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(54) **A bumper for a luggage case and case incorporating it.**

(57) A bumper and a luggage case incorporating the bumper are provided in which the bumper (6) comprises a body (18) moulded in a plastics material and having deformable projections (20) arranged on its surface which is exposed when the bumper is fitted to a luggage case. In a particular example, the projections are studs (20) arranged in an array and are of a material more deformable than the shell of the luggage case of the body of the bumper.

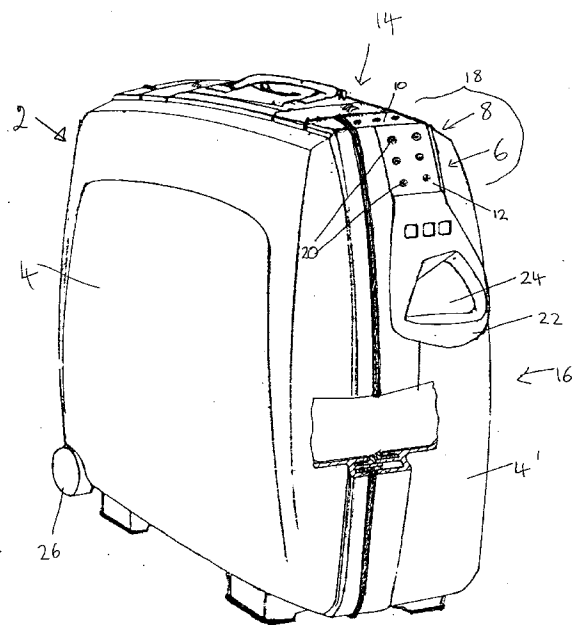


FIGURE - 1

The present invention relates to a bumper. In particular it relates to a bumper for use on luggage case, particularly a hard side suitcase.

Such articles have previously been proposed. In US-A-4993526 a protective pad of resilient material has feet (24) for keeping a luggage case from a supporting surface, and in US-A-4163484 resilient strips are attached to a luggage case both to protect and to identify it.

In a first aspect the invention provides a bumper for a luggage case which bumper comprises a body moulded in a plastics material, the body having deformable projections on that surface which is exposed when the bumper is in place on a luggage case. These projections serve to cushion the case and can be arranged to give the most effective cushioning effect. Preferably the projections are resiliently deformable. Typically, the luggage case will be a hard side case, for example, a hard side suitcase.

Usually, the bumper will have means for attaching it to a luggage case, and these means may typically enable the bumper to be screwed onto the luggage case. Other conventional methods of attachment, for example using adhesive, may be used.

In a preferred embodiment the deformable projections are studs which may be arranged in an ordered array, for example to give a pleasing appearance. An arrangement of the studs in rows is particularly preferred to provide a good cushioning effect. Alternatively, the projections may be ridges which may extend along the length of the bumper.

Preferably the body of the bumper may be formed in a substantially hard plastics such as polypropylene, and the projections may be of a thermoplastic elastomer which is softer and more resistant to wear and tear than polypropylene.

Generally the projections are formed of a softer material than the hardshell of a luggage case to which the bumper is to be attached, and/or are of softer material than the material of the body of the bumper itself.

Preferably the projections project between 1 and 20mm from the surface of the bumper. Most preferably they project about 2mm from the surface.

The bumper with its projections prevents surface marks spoiling the appearance of the luggage, by absorbing the energy of knocks applied to the luggage case.

Preferably the bumper has a portion which is oriented to lie on a first surface of a luggage case and a second portion oriented to lie on a second surface of a luggage case. The boundary between the two portions typically corresponds with a corner of the luggage case. This boundary may be curved or may be an angular joining between the two portions. The two portions may be integrally formed in one piece with the boundary area being curved or angular. Alternatively, the bumper body can be formed in two

parts which are separately attached to the luggage case, for example with adhesives, but preferably with rivets or screws.

Preferably, one of the body parts extends transversely across one face of the suitcase and the other part extends longitudinally along a second face of the luggage case.

In a second aspect, the invention provides a luggage case which incorporates a bumper with any or all of the features mentioned above. In a preferred embodiment a handle is included in the luggage case, which handle is located near to the bumper. The handle itself can be of the same material as the body of the bumper, or of the same material as the shell of the luggage case to which the bumper is to be attached, or of any other suitable material. The handle may be hinged to the luggage case to aid in movement of the luggage.

The invention will now be illustrated by way of example only, and with reference to the accompanying drawing in which:

Fig 1 is an illustration of a suitcase incorporating a bumper according to the present invention.

In Fig 1 a hard side suitcase 2 has two shells 4 and 4' made of polypropylene. A bumper 6 is oriented to extend around a corner 8. The bumper has a body 18 which has two parts 10 and 12 which are two parts separately attached to the suitcase shell with screws. One part 10 extends transversely across the front face 14 of the suitcase while the other part 12 extends longitudinally along the side 16 of the suitcase.

The bumper body 18 is also formed of polypropylene. An array of deformable projections in the form of studs 20 provides extra cushioning capability. The studs are formed of a softer material for example, a thermoplastic elastomer, than the shell or the body. They project around 2mm from the surface of the bumper.

In this embodiment the body of the bumper is moulded in a material different from that of the studs 20 but in other embodiments they may be the same.

The bumper 6 is fitted to the suitcase by a screw fixture, in two parts 10 and 12.

A handle 22 is made of a soft material such as a thermoplastic elastomer or PVC overmoulded on a non-deformable skeleton. The handle is attached to the suitcase just below the bumper body 18. It is hinged to the suitcase so that in use it can be hinged away from the suitcase and used to pull the suitcase along using the wheels 26.

Claims

1. A bumper (6) for a luggage case (2) which comprises a body (18) moulded in a plastics material, characterized in that the body has deformable projections (20) on that surface which is exposed

when the bumper is in place on a luggage case.

