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Remarks:
Amended claims in accordance with Rule 137(2) EPC.

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(54) **Carrying bag**

(57) A carrying bag which is adapted to minimise damage to a computer contained within it. This is achieved by a suspension system that holds the compu-

ter in isolation from the bottom wall of the carrying bag. The suspension system also acts to absorb any energy transferred to the bag in the event that the bag collides with an external surface.

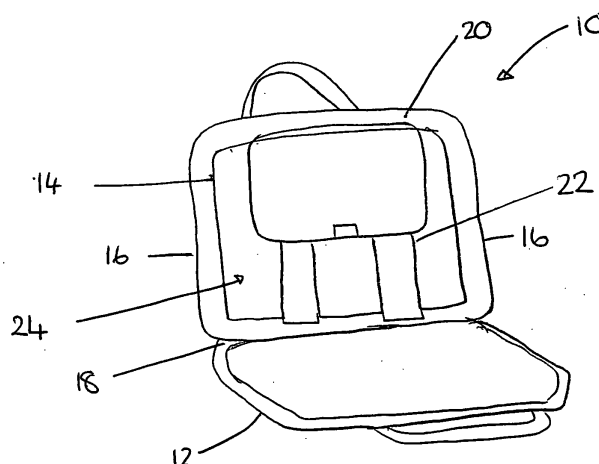


Figure 1

Description

[0001] This invention relates to a carrying bag for limiting damage to its contents. The invention is applicable to use in a bag for carrying laptops or notebooks.

[0002] Carrying bags for delicate items, such as laptops need to be strong enough so that if they are dropped they prevent the laptop from being damaged. Usually carrying bags for laptops or similar computing equipment include a pocket in which the laptop can be placed. The laptop can then be fastened in place using a strap that loops over the laptop and attaches to the pocket, for example using a hook and eye fastener such as Velcro (RTM).

[0003] This placement of laptops within a bag is not desirable because if the bag is dropped with the laptop within it the laptop will feel the full force of the bag hitting the ground. Repeated dropping of the bag and laptop may result in the laptop being damaged so that the laptop no longer functions.

[0004] Additionally, in order to reduce the impact on the laptop caused by dropping a carrying bag including the laptop frames and additional foam padding may be introduced into the bag. The frame and any foam present are generally placed around the side and top and bottom walls of the bag. However, although the frame and padding reduce the effect on the laptop caused by dropping it when it is in a carrying bag they add to the weight of the bag. The extra weight is not convenient to a user who has to carry the bag and the laptop.

[0005] Therefore, it is desirable to protect the laptop whilst it is being carried around in a bag but minimise the weight of the bag.

[0006] According to a first aspect of the invention there is provided a carrying bag for a computer, the carrying bag comprising a front wall, a back wall opposite the front wall, two side walls, a top wall, a bottom wall and support means, the support means attached to the top wall and arranged to bear the computer at a distance from the bottom wall.

[0007] Preferably, the support means is made from an elastic material. Preferably the support means also includes a surface which holds the computer in place using friction. The friction may, for example be provided by a matt surface on the support means.

[0008] The support means may be attached to the top wall using rivets. The support means may be a strap which is adapted to extend below the computer and attach to a second support means attached to the top wall.

Figure 1 illustrates a carrying bag with a laptop fastened in it;

Figure 2 illustrates a laptop in the process of being fastened within a carrying bag; and

Figure 3 illustrates a carrying bag with an adjustable support means.

[0009] Figure 1 shows a carrying bag 10 in accordance

with the present invention. As can be seen the carry bag has a front wall 12 and a back wall 14 opposing it. The carrying bag 10 additionally has two sidewalls 16, a bottom wall 18 and a top wall 20.

5 [0010] Optionally, the carrying bag 10 may be provided with a rigid frame running around the inside of the side 16, bottom 18 and top 20 walls. The frame acts to ensure the shape of the bag 10 is maintained if it is dropped. Preferably, the frame is made of steel or honeycomb 10 PVC.

[0011] It will be understood by the skilled person that the carrying bag may be constructed in any suitable manner for implementing the invention described below.

