tr> </table> <div style="text-align: center; padding: 5px;">Documentation Searched other than Minimum Documentation to the Extent that such Documents are Included in the Fields Searched ⁵</div>			Classification System	Classification Symbols	IPC	A61F 13/00, 15/00
Classification System	Classification Symbols					
IPC	A61F 13/00, 15/00					
AU: IPC AS ABOVE						
III. DOCUMENTS CONSIDERED TO BE RELEVANT ¹⁴						
Category ⁶	Citation of Document, ¹⁵ with indication, where appropriate, of the relevant passages ¹⁷	Relevant to Claim No. ¹⁸				
X	US,A, 3824998 (SNYDER) 23 July 1974 (23.07.74) See col 2 lines 3-12	(1-11)				
X	US,A, 3528416 (CHAMBERLAIN) 15 September 1970 (15.09.70) See Col 2 lines 16-22 Col 4 lines 17-20	(1-11)				
X	US,A, 4372303 (GROSSMANN et al) 8 February 1983 (08.02.83) See Col 2 lines 5-8	(1-11)				
X	US,A, 4263906 (FINLEY) 28 April 1981 (28.04.81) See col 3 lines 14-17	(1-11)				
X	FR,A, 2510885 (CHAINED) 11 February 1983 (11.02.83) See page 3 lines 11-28	(1)				
X	US,A, 3709221 (RIELY) 9 January 1973 (09.02.73) See col 8 lines 14-28	(1-11)				
X	US,A, 3964475 (HOLM) 22 June 1976 (22.06.76) See col 1 lines 28-37	(1)				
<div style="display: flex; justify-content: space-between;"> <div style="width: 45%;"> <p>¹⁶ Special categories of cited documents:</p> <p>"A" document defining the general state of the art which is not considered to be of particular relevance</p> <p>"E" earlier document but published on or after the international filing date</p> <p>"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)</p> <p>"O" document referring to an oral disclosure, use, exhibition or other means</p> <p>"P" document published prior to the international filing date but later than the priority date claimed</p> </div> <div style="width: 45%;"> <p>"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention</p> <p>"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step</p> <p>"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.</p> <p>"&" document member of the same patent family</p> </div> </div>						
IV. CERTIFICATION						
Date of the Actual Completion of the International Search ¹ 12 December 1984 (12.12.84)	Date of Mailing of this International Search Report ¹ 17 DECEMBER 1984 (17.12.84)					
International Searching Authority ¹ AUSTRALIAN PATENT OFFICE	Signature of Authorized Officer ¹⁹ A. HENDRICKSON					

III. DOCUMENTS CONSIDERED TO BE RELEVANT (CONTINUED FROM THE SECOND SHEET)		
Category *	Citation of Document, ¹⁶ with indication, where appropriate, of the relevant passages ¹⁷	Relevant to Claim No ¹⁸
X	GB,A, 1491440 (NRDC) 9 November 1977 (09.11.77) See page 2 lines 23-35, 65-71	(1-11)
X	US,A, 4346699 (LITTLE et al) 31 August 1982 (31.08.82)	(1)
X	US,A, 3986505 (POWER) 19 October 1976 (19.10.76) See col 2 lines 22-28	(1)

ANNEX TO THE INTERNATIONAL SEARCH REPORT ON
INTERNATIONAL APPLICATION NO. PCT/AU 84/00185

This Annex lists the known "A" publication level patent family members relating to the patent documents cited in the above-mentioned international search report. The Australian Patent Office is in no way liable for these particulars which are merely given for the purpose of information.

Patent Document Cited in Search Report		Patent Family Members			
US	3824998	CA	1011206		
GB	1491440	GB	1436104		
US	3986505	AU 16069/76 FR 2319324 JP 52025493	CA 1071965 GB 1560390 MX 144309	DE 2634323 IL 50163 SE 7608650	
US	4346699	US 4043326	US 4139003	US 4139003	

END OF ANNEX