

COMMONWEALTH OF AUSTRALIA

PATENTS ACT 1952

595451

APPLICATION FOR A STANDARD PATENT

Kraaijer Nederland B.V., of Bruynvisweg 4, 1531 AZ Wormer, THE NETHERLANDS,
hereby apply for the grant of a standard patent for an invention entitled:

Clothing Assembly

which is described in the accompanying complete specification.

Details of basic application(s):-

Basic Applic. No: Country:

87201062.4

EPD

Application Date

4 June 1987

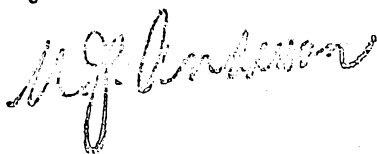
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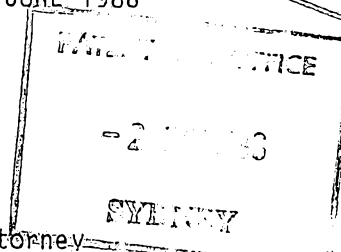
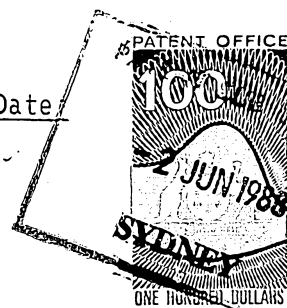
DATED this FIRST day of JUNE 1988

Kraaijer Nederland B.V.

By:



Registered Patent Attorney



TO: THE COMMISSIONER OF PATENTS
OUR REF: 60147
S&F CODE: 59410

APPLICATION ACCEPTED AND AMENDMENTS

ALLOWED 25-1-90

5845/2

DECLARATION IN SUPPORT OF A CONVENTION
APPLICATION FOR A PATENT OR PATENT OF ADDITION

In support of the Convention Application made for a

~~patent~~
~~patent-of-addition~~ for an invention entitled
Clothing Assembly

Full name and address of Declarant.

I, Wilhelmus Hendrikus Petrus van der Mark
care of Kraaijer Nederland B.V.
Bruynvisweg 4, 1531 AZ Wormer
the Netherlands
do solemnly and sincerely declare as follows:-

- ~~1. I am the applicant for the~~ ~~patent~~
~~patent-of-addition~~
(or, in the case of an application by a body corporate)
1. I am authorised by Kraaijer Nederland B.V.

the applicant for the ~~patent~~
~~patent-of-addition~~ to make this declaration on its behalf.

Insert country and date of basic application and name of foreign applicant.

2. The basic application as defined by Section 141 of the Act was made in
European Patent Office, Federal Republic of Germany on the
4th day of June 1987 by Kraaijer Nederland B.V.

- ~~3. I am the actual inventor of the invention referred to in the basic application.~~
(or where a person other than the inventor is the applicant)

Full name and address of Inventor(s)

3. Simon Roberto Theewis of De Spil 24, 1507 CX Zandam
the Netherlands, and
Robert Jacobus Eloy Victor Ebell
of Lange Weide 6, 1631 DL Oudendijk, the Netherlands

~~are~~ is the actual inventor of the invention and the facts upon which the applicant
is/are entitled to make the application are as follows:

The said applicant is the assignee of the actual inventors.

4. The basic application referred to in paragraph 2 of this Declaration was the first
application made in a Convention country in respect of the invention the subject
of the application.

Declared at Wormer this 26th day of May 1988

KRAAIJER NEDERLAND B.V.

