(12) PETTY PATENT (11) Application No. AU 199944485 B3 (10) Patent No. 717135 (19) AUSTRALIAN PATENT OFFICE (54)An article of luggage International Patent Classification(s) A45C 013/02 A45C 005/14 A45C 005/04 A45C 013/00 A45C 013/36 A45C 005/12 Application No: 199944485 (21)(22) Application Date: 1999 .08 .16 (30)Priority Data (31)Number (32) Date (33) Country ZA 1998 08 14 98/7321 (43)Publication Date : 2000 .03 .16 Publication Journal Date : 2000 .03 .16 (43)(45) Granted Journal Date : 2000 .03 .16 (71) Applicant(s) Interbrand (Proprietary) Limited (72)Inventor(s) Colin Datnow Agent/Attorney (74)PIZZEYS, GPO Box 1374, BRISBANE QLD 4001 (56)Related Art GB 2248384

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ABSTRACT

An article of luggage which is substantially frameless and has walls of a fabric material includes at least one stiffening loop of a resiliently flexible wire-like material, the, or each, stiffening loop being arranged peripherally on a respective wall of the article.

THIS INVENTION relates to an article of luggage.

More particularly, the invention relates to luggage known in the art as upright, roll-on cases. Such cases are substantially cuboid, having six generally rectangular walls, with a pair of wheels located at the junction between the two walls and a handle (which is usually extendable) being provided at the opposite end of one of these walls. The wall which extends between the wheels and this handle will be referred to as the back wall with a wall that is parallel to and spaced therefrom being referred to as the front wall. The wall which extends between the wheels and the front wall will then be a bottom wall with the wall that is parallel thereto and which extends between the front and back walls on the opposite end being the top wall. The remaining walls are then side walls. It will be appreciated that the disposition of the walls has been defined with the case oriented such that the wheels are in contact with the ground and the handle used to pull the case is above. In this specification an article of luggage as described above will be referred to as "an article of luggage of the type described".

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According to the invention there is provided an article of luggage of the type described which is substantially frameless and has walls of a fabric material and includes



a pair of stiffening loops of a resiliently flexible wire-like material, each stiffening loop being arranged peripherally on a respective side wall of the article; and

a stiffening sheet of a resiliently flexible material, the stiffening sheet defining a pair of end portions and an intermediate portion, the end portions being substantially perpendicular to the intermediate portion, each end portion being arranged on a respective one of the bottom and top walls of the articles and the intermediate portion being arranged on the back wall of the article.

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The article of luggage may include a third stiffening loop of a resiliently flexible material. The third loop may be arranged peripherally on the front wall of the article.

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Each stiffening loop of the resiliently flexible wire-like material may comprise a core of a piping. The piping may be stitched into a seam between the wall on which the said stiffening loop is arranged and adjacent walls of the article.

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Where the article of luggage has an openable front wall, the piping may be stitched into a seam between the front wall and a zip fastener arranged peripherally about the front wall. The loop may be covered with a fabric material which may be of the same material as that of the walls of the article of luggage.

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The stiffening sheet may be of a synthetic plastics material and may be bent to define its end and intermediate portions. The sheet may have moulded recesses in which the wheels are supported with suitable axles. In a preferred embodiment of the invention, the article of luggage has an extendable "U"-shaped handle, having a cross bar with two arms extending therefrom. Two support tubes may then be secured to the portion of the rigid sheet, with the two arms being slidable therein between extended and retracted positions.

Also, the end portions of the stiffening sheet may serve to stiffen the top and bottom walls. The intermediate portion may serve to stiffen the back wall.

Some of the walls may be further stiffened by means of a non-rigid sheet of stiffening material such as an expanded plastics material, for example an open or closed cell foam plastic. The non-rigid sheet of stiffening material may be encased in cloth which may be of a high density polyester with an acrylic coating. Such cloth is lightweight and durable. This cloth may also be used to cover the rigid sheet, or sheets, used for the top, bottom and back walls,





the cloth of the various walls being sewn to each other. The tubes for the extendable handle may be covered with a lining of the cloth.