2. A bumper according to claim 1 wherein the bumper has means for attaching it to a luggage case.

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3. A bumper according to claim 2 wherein the attaching means allow the bumper to be screwed to the luggage case.

4. A bumper according to any preceding claim wherein the projections (20) are studs.

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5. A bumper according to claim 4 wherein the studs are arranged in rows in an array.

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6. A bumper according to any preceding claim the body (16) of which is formed in two parts (10,12) that can be attached to a luggage case.

7. A luggage case (2) incorporating a bumper (6) according to any preceding claim.

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8. A luggage case according to claim 7 which is a hard-side suitcase (2).

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9. A luggage case according to claim 8 wherein at least the projections (20) of the bumper (6) are of a more deformable material than the shell (4,4') of the luggage case.

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10. A luggage case according to claim 7, 8 or 9 wherein a handle (22) for pulling the luggage case is hinged to the case at an edge of the bumper (6).

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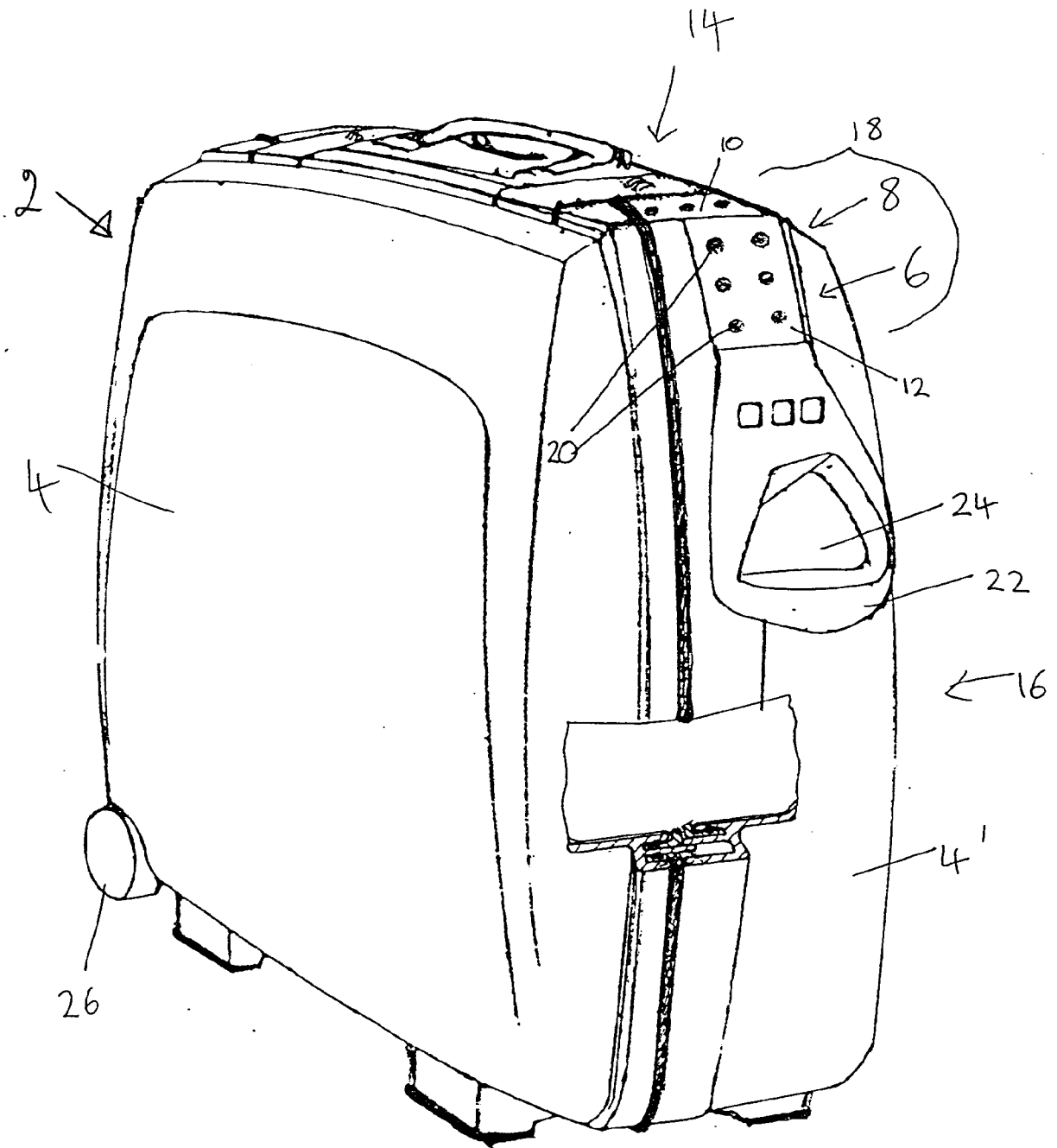


FIGURE - 1



European Patent
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EUROPEAN SEARCH REPORT

Application Number
EP 94 30 1969

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.5)
X	US-A-2 847 100 (HOTCHNER) * the whole document *	1,2,7-9	A45C13/36
X	FR-A-1 271 577 (BERGUERAND) * figure 7 *	1-5,7	
A	FR-A-2 375 801 (FAVO)		
A	FR-A-713 945 (MOSSALGUE)		
A	US-A-3 049 260 (STONE)		
D,A	US-A-4 993 526 (MORRISON)		
A	DE-U-85 08 127 (GOTTA)		
A	US-A-3 901 995 (COLON)		
A	DE-U-82 23 721 (PLASTIMODA ITALIANA)		
			TECHNICAL FIELDS SEARCHED (Int.Cl.5)
			A45C B65D
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 7 July 1994	Examiner Sigwalt, C
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