Signature of Declarant

To:

The Commissioner of Patents,

W.H.P. van der Mark
General Manager

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CLOTHING OUTERWEAR WITH REFLECTING STRIPS

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(56) Prior Art Documents
DE 2715191
FR 2164946
GB 1230098

(57) Claim

1. Clothing assembly comprising a coat and trousers, provided with reflecting strips, characterized in that the reflecting strips on the forward coat tail and on the rearward coat tail are applied in a closed pattern, each comprising an upper horizontal strip extending practically at the height of the collar bones or the shoulder blades, respectively, a lower horizontal strip extending near to the lower edge of the coat section, wherein the lower horizontal strips on the forward coat tail and the rearward coat tail practically meet mutually, further comprising two substantially vertical strips connecting said upper and lower strips and being positioned at some distance from each other, wherein the upper horizontal strips practically meet strips applied to the sleeves and extending in the longitudinal direction thereof, of which strips in each case one is applied to the forward sleeve tail and one to the rearward sleeve tail, whereas further each trouser-leg comprises at its forward and its rearward side a strip extending in the longitudinal direction of said trouser-leg.

FORM 10

COMMONWEALTH OF AUSTRALIA

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COMPLETE SPECIFICATION

(ORIGINAL)

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FOR OFFICE USE:

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Complete Specification Lodged:

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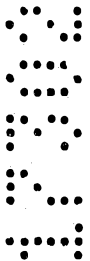
Complete Specification for the invention entitled:

Clothing Assembly

The following statement is a full description of this invention, including the best method of performing it known to me/us

A B S T R A C T

The invention relates to a clothing assembly comprising a coat and trousers with reflecting strips. According to the invention the strips are applied in a special pattern, enlarging the recognition of the bearer of 5 the clothing assembly as a human being.



Clothing assembly

The invention relates to a clothing assembly comprising a coat and trousers, provided with reflecting strips.

A clothing assembly of this type is used as working clothes for, among others, firemen and road workmen. With this working clothes by an appropriate choice of the locations where the reflecting strips are applied, one tries
5 to provide the working clothes with a notable appearance, especially under conditions with a low visibility. While these known working clothes are rather notable, they cannot achieve a good identification of the bearer as a human being. Mostly an incoherent image is provided that hardly can be
10 distinguished from the background, or of which it is totally obscure what object, in this a human being, it is about.

It is an object of the invention to provide a clothing assembly of the type referred to above, removing this disadvantage in a simple, but nevertheless effective way.

15 Therefore the clothing assembly according to the invention is characterized in that the reflecting strips on the forward coat tail and on the rearward coat tail are applied in a closed pattern, each comprising an upper horizontal strip extending practically at the height of the
20 collar bones or the shoulder blades, respectively, a lower horizontal strip extending near to the lower edge of the coat section, wherein the lower horizontal strips on the forward coat tail and the rearward coat tail practically meet mutually, further comprising two substantially vertical
25 strips connecting said upper and lower strips and being positioned at some distance from each other, wherein the upper horizontal strips practically meet strips applied to the sleeves and extending in the longitudinal direction thereof, of which strips in each case one is applied to the
30 forward sleeve tail and one to the rearward sleeve tail, whereas further each trouser-leg comprises at its forward and its rearward side a strip extending in the longitudinal direction of said trouser-leg.

As a result of the position of the reflecting
35 strips according to the invention a good recognizable human

figure is always visible regardless the position of the bearer or the direction from which one sees the bearer. Moreover the sleeves and the trouser-legs are provided with a linear indication practically meeting the volume-like
5 indication of the torso.

According to a preferred embodiment of the clothing assembly according to the invention the vertical strips are positioned more closely at the upper horizontal strip than at the lower horizontal strip. Like this the natural line of the
10 body is emphasized, whereas moreover the possibility is offered to carry a compressed air assembly without covering this section of the reflecting pattern.

Further it is preferred that the strips on the forward side of the trouser-legs are substantially aligned
15 with the corresponding strips on the forward coat tail and extend outwardly of the knees, whereas the strips on the rearward side of the trouser-legs are inwardly disposed relative to the corresponding strips on the rearward coat tail and extend slightly inwardly of the hollow of the knees.
20 In this way the trouser-legs comprise a simple linear indication in the form of two axial parallel lines. These lines are applied to each trouser-leg such, that during a rotation at least one of said lines will always be visible.
25 The schematic indication of a leg therefore will be maintained constantly. Further in applying the reflecting strokes to the trouser-legs possible wear has been taken into account and the most heavily loaded locations, as on the knee and at the seat-bones of the pelvis, are spared.