The article of luggage may have a central compartment which is defined by the bottom, back, front, top and side walls. Conveniently, the front wall may be openable, and may be secured to the top, bottom and one of the side walls by means of a sliding fastener, such that the front wall is hingedly connected to the other side wall.

Auxiliary pouches may also be provided on the outside of the front wall, which may also be closed by sliding fasteners.

Further, the article may have a first carrying handle attached to one of the side walls. Preferably, the first carrying handle may be attached to the side wall opposite to the side wall to which the front wall is hingedly attached. A second carrying handle may be attached to the top wall.

Feet may be provided on the bottom wall opposite the wheels.

The invention is now described, by way of example, with reference to the accompanying drawings.

In the drawings,

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Figure 1 shows a front view of an article of luggage in accordance with the

invention;

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Figure 2 shows a rear view of the article of luggage;

Figure 3 shows a first side view of the article of luggage;

Figure 4 shows a second opposed side view of the article of luggage;

Figure 5 shows a top view of the article of luggage; and

Figure 6 shows a sectional top view of the article of luggage.

In the drawings, reference numeral 10 generally indicates an article of luggage in accordance with the invention.

The article of luggage 10 is of the type described, being of the upright roll-on type, and has a bottom wall 12, a top wall 18, a back wall 14, a front wall 16 and a pair of side walls 20.

The bottom wall 12, top wall 18 and back wall 14 have arranged thereon a stiffening sheet 19 (as shown in Figure 6) of a resiliently flexible plastics material which is bent to define a pair of end portions and an intermediate portion 21, the end portions being substantially perpendicular to the intermediate portion 21. Moulded recess defining elements 28 define recesses in the sheet 19 of plastics material and are attached to the sheet 19 at a junction between the operatively bottom end portion 23 and the intermediate portion 21 of the stiffening sheet 19. Wheels 30 are supported with axles 32 in each of the recesses 28. An extendable handle 34 which is "U"-shaped, having a cross bar 36 with two arms 37 (as shown in Figure 6) extending therefrom is secured to the intermediate

portion 21 of the stiffening sheet 19 of rigid plastics material by means of a pair of guide tubes 39 in which the arms 37 are slidably received.

The article of luggage 10 has a central compartment 48 which is defined by the bottom wall 12, back wall 14, front wall 16, top wall 18 and side walls 20. The front wall 16 is openable, and is secured to the top wall 18, bottom wall 12 and one of the side walls 20 by means of a zip 48, such that the front wall 16 is hingedly connected to the other side wall 20. A cloth lining (not shown) covers the interior of the central compartment 46, covering the sheets 19 of plastics material and the arms 37 and guide tubes 39 for the extendable handle 34.

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The article of luggage 10 has a front pocket 50 attached to, and projecting from, the front wall 16. The front pocket 50 is defined by fabric 44, which is the same as that used for the walls 12, 14, 16, 18 and 20. The pocket 50 has a gusset 52 and a front cover 54, the gusset 52 extending from the front wall 16. An opening 55 defined in the front cover 54 is openably closeable by means of a zip 56 to permit access to the front pocket 50.

An auxiliary pouch 58 is provided on the outside of the front cover 54 and is closed by a zip 60. Further auxiliary pouches (not shown) and tie-down straps (not shown) are provided within the cantral compartment 48.

Further, the article of luggage 10 has a first carrying handle 62 attached to the side wall 20 opposite to the side wall 20 to which the front wall

16 is hingedly attached. A second carrying handle 64 is attached to the top wall 18.

Feet 66 are provided on the bottom wall 12 opposite the wheels 30.

A further pair of feet 67 is provided on the back wall 14 opposite the wheels 30.

