

(19)



Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 898 906 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:

09.01.2002 Bulletin 2002/02

(51) Int Cl.7: **A45C 13/30**, A45F 3/12

(21) Application number: **98306861.0**

(22) Date of filing: **26.08.1998**

(54) **Shoulder strap with replaceable cushioned insert for golf bags, rucksacks and any other carry bags**

Schulterriemen mit austauschbaren Polstereinlagen für Golftasche, Rucksack oder anderen Taschen

Bretelle à coussins interchangeables pour sac de golf, sac à dos ou autre sac

(84) Designated Contracting States:
AT BE CH DE DK ES FI FR GR IE IT LI LU NL PT SE

(30) Priority: **29.08.1997 GB 9718167**

(43) Date of publication of application:
03.03.1999 Bulletin 1999/09

(73) Proprietor: **Mizen, John Paul**
Bramhall, Cheshire SK7 1JT (GB)

(72) Inventor: **Mizen, John Paul**
Bramhall, Cheshire SK7 1JT (GB)

(74) Representative: **Ajello, Michael John**
Urquhart-Dykes & Lord Greg's Buildings 1 Booth
Street
Manchester M2 4DU (GB)

(56) References cited:

WO-A-94/28756	WO-A-98/17144
DE-A- 19 505 091	FR-A- 2 264 502
US-A- 3 883 053	US-A- 5 361 957
US-A- 5 547 461	

Note: Within nine months from the publication of the mention of the grant of the European patent, any person may give notice to the European Patent Office of opposition to the European patent granted. Notice of opposition shall be filed in a written reasoned statement. It shall not be deemed to have been filed until the opposition fee has been paid. (Art. 99(1) European Patent Convention).

EP 0 898 906 B1

Description

[0001] THIS INVENTION relates to shoulder straps, with replaceable cushioned inserts for golf bags, rucksacks and any other carry bags.

[0002] Shoulder straps are used as a convenient way of carrying heavy bags. Golf bags normally have one shoulder strap but sometimes have two. Rucksacks and baby carriers, for instance, are usually fitted with two shoulder straps.

[0003] Shoulder straps however often become uncomfortable after a time, especially when carrying a heavy weight.

[0004] DE-U-195 05 091 discloses a bag in which air sacks are provided in the straps or are attached thereto.

[0005] According to the present invention, there is provided, a shoulder strap for bags, having means for receiving an insert, the insert comprising a sealed inflated air sack of supple non-porous material, and an opening in the strap to enable replacement of the air sack.

[0006] The insert can be made using walls made of a single layer of material or two or more layers. The thickness of material and the number of layers used will affect the resistance to accidental puncture of the insert.

[0007] The insert may be made of one complete tube or it could be constructed with sections. These sections could be totally separate and sealed off from one another. If one section is accidentally punctured the other sections would remain inflated. Alternatively the insert could have sections which are not totally separate from each other (if a gap is left between each section). This would allow the air to pass between the sections when the insert is under pressure i.e. when the shoulder strap is in use. This method could make the insert more malleable and able to spread the load throughout its length and width.

[0008] A specific embodiment of the invention will now be described by way of example, with reference to the accompanying drawing, in which:-

Fig. 1 shows in plan view, the insert prior to inflation;

Fig. 2 shows in plan view, the insert after inflation;

Fig. 3 shows a cross-section of the inflated insert;

and Fig. 4 shows a cross-section (lengthways of the insert inside the outer cover of the strap.

[0009] Two sheets of polyurethane are welded together using a high frequency welding tool with a "tear" seal on the outside.

[0010] As shown in Fig. 1 of the drawing, the insert is formed first leaving a small gap 1 in the outside seam. At the same time seams 2 are welded along the length and width which would allow the insert not to form a 'sausage' shape when inflated and also to have a 'hinged effect' which would fit comfortably over the shoulder.

Gaps 3 are left between the inner and outer seams in order to allow the air to pass between sections when inflated.

[0011] Air is blown into the insert between the middle layers via the small gap 1 and this gap is then sealed off with another weld as shown in Fig. 2,4.

[0012] As shown in Fig. 4, the outer cover 5 of the shoulder strap has an opening 6 on its underside at one end to allow the insert to be placed in position. This opening can be sealed by means of "VELCRO", "pop-pers", zip, button or could be left open as a flap. Being on the underside of the strap the opening would have a tendency to remain closed.