Correspondingly it is possible, that the strips on
30 the forward tail sleeves extend outwardly of the hollow of the arms and end slightly disposed upwardly relative to the corresponding upper horizontal strip of the forward coat tail, whereas the strips on the rearward tail sleeves extend slightly inwardly of the elbows and precisely join the
35 corresponding upper horizontal strip of the rearward coat tail.

In determining the location of the strips on the sleeves similar considerations as with the trouser-legs are of importance. At one hand in all positions of the arms and
40 as seen from all directions at least one linear indication of

the arms should always be visible, whereas, moreover the most heavily loaded locations on the elbows and at the inner sides of the sleeves have to be spared.

According to a handy embodiment of the clothing assembly according to the invention the horizontal strips of the coat tails have a larger width than the other strips. As a result the arms and legs are indicated as clearly smaller projections of a wider body.

Further the invention relates to a coat as applied in a clothing assembly according to the invention, as well as to trousers as applied in a clothing assembly according to the invention.

Hereafter the invention will be explained further with reference to the drawing in which an embodiment is illustrated of a clothing assembly according to the invention.

Fig. 1 illustrates a view of the assembling parts of the forward side of the clothing assembly according to the invention;

Fig. 2 illustrates a view of the assembling parts of the rearward side of the clothing assembly according to the invention, and

Fig. 3-7 illustrate the reflecting pattern of the clothing assembly according to fig. 1 and 2, and seen from several directions and in several positions of the bearer of the clothing assembly.

As a way of speaking the fig. 1 and 2 show plans of the assembling parts of the clothing assembly. Accordingly fig. 1 shows: the forward sleeve tails 1 and 2, the forward coat tail 3 as well as the forward tails 4, 5 of the trouser-legs.

Correspondingly fig. 2 shows the rearward sleeve tails 6, 7, the rearward coat tail 8 as well as the rearward tails 9, 10 of the trouser-legs.

In a ready clothing assembly the forward sleeve tails 1, 2 are connected with the rearward sleeve tails 7 and 6, respectively, the forward coat tail 3 is connected with the rearward coat tail 8 and the forward tails 4, 5 of the trouser legs are connected with the rearward tails 10 and 9, respectively, of the trouser-legs. In fig. 1 and 2 the assembling lines are illustrated by fat dotted lines.

Further in fig. 1 and 2 the shown clothing assemblies are provided with a frame of reference made up of a large number of squares. This frame of reference only serves for determining the position of the reflecting strips 5 on the clothing assembly, and in use it is not present. Further each of the assembling parts comprises two lines of reference, illustrated as full lines. Thus on the forward coat tail 3 the lines of reference 11 and 12 are applied. These lines of reference too only are meant for determining 10 the position of the reflecting strips and are not present on a real clothing assembly.

As appears from fig. 1 and 2 the reflecting strips on the forward coat tail 3 as well as on the rearward coat tail 8 are applied in a closed pattern. Each closed pattern 15 comprises an upper horizontal strip 13 and 14, respectively, a lower horizontal strip 15 and 16, respectively, and two substantially vertical strips 17, 18 and 19, 20, respectively, connecting the upper strips 13, 14 with the lower strips 15, 16 and being positioned at some distance 20 from each other.

The upper horizontal strip 13 on the forward coat tail 3 extends substantially at the height of the collar bones of a bearer. The upper horizontal strip 14 on the rearward coat tail 8 extends substantially at the height of 25 the shoulder blades of a bearer. The lower horizontal strips 15 and 16 extend near to the lower edge of the coat tails, wherein the horizontal strip 15 of the forward coat tail 3 meets the lower horizontal strip 16 of the rearward coat tail 8.