A stiffening element 68 comprising an endless loop 69 of a spring steel is shaped and configured to correspond with the shape and configuration of a periphery 70 of the front wall 16, the stiffening element 68 providing stiffening for the wall 16. The loop 69 comprises a core of a piping 72, the spring steel loop 69 being covered with fabric 44 (as shown in Figure 6). The piping 72 is stitched into a seam between the front wall 16 and the zip 48. Two further stiffening elements 68 comprising loops 69 included in piping 72 provide stiffening for the side walls 20 of the article 10. The piping 72 of each of the further loops 69 is stitched into a seam between the respective side wall 20 and adjacent top, bottom, front and back walls 18, 12, 16 and 14, respectively.

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THE CLAIMS DEFINING THE INVENTION ARE AS FOLLOWS:

5 1. An article of luggage of the type described which is substantially frameless and has walls of a fabric material and includes a pair of stiffening loops of a resiliently flexible wire-like material, each stiffening loop being arranged peripherally on a respective side wall of the article; and

a stiffening sheet of a resiliently flexible material, the stiffening sheet defining a pair of end portions and an intermediate portion, the end portions being substantially perpendicular to the intermediate portion, each end portion being arranged on a respective one of the bottom and top walls of the articles and the intermediate portion being arranged on the back wall of the article.

- The article of luggage as claimed in Claim 1, which includes a third stiffening loop of a resiliently flexible material, the third loop being arranged peripherally on the front wall of the article.
- 3. The article of luggage as claimed in Claim 1 or Claim 2, in which each stiffening loop of the resiliently flexible wire-like material comprises a core of a piping, the piping being stitched into a seam between the wall on which the said stiffening loop is arranged and adjacent walls of the article.

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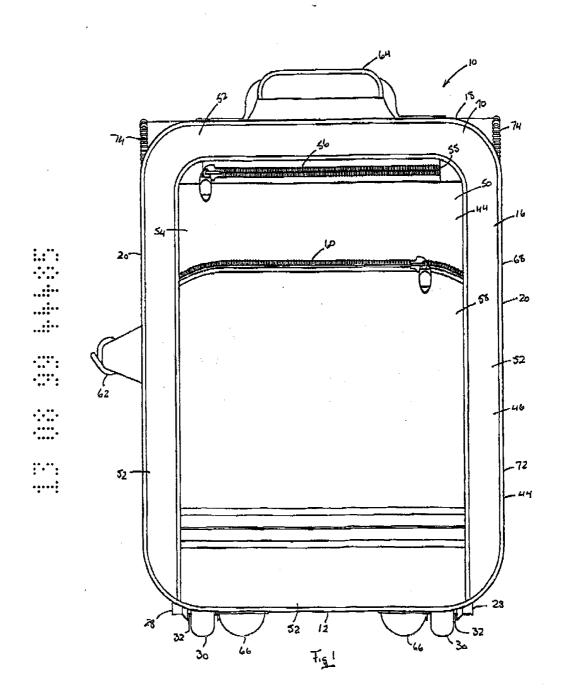
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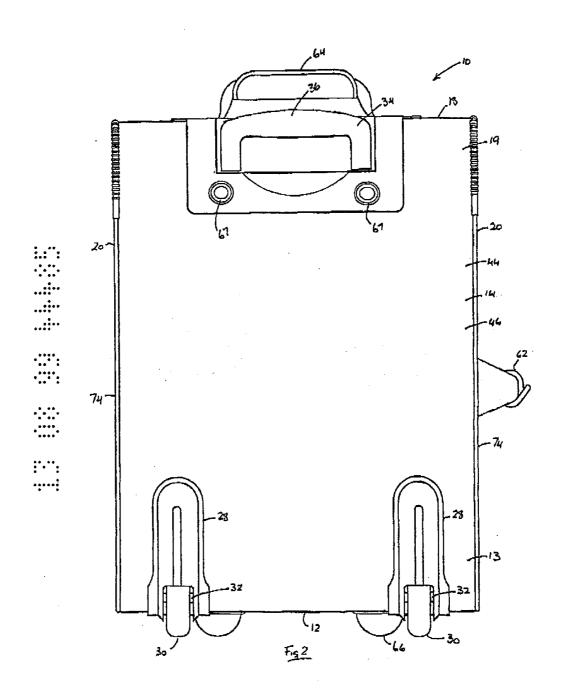