15 [0012] The carrying bag 10 is provided with one or more support means 22. The support means 22 may be one or more straps. The width of the straps may be varied according to, for example, the maximum size of laptop that they will support. Alternatively, the support means 22 may be any other device that is suitable for supporting 20 the weight of a laptop.

[0013] The support means 22 are preferably attached to the top wall 20 of the carry bag 10. By attaching the support means 22 to the top wall 20 a laptop 24 held within the carrying bag 10 may be adequately supported. 25 Additionally, attachment of the support means 22 to the top wall 20 acts to minimise any horizontal movement of the support means 22 and hence the laptop 24. The support means 22 may be attached to the top wall 20 using any suitable means. Preferably, rivets are used to ensure 30 a strong connection between the top wall 20 and the support means 22.

[0014] In order to fasten a laptop 24 within the carrying bag 10 the laptop is laid in the carrying bag 10 adjacent to the top wall 20. Preferably, there is a gap between the 35 laptop 24 and the bottom wall 18 of the carry bag 10. The gap means that when the carrying bag 10 and laptop are dropped the laptop 24 does not come into contact with the bottom wall 18 of the carry bag 10. As the laptop 24 does not come into contact with the bottom wall 18 of the carrying bag 10 it is protected from the full impact of the collision between the carrying bag 10 and a surface. 40

[0015] The support means 22 are then folded over the laptop 24 and fastened to a second support means 26 as illustrated in Figure 2. The fastening of the support 45 means 22 to a second support means 26 ensures that the laptop 24 is held securely in place. The support means 22, 26 may be fastened to each other using hook and eye fasteners, a sliding or conventional buckle or any other suitable means. The support means 22 and 50 second support means 26 may be integral with one another or, alternatively may be two separate support means both attached to the top wall of the carry case.

[0016] A sliding buckle is illustrated in Figure 3 and is defined for the purposes of this description as a device 55 through which a strap may be threaded. The device uses friction to hold the buckle in place at the position at which it is placed on the strap. A conventional buckle is provided with a protrusion which may be inserted through a strap,

or a hole in a strap in order to hold the strap at a fixed length.

[0017] The support means 22 may be made from heavy-duty fabric, for example webbing. The support means 22 may also be provided with an elastic material segment in order to allow the length of the support means to be adjusted. Alternatively, the support means 22 may comprise two separate sections as illustrated in Figure 3. The first section 28 is attached to the top wall of the carry case and the second section 30 is provided with means to attach to the second support means 26. The first 28 and second 30 sections of the support means 22 are attached to each other using any suitable means that enables the length of the support means 22 to be adjusted. This may be, for example, a slide buckle as illustrated in Figure 3.

[0018] Optionally, the second support means 26 or both the support means 22, 26 may be provided with an elastic material segment. Furthermore the second support means 26, may comprise two separate sections attached to each other in an adjustable manner.

[0019] The support means 22 are constructed such that when the carrying bag containing the laptop 24 is dropped the support means 22 acts to absorb the energy generated by the impact of the carrying bag on an external surface. The amount of force transferred to the laptop by the bag is thereby minimised reducing the amount of damage caused to the laptop.

[0020] Preferably the support means 22 is made of one or more, preferably two, straps. Additionally, the support means 22 may include a matt or other suitable surface which acts to place a frictional force on the laptop to hold it in place and prevent it from moving from side to side.

Claims

1. A carrying bag for a computer, the carrying bag comprising:

- (a) a front wall;
- (b) a back wall opposite the front wall;
- (c) two side walls;
- (d) a top wall;
- (e) a bottom wall; and
- (f) support means, the support means attached to the top wall and arranged to bear the computer at a distance from the bottom wall.

2. A carry bag for a computer as claimed in Claim 1 wherein the support means is made from an elastic material.

3. A carry bag for a computer as claimed in Claim 1 or Claim 2 wherein the support means includes a surface which holds the computer in place using friction.

4. A carry bag for a computer as claimed in Claim 3

wherein the friction is provided by a matt surface on the support means.

