



(22) Date de dépôt/Filing Date: 1998/02/24

(41) Mise à la disp. pub./Open to Public Insp.: 1999/08/24

(45) Date de délivrance/Issue Date: 2004/12/07

(51) Cl.Int.⁶/Int.Cl.⁶ A41F 19/00

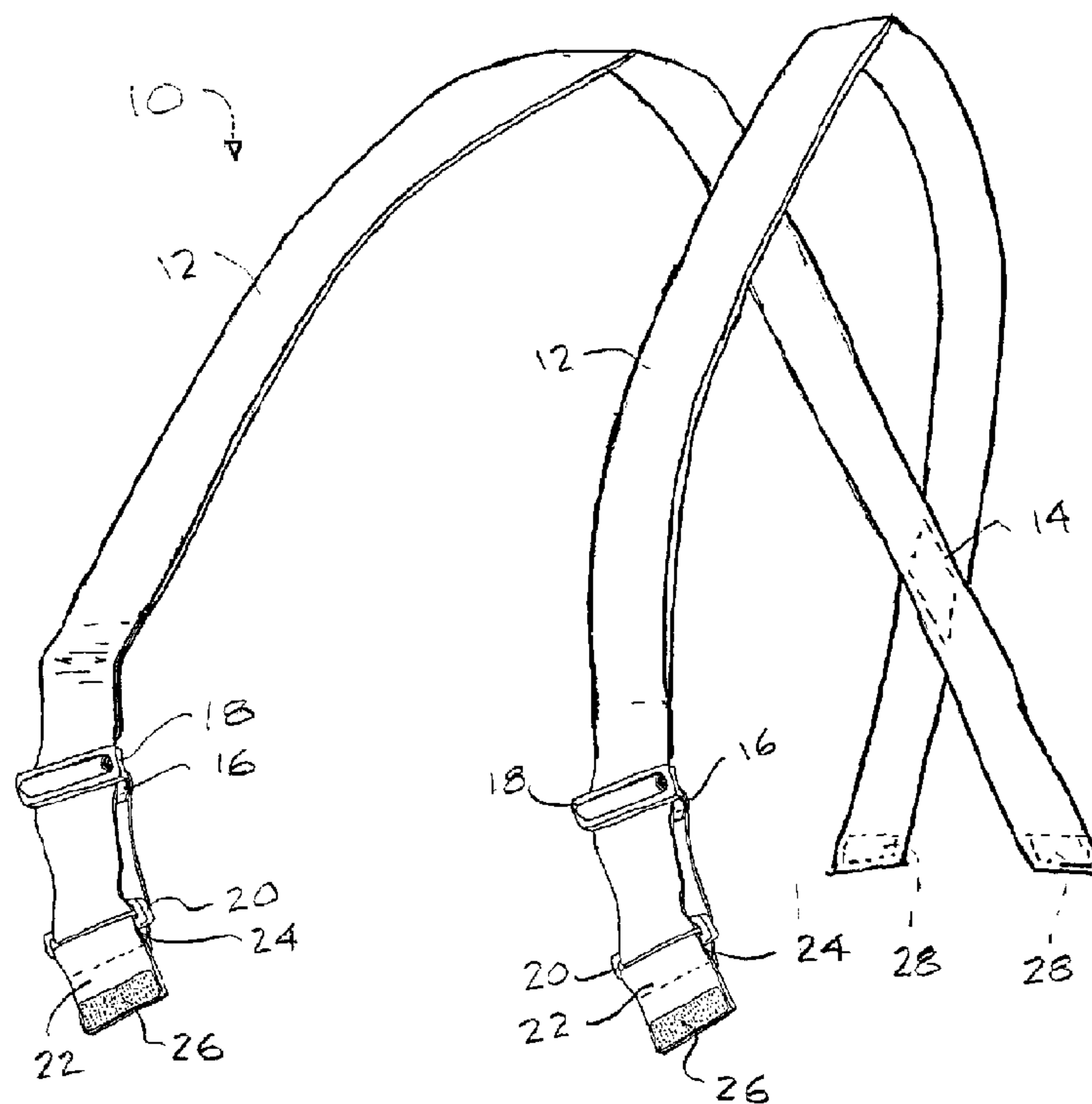
(72) Inventeur/Inventor:
LLOYD, JOHN K. L., CA