30 The upper horizontal strips 13 and 14 meet the forward sleeve tails 1, 2 and the rearward sleeve tails 6, 7, respectively. Onto the forward sleeve tails 1, 2 strips 21, 22 are applied, whereas onto the rearward sleeve tails 6, 7 strips 23, 24 are applied. As indicated in fig. 1 by the 35 shallow dotted lines between the forward sleeve tails 1, 2 and the forward coat tail 3 the strips 21, 22 on the forward sleeve tails 1, 2 end slightly disposed upwardly relative to the upper horizontal strip 13 of the forward coat tail 3. Correspondingly it appears from fig. 2 that the strips 23, 24 40 on the rearward sleeve tails 6, 7 exactly join the upper

horizontal strip 14 of the rearward coat tail 8.

As appears further from fig.1 and 2 each trouser-leg comprises at its forward side (forward tails 4 and 5) as well as at its rearward side (rearward tails 9 and 10) a strip 25, 26 and 27,28, respectively, extending in the longitudinal direction of the respective trouser-leg.

The vertical strips 17, 18 on the forward coat tail 3 and the vertical strips on the rearward coat tail 8 are positioned more closely at the respective upper horizontal strips 13 and 14 than at the respective lower horizontal strips 15 and 16. Each vertical strip 17-20 comprises an upper vertical section and a lower slightly inclined section, wherein the transition between said two sections is positioned approximately at the height of the lower side of the breast-bone of a bearer of the clothing assembly. The kinked structure obtained like this promotes the impression of the natural line of the body.

The strips 25, 26 on the forward side of the trouser-legs (on the forward tails 4, 5 of the trouser legs) are positioned substantially aligned with the vertical strips 17, 18 on the forward coat tail 3. The mentioned strips 25, 26 extend along the outer side of the knees of a bearer thus avoiding an excessive wear of these strips.

The reflecting strips 27, 28 on the rearward tails 9, 10 of the trouser-legs are disposed inwardly relative to the vertical strips 19 and 20 on the rearward coat tail 8 and extend slightly inwardly of the inner side of the hollow of the knees of a bearer. This appears among others from fig.2. The position of the reflecting strips 27, 28 is such that the most heavily loaded locations, where the seat-bones of the pelvis are positioned when sitting, are avoided.

The strips 21, 22 on the forward sleeve tails 1, 2 extend outwardly from the hollow of the arms of a bearer so that moving the sleeves along the body will not result in any wear of these strips 21, 22. Further the location of these strips 23, 24 on the rearward sleeve tails is chosen such that these extend slightly inwards of the elbows. Thus here too an excessive wear at the elbows is avoided.

As appears clearly from fig. 1 and 2 the horizontal strips 13, 14 and 15, 16 of the forward coat tail and the

rearward coat tail 8 have a larger width than all the other strips of the clothing assembly. In general the width of the said wider horizontal strips will be 8-9 cm whereas the width of the other strips is 5-6 cm. Like this the arms and legs 5 are indicated as clearly smaller projections of a wider body, promoting the recognition as a human being.

As can be seen too, the reflecting strips extend as far as the ends of the respective assembling parts of the clothing assembly, so that these reflecting strips provide 10 reliable information about the dimensions of the limbs.

In positioning the reflecting strips on the forward coat tail 3 and the rearward coat tail 8 account is taken of carrying a compressed air assembly. Here, hiding the reflecting pattern because of covering the reflecting strips 15 or because of folding the clothing assembly had to be avoided.

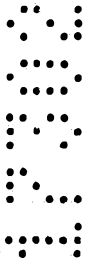
Besides of the embodiment of the clothing assembly according to the invention shown in fig. 1 and 2 it is possible too that the coat and trousers are integrally formed. In such an embodiment however the lower horizontal 20 strips 15 and 16 will be positioned at the height of the upper legs of the bearer.