[0013] The purpose of an opening in the shoulder strap is that should the insert be accidentally punctured, a replacement could easily be fitted.

[0014] Another specific embodiment of the invention is made as above but including a one-way valve 7 through which the insert would be inflated.

[0015] A further specific embodiment of the invention is made as previously described but using polyurethane tubing instead of sheets. This means that there is, in this instance, no need for a complete outside welded seam.

Claims

1. A shoulder strap for bags, having means (5) for receiving an insert, the insert comprising a sealed inflated air sack of supple non-porous material, and an opening (6) in the strap to enable replacement of the air sack.
2. A shoulder strap according to Claim 1, wherein the air sack is divided into compartments with internal gaps to allow air to flow between the compartments.
3. A shoulder strap according to Claim 1 or Claim 2, wherein the opening (6) is on the underside of the strap when worn.
4. A shoulder strap according to any preceding claim, wherein the opening (6) is adjacent one end of the strap.
5. A shoulder strap according to Claim 2, wherein the internal gaps are provided between inner and outer seams (2) defining the compartments.
6. A shoulder strap according to Claim 5, wherein an inner seam (2) extends across the width of the strap to provide a hinge effect for the insert.
7. A shoulder strap according to any preceding claim, wherein the insert is formed from one or more sheets of polyurethane sealed and seamed by high frequency welding.

8. A shoulder strap according to any preceding claim, wherein the opening (6) is provided with closure means.
9. A shoulder strap according to any preceding claim, wherein the insert includes an inflation valve (7).

Patentansprüche

1. Schulterriemen für Taschen, mit einer Einrichtung (5) zur Aufnahme eines Einsatzes, wobei der Einsatz einen versiegelten aufgeblasenen Luftsack aus geschmeidigem nichtporösem Material aufweist, und mit einer Öffnung (6) im Riemen, um einen Austausch des Luftsacks zu ermöglichen.
2. Schulterriemen nach Anspruch 1, wobei der Luftsack in Abteile unterteilt ist mit inneren Spalten, um eine Luftströmung zwischen den Abteilen zuzulassen.
3. Schulterriemen nach Anspruch 1 oder Anspruch 2, wobei die Öffnung (6) an der Unterseite des Riemens in der Tragestellung liegt.
4. Schulterriemen nach einem der vorangehenden Ansprüche, wobei die Öffnung (6) nahe dem einen Ende des Riemens angeordnet ist.
5. Schulterriemen nach Anspruch 2, wobei die inneren Spalten zwischen inneren und äußeren Nähten (2) vorgesehen sind, die die Abteile begrenzen.
6. Schulterriemen nach Anspruch 5, wobei eine innere Naht (2) sich quer über die Breite des Riemens erstreckt, um eine Gelenkwirkung für den Einsatz zu schaffen.
7. Schulterriemen nach einem der vorangehenden Ansprüche, wobei der Einsatz aus einer oder mehreren Bahnen aus Polyurethan gebildet ist, die durch Hochfrequenzschweißen versiegelt und abgenäht sind.
8. Schulterriemen nach einem der vorangehenden Ansprüche, wobei die Öffnung (6) mit einer Verschlusseinrichtung versehen ist.
9. Schulterriemen nach einem der vorangehenden Ansprüche, wobei der Einsatz ein Aufblasventil (7) aufweist.

Revendications

1. Sangle d'épaule pour sacs, comportant des moyens (5) pour recevoir une pièce d'insertion, la

pièce d'insertion comprenant un sac d'air gonflé hermétiquement scellé en matériau non-poreux souple, et une ouverture (6) dans la sangle pour permettre le remplacement du sac d'air.

