



US 20250261731A1

(19) **United States**

(12) **Patent Application Publication**  
**Tang**

(10) **Pub. No.: US 2025/0261731 A1**

(43) **Pub. Date: Aug. 21, 2025**

(54) **SUITCASE AND SUITCASE BODY**

**Publication Classification**

(71) Applicant: **Omnimus Company (HK) Limited,**  
Kwai Chung (HK)

(51) **Int. Cl.**  
*A45C 5/03* (2006.01)

*A45C 13/26* (2006.01)

(72) Inventor: **Wai Kwon Tang,** Kwai Chung (HK)

(52) **U.S. Cl.**  
CPC ..... *A45C 5/03* (2013.01); *A45C 13/26*  
(2013.01)

(21) Appl. No.: **18/668,875**

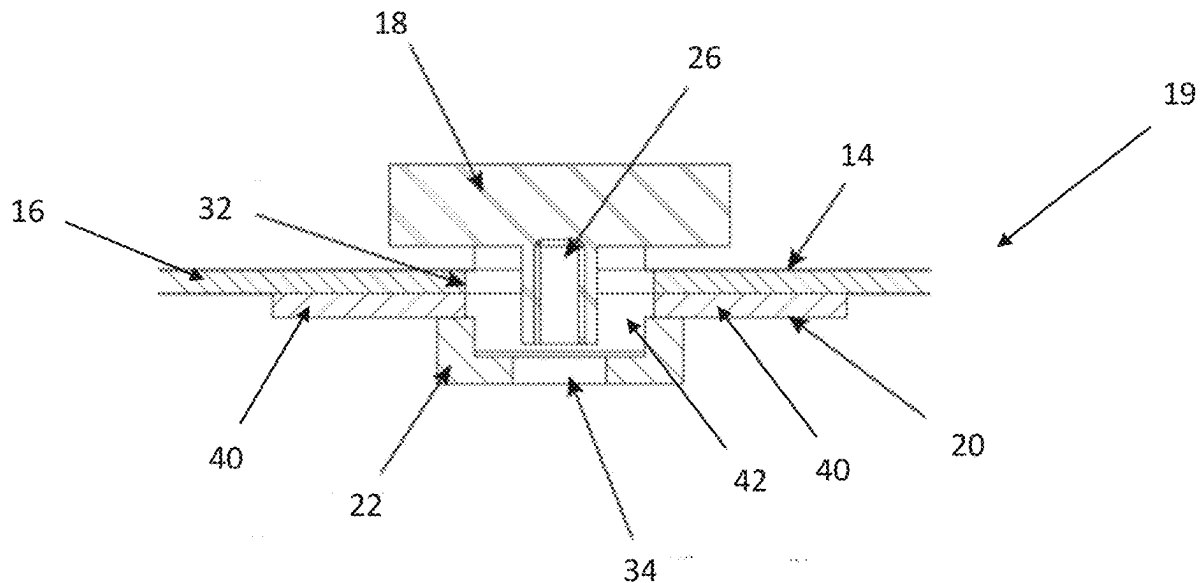
(57) **ABSTRACT**

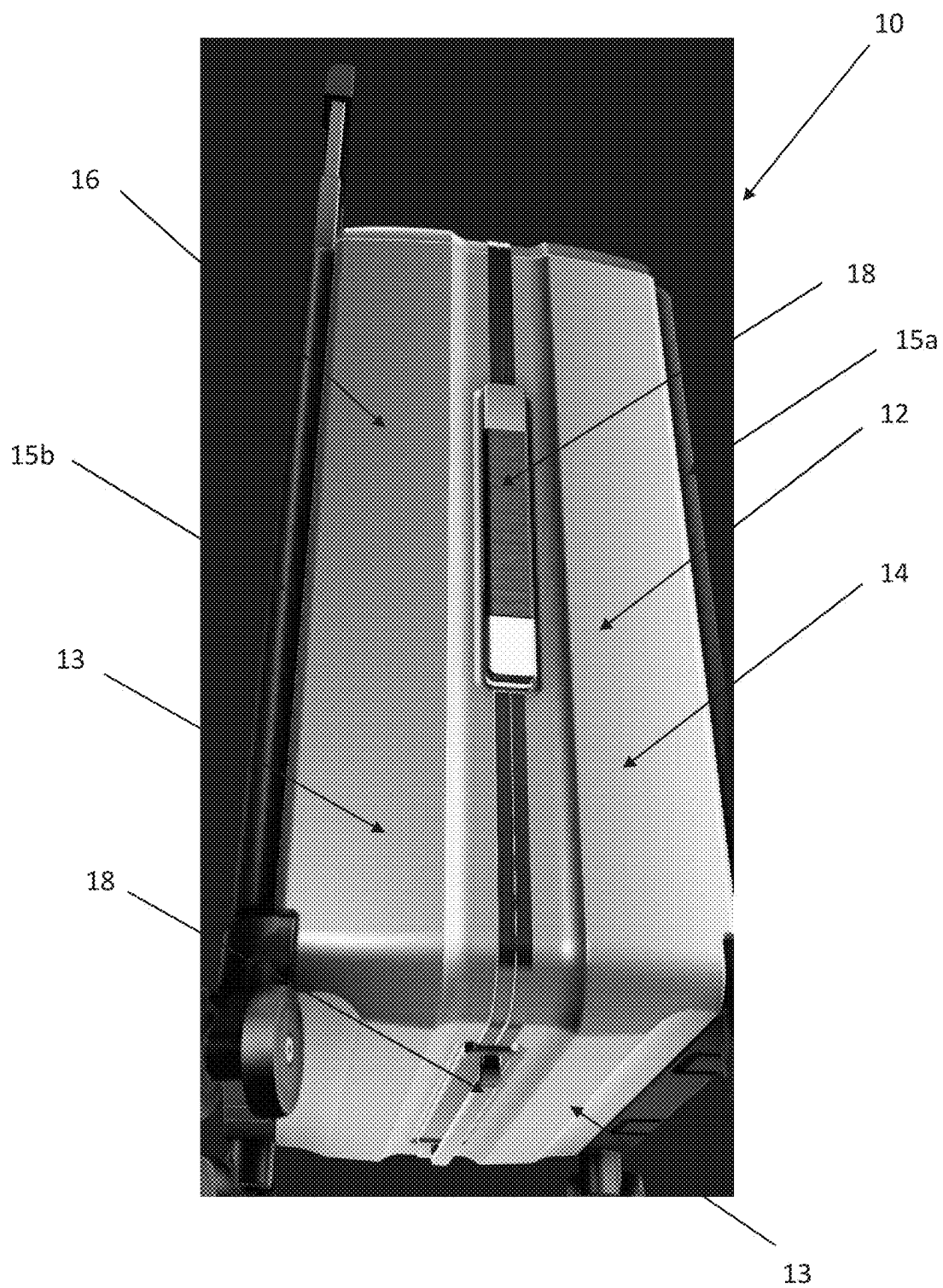
(22) Filed: **May 20, 2024**

A suitcase body (12) is disclosed as including a first body part (14), a second body part (16) fixedly engaged with the first body part via an outer frame (20), an inner frame (22) fixedly engaged with the outer frame (20), and a handle (18) fixedly engaged with and between the first body part and the second body part.