(73) Propriétaire/Owner:
LLOYD, JOHN K. L., CA

(74) Agent: ADE & COMPANY

(54) Titre : SYSTÈME D'ATTACHE DE BRETELLES

(54) Title: SUSPENDER ATTACHMENT SYSTEM



(57) Abrégé/Abstract:

A suspender system includes a pair of suspenders for holding work trousers. At the front end of each suspender strap is a patch of the hook component of a hook and loop fastener. A similar patch of hook component is found at the back end of each strap. The waistband of a pair of trousers has the mating loop component of the fastener stitched to its inside. The suspenders are therefore attached to the trousers without the use of conventional metal clips, which can damage surrounding objects which they contact and can damage and deform the trouser waistband.

ABSTRACT

A suspender system includes a pair of suspenders for holding work trousers. At the front end of each suspender strap is a patch of the hook component of a hook and loop fastener. A similar patch of hook component is found at the back end of each strap. The waistband of a pair of trousers has the mating loop component of the fastener stitched to its inside. The suspenders are therefore attached to the trousers without the use of conventional metal clips, which can damage surrounding objects which they contact and can damage and deform the trouser waistband.

SUSPENDER ATTACHMENT SYSTEM

BACKGROUND OF THE INVENTION

The present invention relates to suspenders for supporting trousers.

The conventional suspenders, particularly those with broad straps for
5 holding up work trousers, are conventionally fastened to the trousers with metal clips
that grip the trouser waistband between two toothed jaws. In some environments
this can be damaging to surrounding objects. For example, when working on an
automobile, the conventional exposed metal clips can scratch paint work and tear
upholstery. The teeth on the conventional metal clips penetrate and will damage the
10 trouser waistband as well causing deformation of the waistband because of the
relatively small area on which the suspending load is applied.

The present invention is concerned with the amelioration of these
problems.

SUMMARY OF THE INVENTION

15 According to one aspect of the invention there is provided a suspender
system for a pair of trousers comprising:

suspenders including two shoulder straps and means connecting the
shoulder straps, the suspenders having front and back ends for connection to a
waistband of the trousers; and

20 fastener means for connecting the suspenders to a pair of trousers
including;

first fastener components secured to the front and back ends of the
suspenders, the first fastener components comprising hook components of a hook
and loop fastener; and

- 2 -

second fastener components secured to the trouser waistband, the second fastener components comprising loop components of the hook and loop fastener.

This arrangement eliminates the exposed metal clips of the prior art and provides a comfortable, strong connection between the suspenders and the trousers. Additional advantages of this arrangement are the load distribution over a wide area of the waistband, minimising bunching of the waistband and the elimination of damage to the waistband by its penetration with the teeth on the conventional clips.

10 BRIEF DESCRIPTION OF THE DRAWINGS

In the accompanying drawings which illustrate an exemplary embodiment of the present invention:

Figure 1 is an isometric view of a pair of suspenders.

Figure 2 is a detail of the front end of one strap of the suspenders.

15 Figure 3 is a detail of the back of the suspenders.

Figure 4 is a view of the upper part of a pair of trousers showing the inside of the waistband.

DETAILED DESCRIPTION

Referring to the accompanying drawings, there is illustrated a pair of suspenders 10. These include two straps 12 that, in use, extend over the shoulders of a user. The two straps are crossed near their back ends and held together by stitching 14.

At the front of each suspender strap is a loop 16 formed in the strap. The loop is stitched onto the centre bar of a plastic buckle. The main length of the strap is threaded through the plastic buckle 18 to provide an adjustable connection to the strap end. The strap is also threaded through a second plastic material buckle

- 3 -

20. A fabric band 22 is also threaded through the buckle 20 and stitched into a loop 24. The loop 24 carries a fastener component 26. This is the hook component of a hook and loop fastener such as that sold under the trademark "VELCRO".

As can be seen most particularly in Figure 3, the back end of each
5 strap 12 carries a fastener component 28, stitched to the outer side of the back end of the strap. This is also the hook component of a hook and loop fastener.

The trousers 30 illustrated in Figure 4 have a waist band 32. Secured to the inside of the waist band 32 are four patches of fastener component 34. Each of these is the loop component of a respective one of the hook and loop fasteners.
10 The loop component is placed on the trousers as it is more comfortable than the hook component when pressed against the skin.