The fig. 3-7 show examples in practice of the images when a clothing assembly according to the invention is worn and reflects in the dark light falling thereon. It is 25 emphasized that the illustrations are represented in negative, this means that in reality the dark patterns have the largest brightness.

Fig. 3 shows a frontal view standing up, wherein fig. 3a represents the situation without compressed air 30 assembly and fig 3b represents the situation with compressed air assembly. Correspondingly fig. 4a shows the situation without compressed air assembly as seen from backwards and standing up, whereas fig. 4b represents a rearward view standing up with compressed air assembly. Further fig. 5 35 shows from behind a walking position, fig. 6 shows from right behind a bent position and finally fig. 7 shows from left behind a squatted position. As appears from fig. 3-7, a human being is always clearly recognisable, thus enlarging the effectivity of the reflecting pattern.

40 The invention is not limited to the embodiment

illustrated above, but can be varied widely within the scope of the invention.



~~CLAIMS~~

The claims defining the invention are as follows:

1. Clothing assembly comprising a coat and trousers, provided with reflecting strips, c h a r a c - t e r i z e d in that the reflecting strips on the forward coat tail and on the rearward coat tail are applied in a
5 closed pattern, each comprising an upper horizontal strip extending practically at the height of the collar bones or the shoulder blades, respectively, a lower horizontal strip extending near to the lower edge of the coat section, wherein the lower horizontal strips on the forward coat tail and the
10 rearward coat tail practically meet mutually, further comprising two substantially vertical strips connecting said upper and lower strips and being positioned at some distance from each other, wherein the upper horizontal strips practically meet strips applied to the sleeves and extending
15 in the longitudinal direction thereof, of which strips in each case one is applied to the forward sleeve tail and one to the rearward sleeve tail, whereas further each trouser-leg comprises at its forward and its rearward side a strip extending in the longitudinal direction of said trouser-leg.
20
2. Clothing assembly according to claim 1, c h a r a c t e r i z e d in that the vertical strips are positioned more closely at the upper horizontal strip than at the lower horizontal strip.
- 25 3. Clothing assembly according to claim 2, c h a r a c t e r i z e d in that each vertical strip comprises an upper vertical section and a lower slightly inclined section, wherein the transition between said two sections is positioned approximately at the height of the lower side of the breast-bone.
30
4. Clothing assembly according to one of the claims 1-3, c h a r a c t e r i z e d in that the strips on the forward side of the trouser-legs are substantially aligned with the corresponding strips on the forward coat tail and extend outwardly of the knees, whereas the strips on the
35 rearward side of the trouser-legs are inwardly disposed relative to the corresponding strips on the rearward coat tail and extend slightly inwardly of the hollow of the knees.
5. Clothing assembly according to one of the claims

1-4, characterized in that the strips on the forward tail sleeves extend outwardly of the hollow of the arms and end slightly disposed upwardly relative to the corresponding upper horizontal strip of the forward coat tail, whereas the strips on the rearward tail sleeves extend slightly inwardly of the elbows and precisely join the corresponding upper horizontal strip of the rearward coat tail.

6. Clothing assembly according to one of the claims 1-5, characterized in that the horizontal strips of the coat tails have a larger width than the other strips.

7. Clothing assembly according to claim 6, characterized in that the width of the horizontal strips is 8-9 cm, whereas the width of the other strips is 5-6.

8. Clothing assembly according to one of the claims 1-7, characterized in that the coat and the trousers are integrally formed wherein the lower horizontal strips are positioned approximately at the height of the upper legs.

9. Coat as applied in a clothing assembly according to one of the claims 1-7.

10. Trousers as applied in a clothing assembly according to one of the claims 1-7.

DATED this FIRST day of JUNE 1986

Kraaijer Nederland B.V.