5. A carry bag for a computer as claimed in any preceding claim wherein the support means is attached to the top wall using rivets.

6. A carry bag for a computer as claimed in any preceding claim wherein the support means comprises a strap.

7. A carry bag for a computer as claimed in Claim 6 wherein the strap extends below the computer and attaches to a second support means attached to the top wall.

8. A carry bag for a computer as claimed in any preceding claim wherein the length of the support means is adjustable.

9. A carry bag for a computer as claimed in Claim 8 wherein the support means incorporates an elastic material segment.

10. A carry bag for a computer as claimed in Claim 8 wherein the support means comprises a first and a second segment, the first segment being attached to the second segment such that the point of attachment between the first and second segment can be adjusted.

11. A carry bag for a computer as claimed in Claim 10 wherein the first and second segments are attached using a buckle.

12. A carry bag substantially as herein described with reference to and as shown in any combination of the accompanying drawings.

Amended claims in accordance with Rule 137(2) EPC.

1. A carrying bag (10) for a computer, the carrying bag comprising:

- (a) a front wall (12);
- (b) a back wall (14) opposite the front wall (12);
- (c) two side walls (16);
- (d) a top wall (20);
- (e) a bottom wall (18); and **characterised by**
- (f) support means (22), the support means (22) including a strap attached to the top wall and arranged to, in use, extend around the computer to bear the computer at a distance from the bottom wall (18), wherein the support means (22) includes an elastic material segment.

2. A carry bag (10) for a computer as claimed in Claim 1 wherein the support means (22) is made from an elastic material.

3. A carry bag (10) for a computer as claimed in Claim 1 or Claim 2 wherein the support means (22) includes a surface which holds the computer in place using friction. 5

4. A carry bag (10) for a computer as claimed in Claim 3 wherein the friction is provided by a matt surface on the support means (22). 10

5. A carry bag (10) for a computer as claimed in any preceding claim wherein the support means (22) is attached to the top wall (20) using rivets. 15

6. A carry bag (10) for a computer as claimed any preceding claim wherein the strap extends below the computer and attaches to a second support means (26) attached to the top wall. 20

7. A carry bag (10) for a computer as claimed in any preceding claim wherein the length of the support means (22,26) is adjustable. 25

8. A carry bag (10) for a computer as claimed in Claim 7 wherein the support means (22) comprises a first (28) and a second (30) segment, the first segment (28) being attached to the second segment (30) such that the point of attachment between the first and second segment can be adjusted. 30

9. A carry bag (10) for a computer as claimed in Claim 8 wherein the first and second segments are attached using a buckle (32). 35

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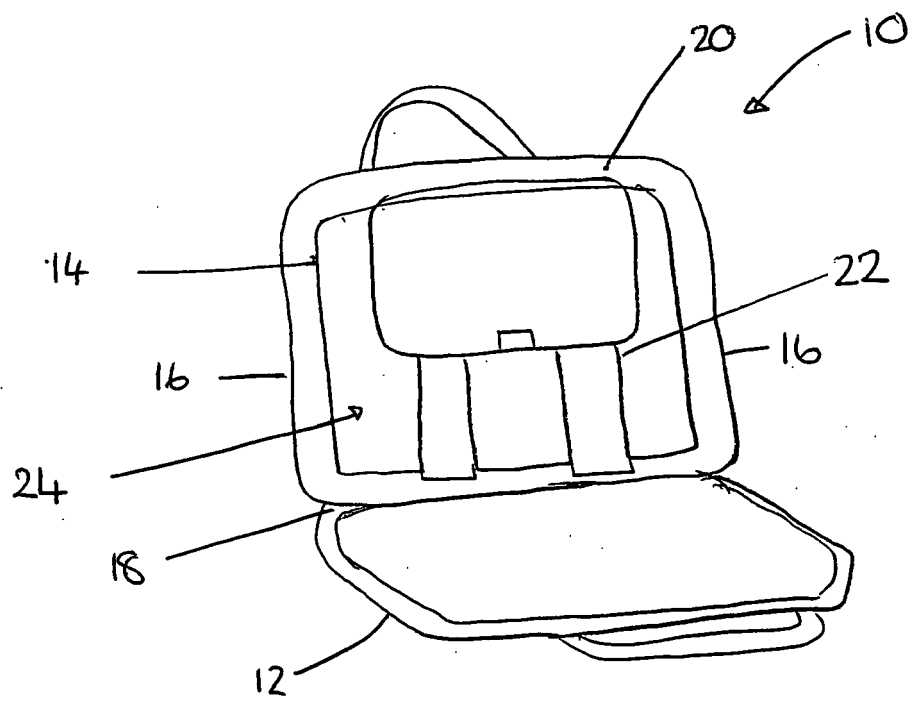