In use, the fastener components 28 at the back ends of the suspender straps are attached to the fastener components 34 at the back of the trouser waistband, while the fastener components 26 at the front ends of the suspenders are
15 attached to fastener components 34 at the front of the trouser waistband. The resulting suspender system eliminates entirely the metal clips that are conventionally used for attaching suspenders of this type to work trousers. The suspenders will therefore not cut or scratch materials with which they come into contact.

While one embodiment of the present invention has been described in
20 the foregoing, it is to be understood that other embodiments are possible within the scope of the invention and are intended to be included herein.

- 4 -

CLAIMS

1. A suspender system for a pair of trousers comprising:

suspenders including two shoulder straps and means connecting the shoulder straps, the suspenders having front and back ends for connection to a
5 waistband of the trousers; and

fastener means for connecting the suspenders to a pair of trousers including;

first fastener components secured to the front and back ends of the suspenders, the first fastener components comprising hook components of a
10 hook and loop fastener; and

second fastener components secured to the trouser waistband, the second fastener components comprising loop components of the hook and loop fastener.

2. A suspender system according to Claim 1 wherein the
15 suspenders include an adjustable length loop at the front end of each shoulder strap, a buckle engaged with the loop and a first fastener component carried by the buckle.

3. A suspender system according to Claim 2 wherein the buckle is a synthetic plastic material.

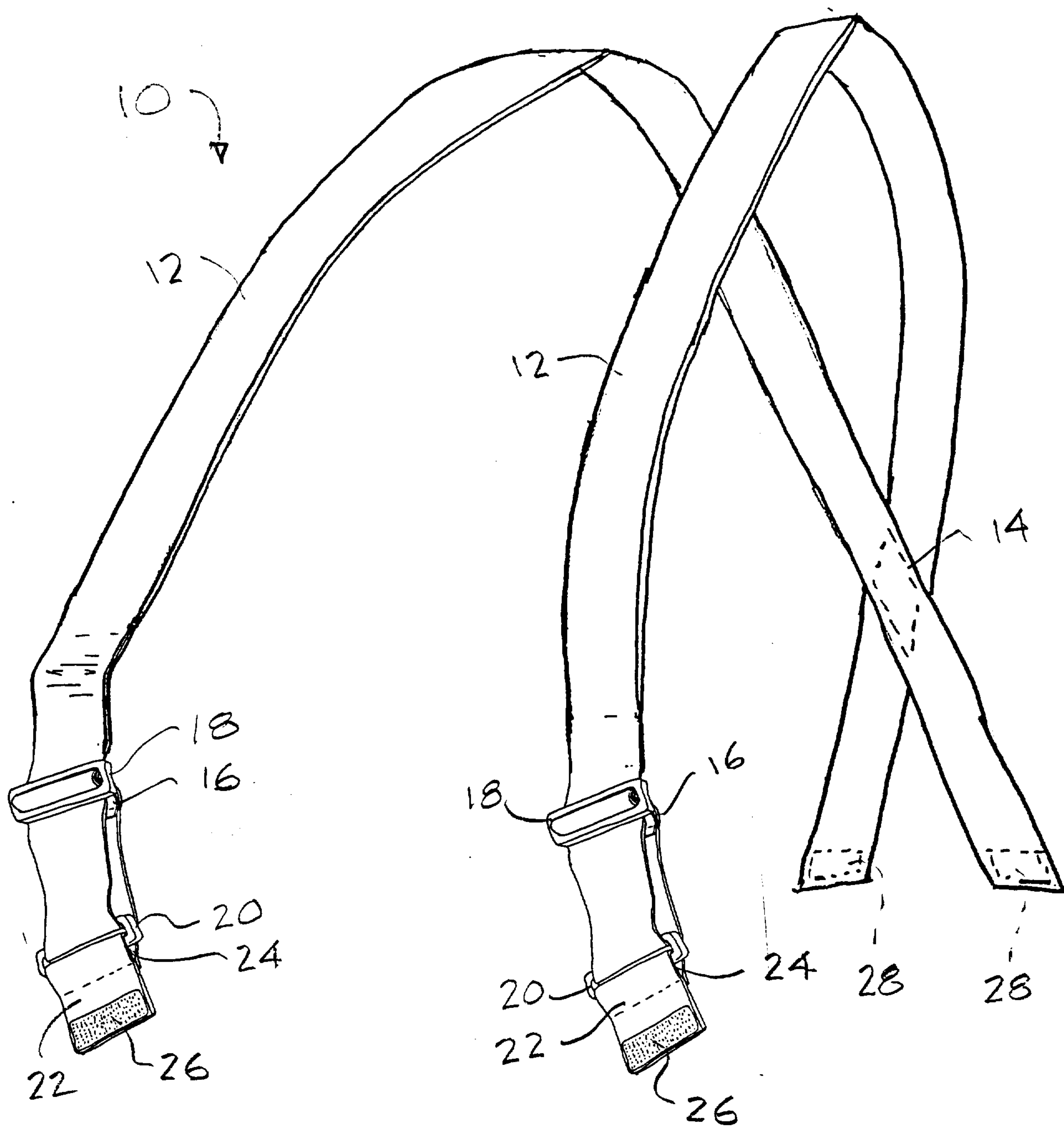


FIG. 1

INVENTOR: JOHN K. L. LLOYD
BY: ADE & COMPANY

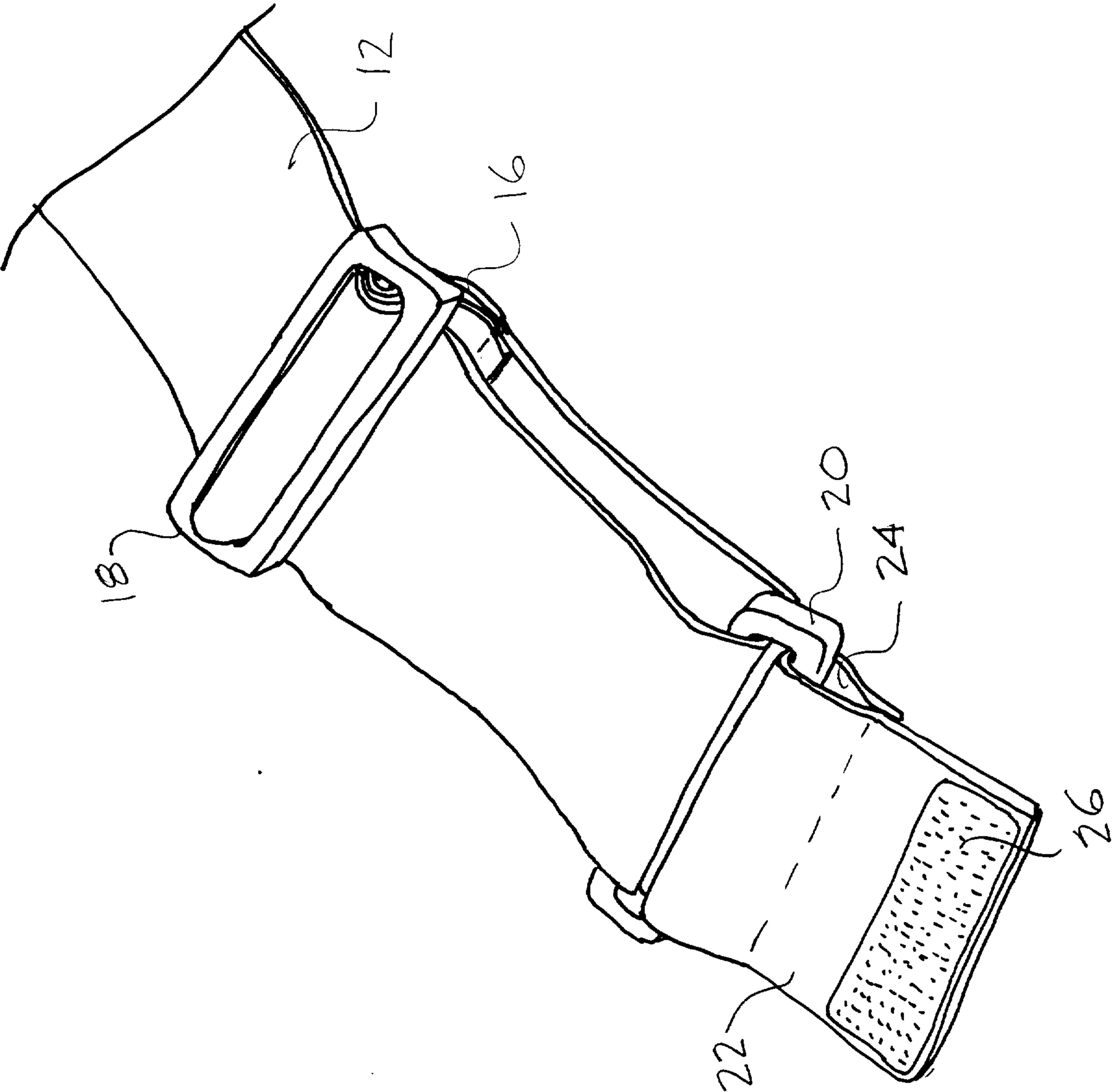
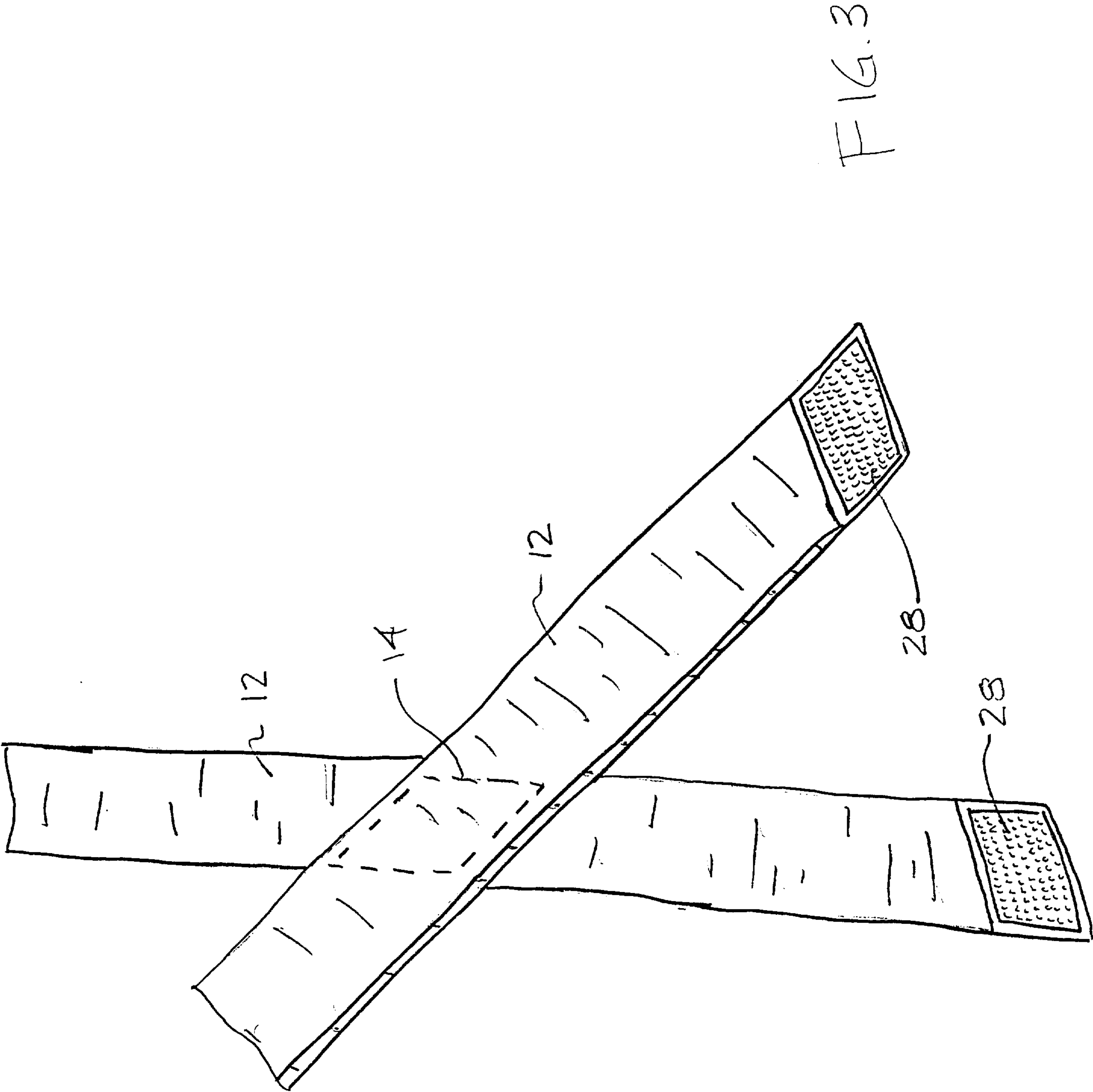