(30) **Foreign Application Priority Data**

Feb. 21, 2024 (HK) ..... 32024087400.0





**Figure 1**

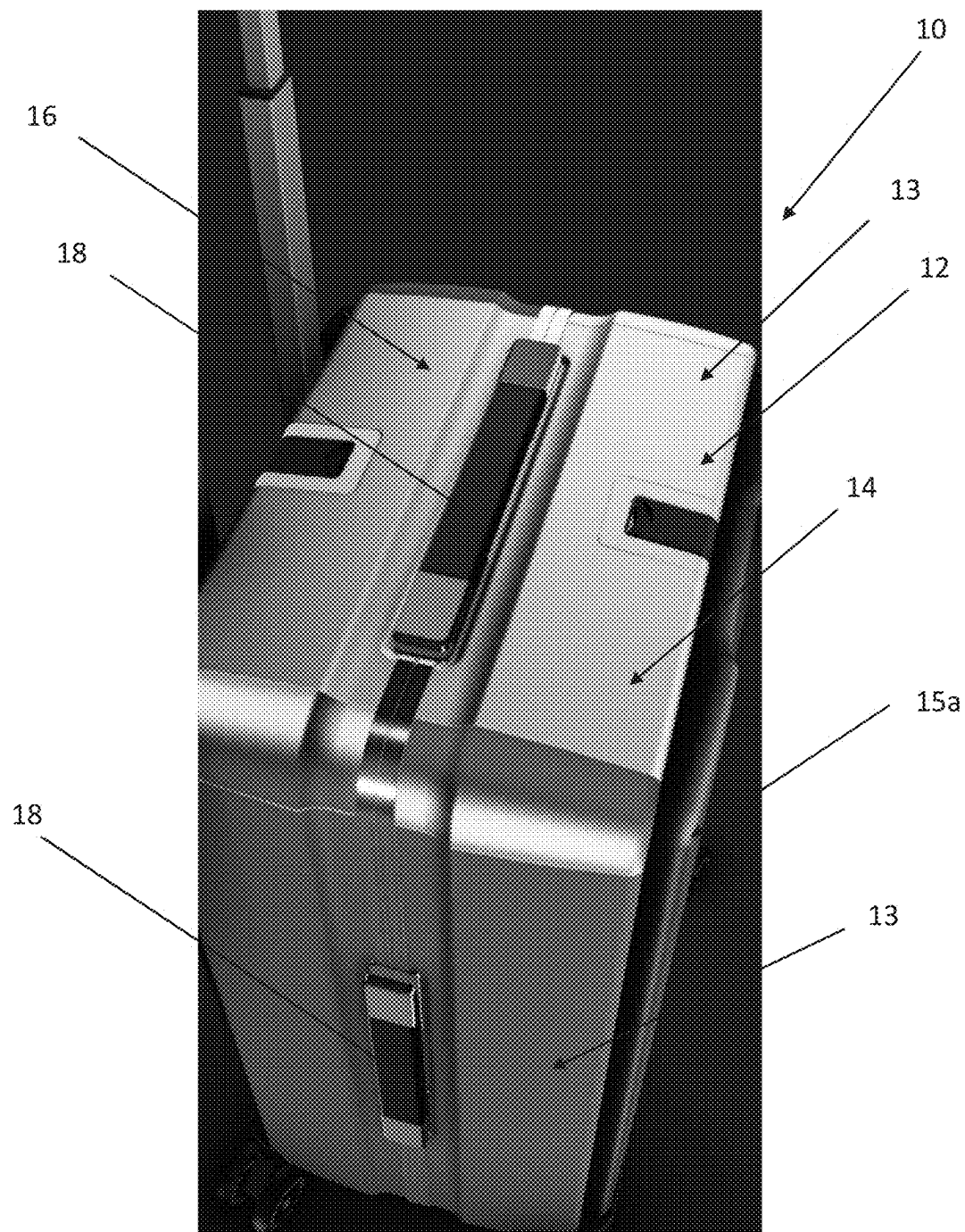
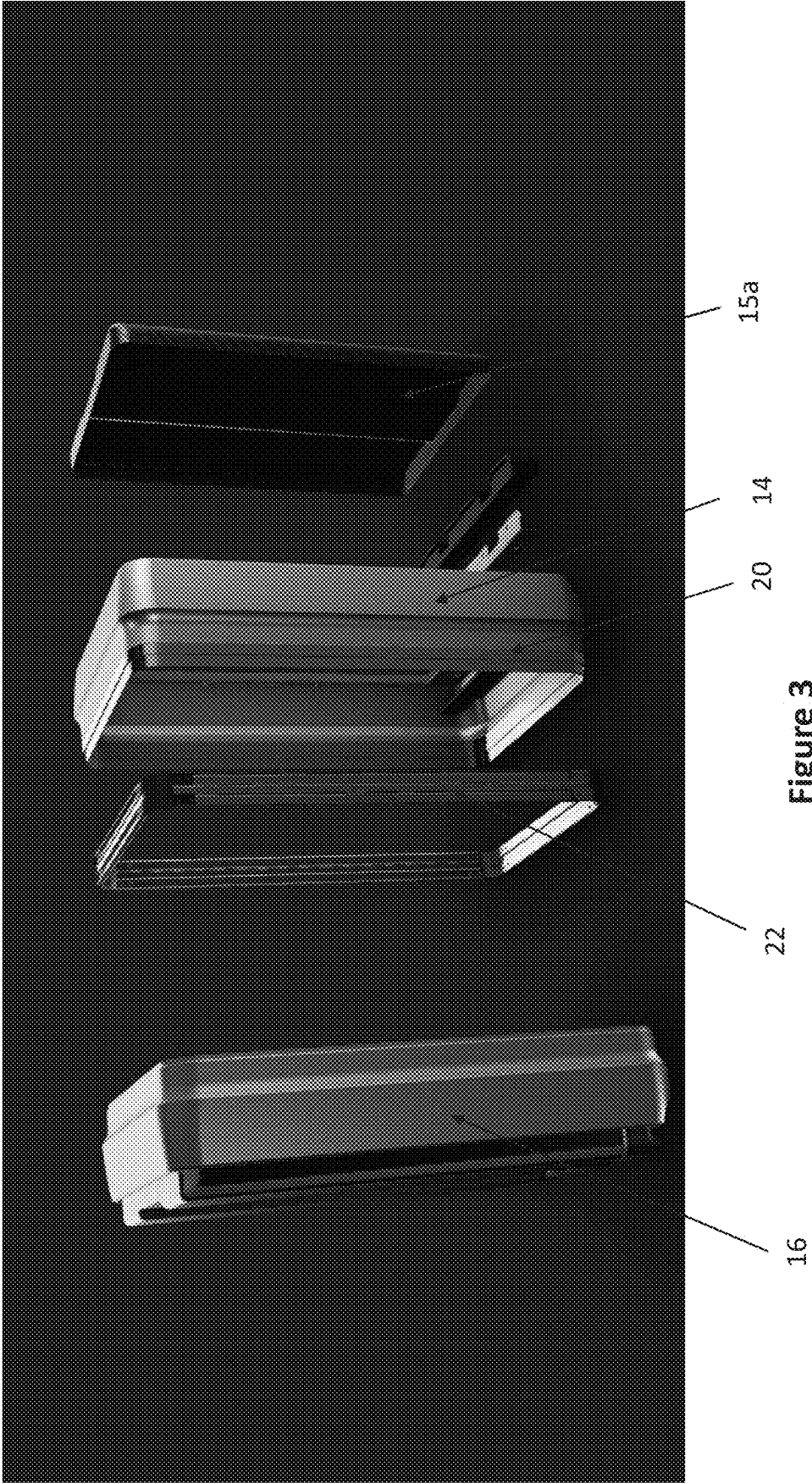