Figure 1

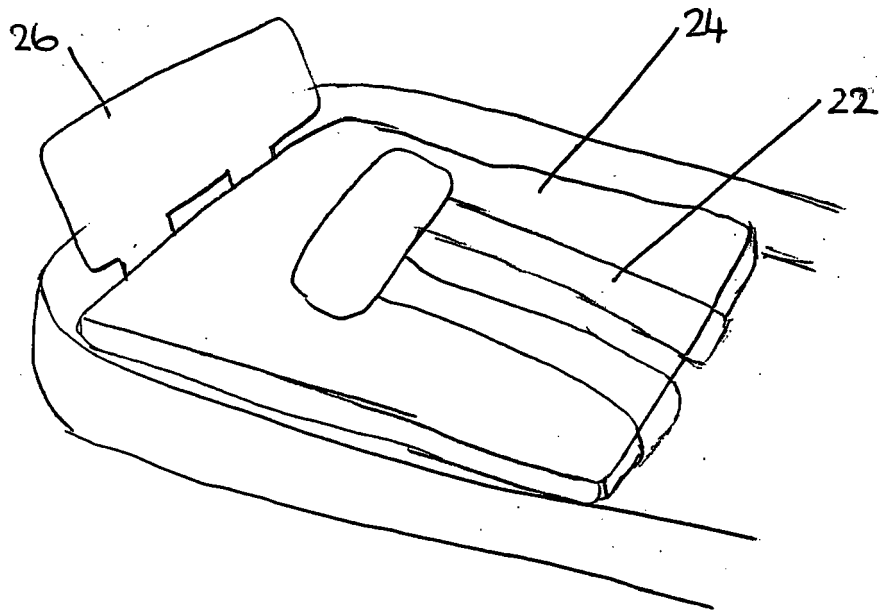


Figure 2

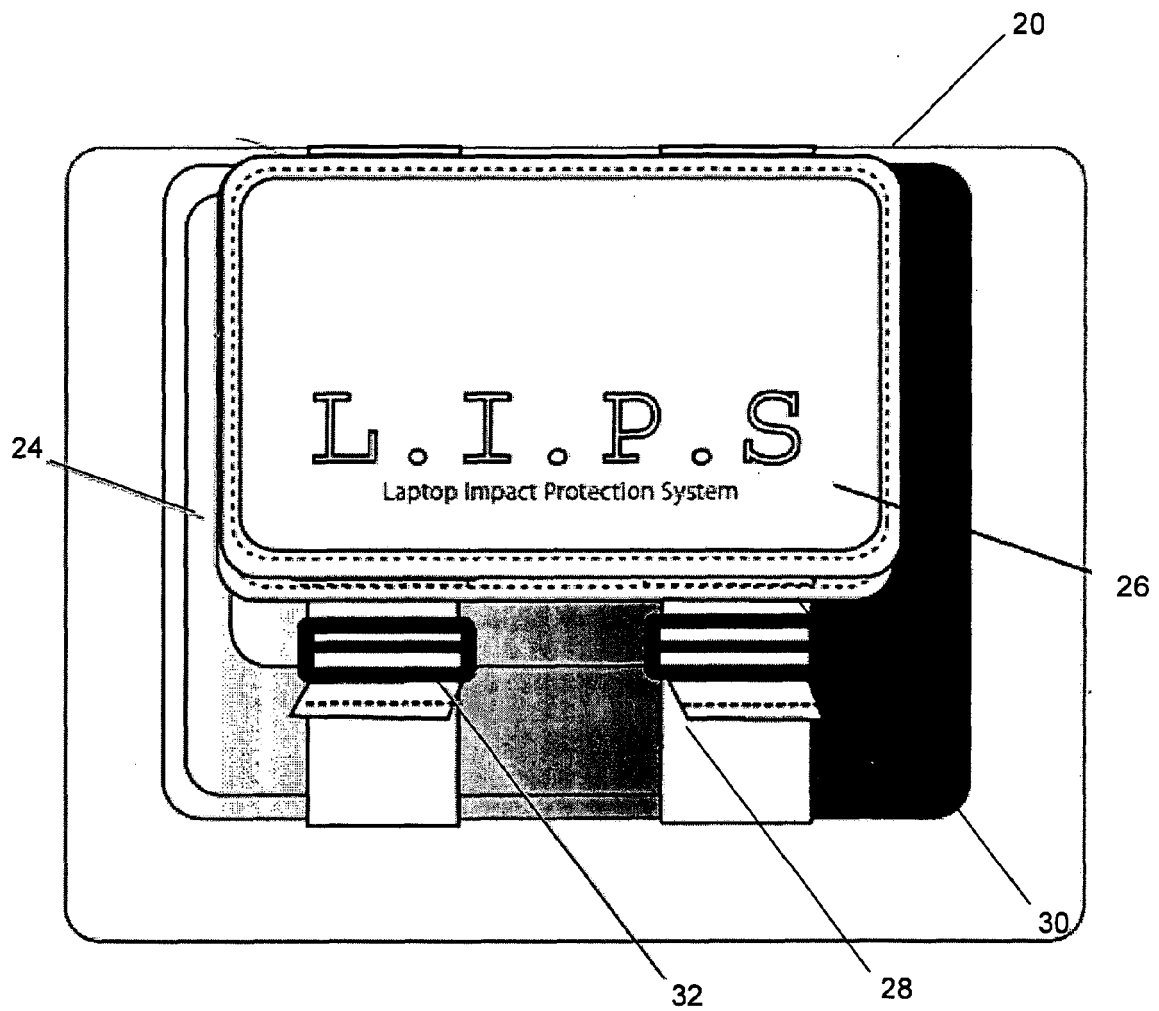


Figure 3



European Patent
Office

EUROPEAN SEARCH REPORT

Application Number
EP 07 25 0179

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X	US 2005/248913 A1 (HASSETT ERIC S [US] ET AL) 10 November 2005 (2005-11-10) * column 3 - column 5; figures *	1,3-8, 10-12	INV. A45C13/02 G06F1/16
Y	-----	2,9	
Y	US 5 524 754 A (HOLLINGSWORTH W DALE [US]) 11 June 1996 (1996-06-11) * column 6, line 8 - column 7, line 49; figure 1 *	2,9	ADD. A45C11/00
X	----- US 5 160 001 A (MARCEAU STEPHEN M [US]) 3 November 1992 (1992-11-03) * the whole document *	1,3,4	
A	----- US 6 131 734 A (HOLLINGSWORTH W DALE [US] ET AL) 17 October 2000 (2000-10-17) * the whole document *	1-4,6,8, 9	
			TECHNICAL FIELDS SEARCHED (IPC)
			A45C G06F
The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 18 June 2007	Examiner Dinescu, Daniela
CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons ----- & : member of the same patent family, corresponding document	

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**ANNEX TO THE EUROPEAN SEARCH REPORT
ON EUROPEAN PATENT APPLICATION NO.**

EP 07 25 0179

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
The members are as contained in the European Patent Office EDP file on
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18-06-2007

Patent document cited in search report		Publication date	Patent family member(s)	Publication date
US 2005248913	A1	10-11-2005	NONE	

US 5524754	A	11-06-1996	NONE	

US 5160001	A	03-11-1992	NONE	

US 6131734	A	17-10-2000	US 6334533 B1	01-01-2002
			US 6334534 B1	01-01-2002