2. Sangle d'épaule selon la revendication 1, dans laquelle le sac d'air est divisé en compartiments avec des espaces internes pour permettre à l'air de circuler entre les compartiments.
3. Sangle d'épaule selon la revendication 1 ou la revendication 2, dans laquelle l'ouverture (6) se trouve sur la face inférieure de la sangle lorsqu'elle est portée.
4. Sangle d'épaule selon l'une quelconque des revendications précédentes, dans laquelle l'ouverture (6) est adjacente à une extrémité de la sangle.
5. Sangle d'épaule selon la revendication 2, dans laquelle les espaces internes sont disposés entre des jointures intérieure et extérieure (2) définissant les compartiments.
6. Sangle d'épaule selon la revendication 5, dans laquelle une jointure intérieure (2) s'étend sur la largeur de la sangle afin de réaliser un effet de charnière pour la pièce d'insertion.
7. Sangle d'épaule selon l'une quelconque des revendications précédentes, dans laquelle la pièce d'insertion est constituée d'une ou plusieurs feuilles de polyuréthane scellé et joint par soudage à haute fréquence.
8. Sangle d'épaule selon l'une quelconque des revendications précédentes, dans laquelle l'ouverture (6) est munie de moyens de fermeture.
9. Sangle d'épaule selon l'une quelconque des revendications précédentes, dans laquelle la pièce d'insertion comprend une soupape de gonflage (7).

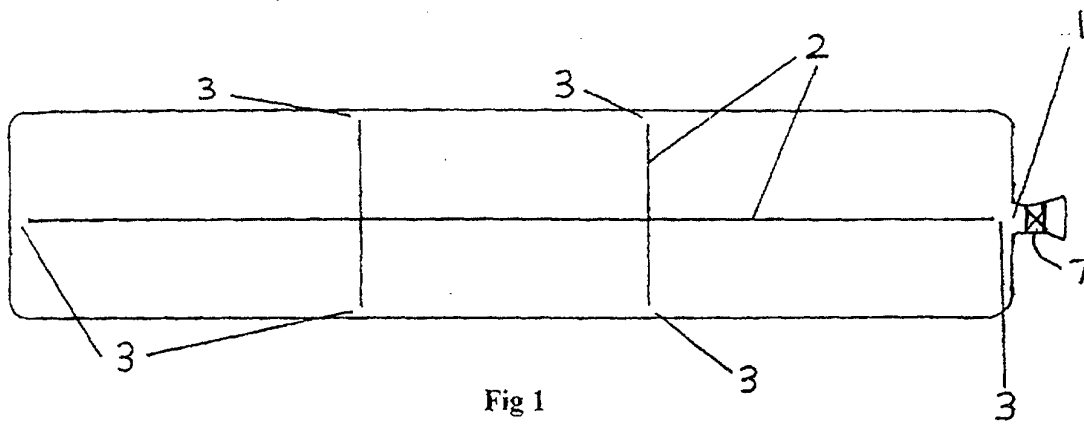


Fig 1

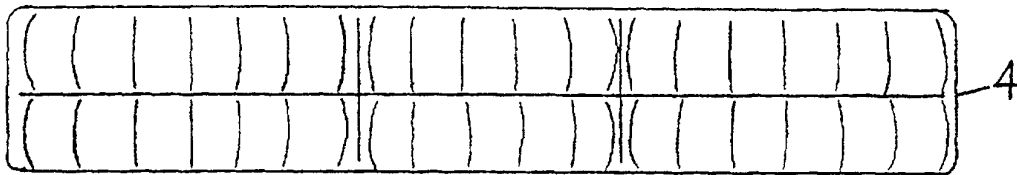


Fig 2

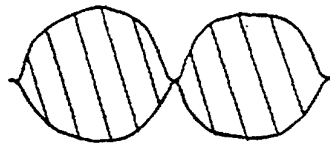


Fig 3

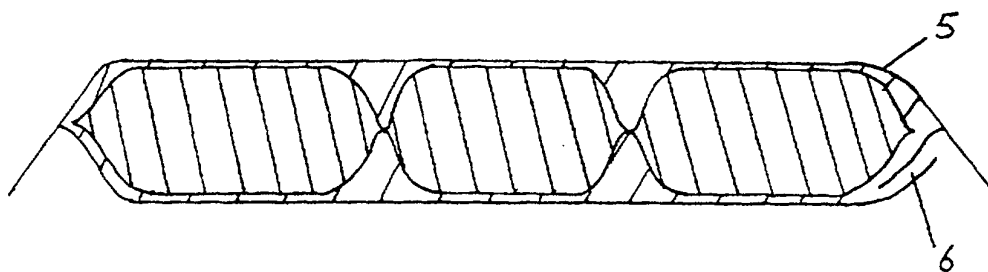


Fig 4