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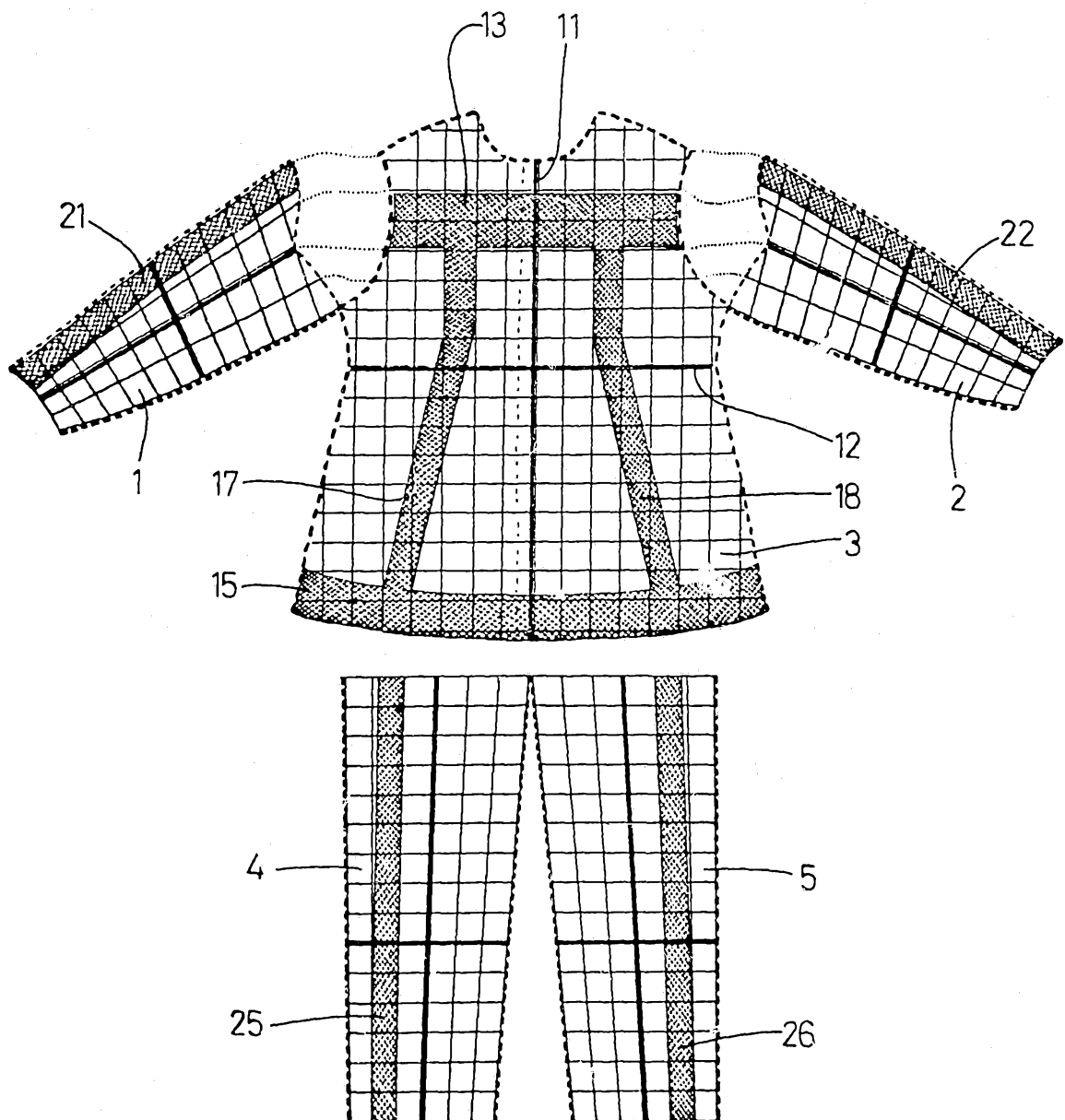