FIG. 2

INVENTOR: JOHN K. L. LLOYD
BY: ADE & COMPANY



INVENTOR: JOHN K. L. LLOYD
BY: ADE & COMPANY

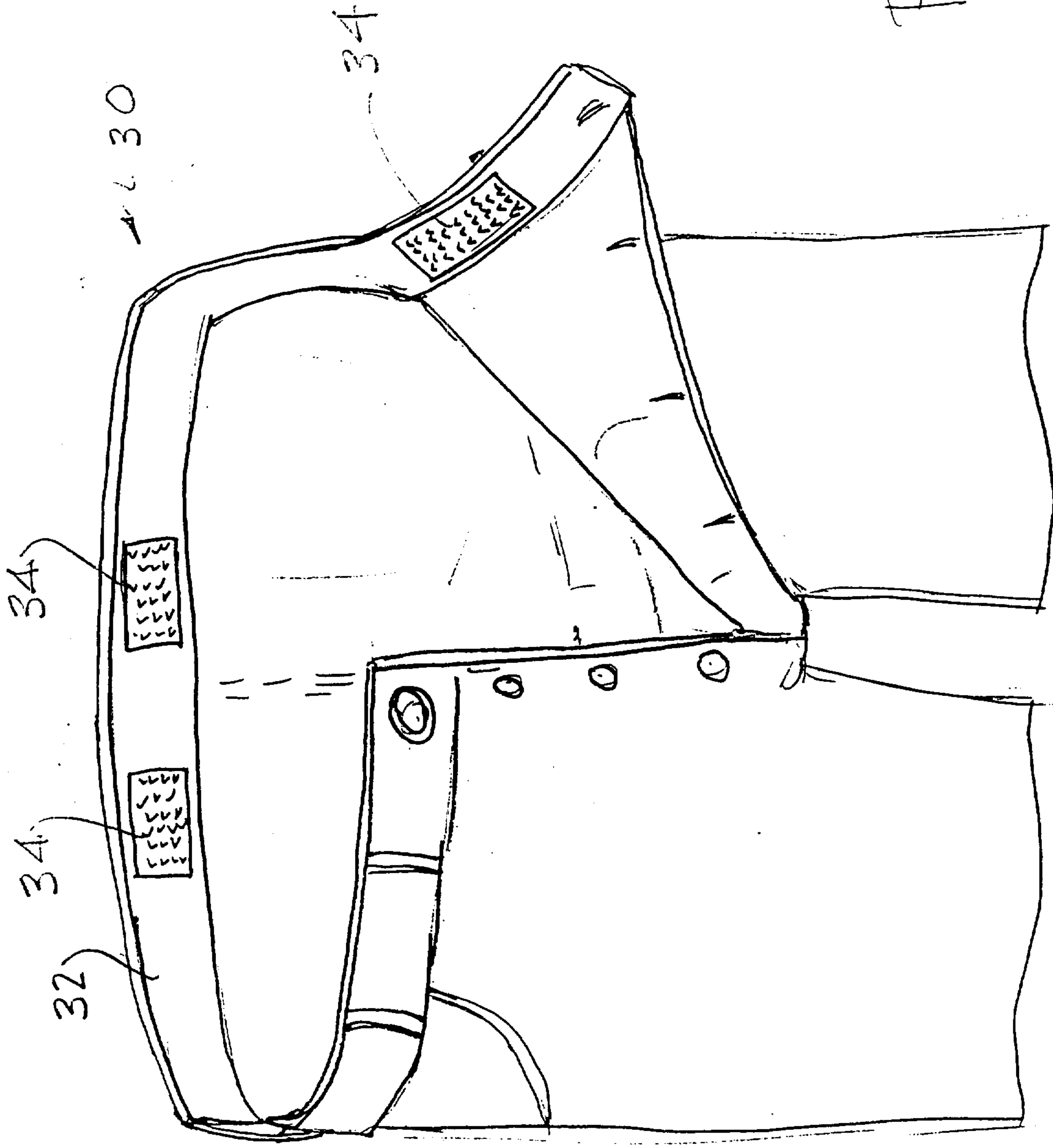


FIG. 4

INVENTOR: JOHN K. L. LLOYD
BY: ADE & COMPANY