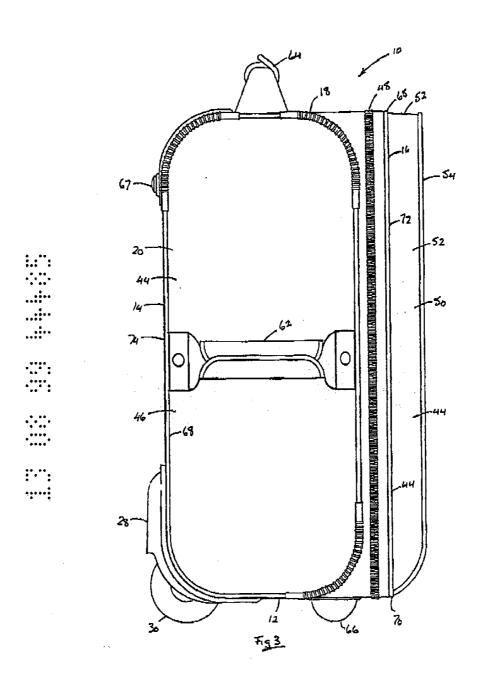
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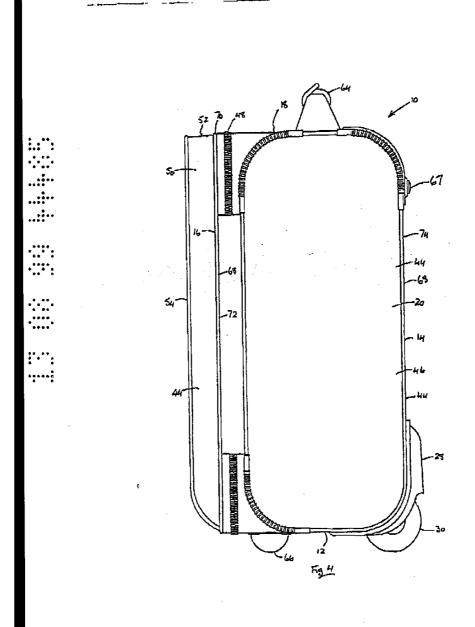
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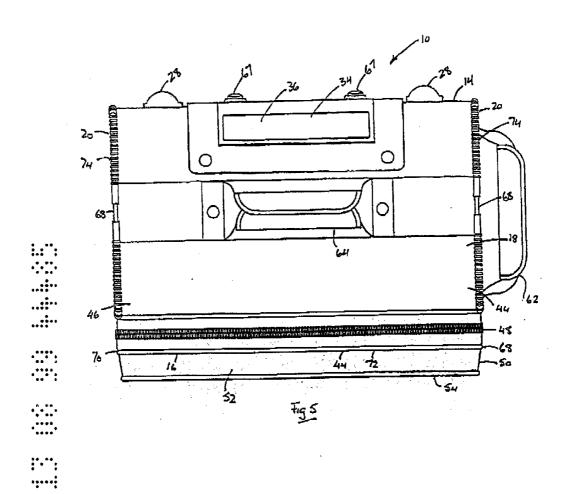
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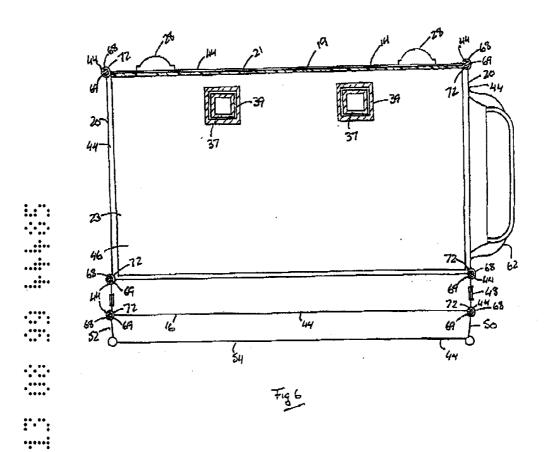












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