fig.1

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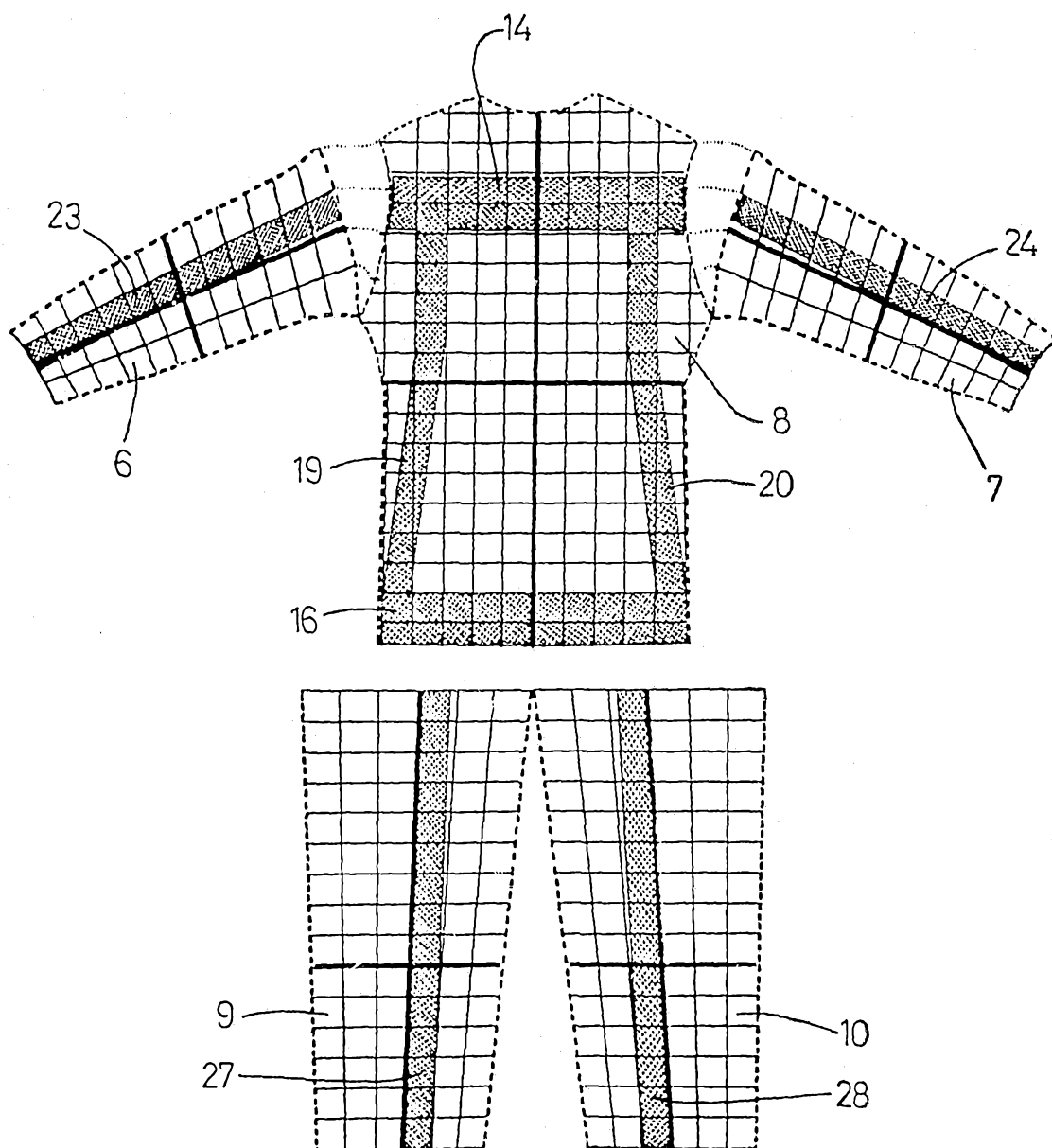


fig.2