Figure 2



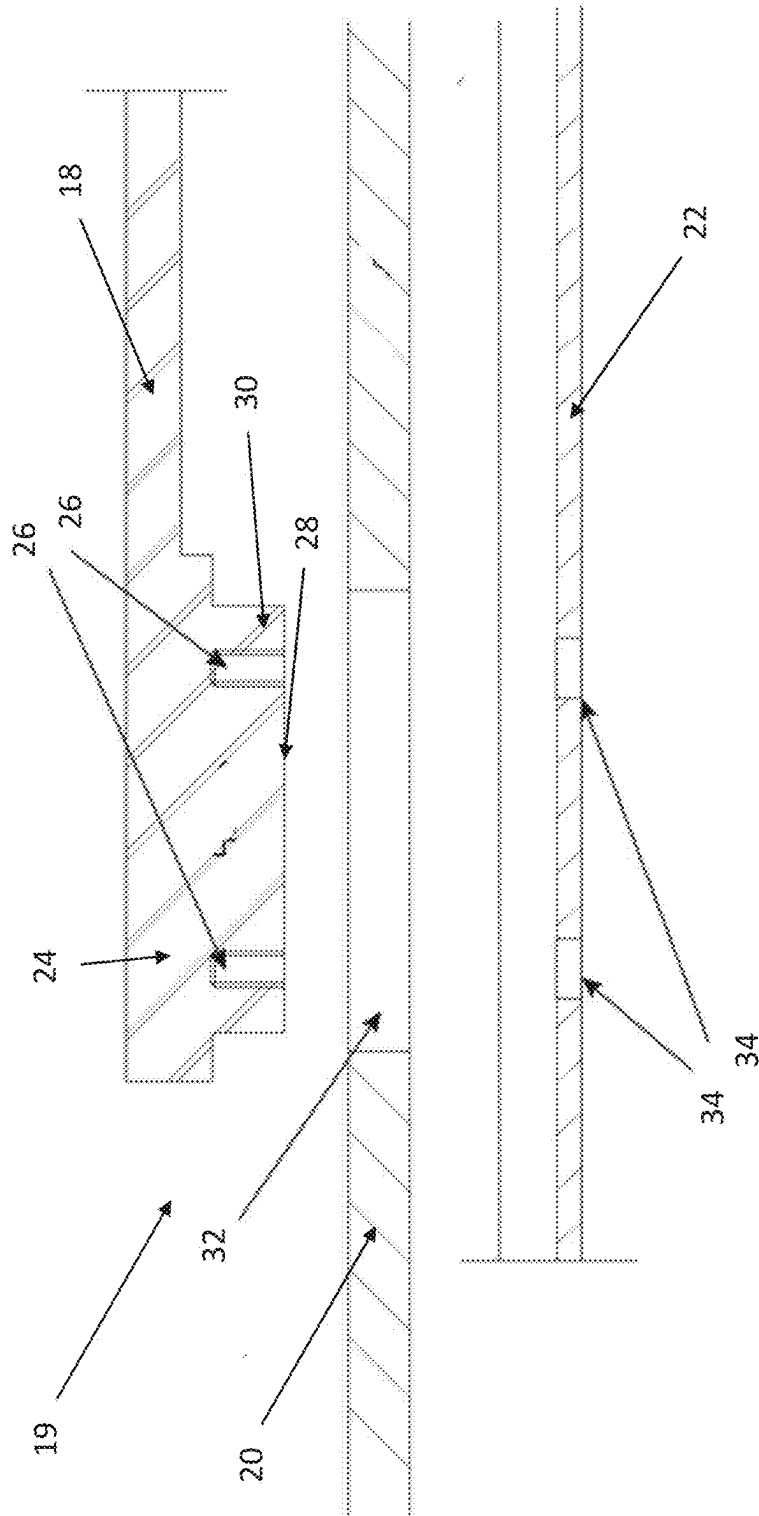


Figure 4

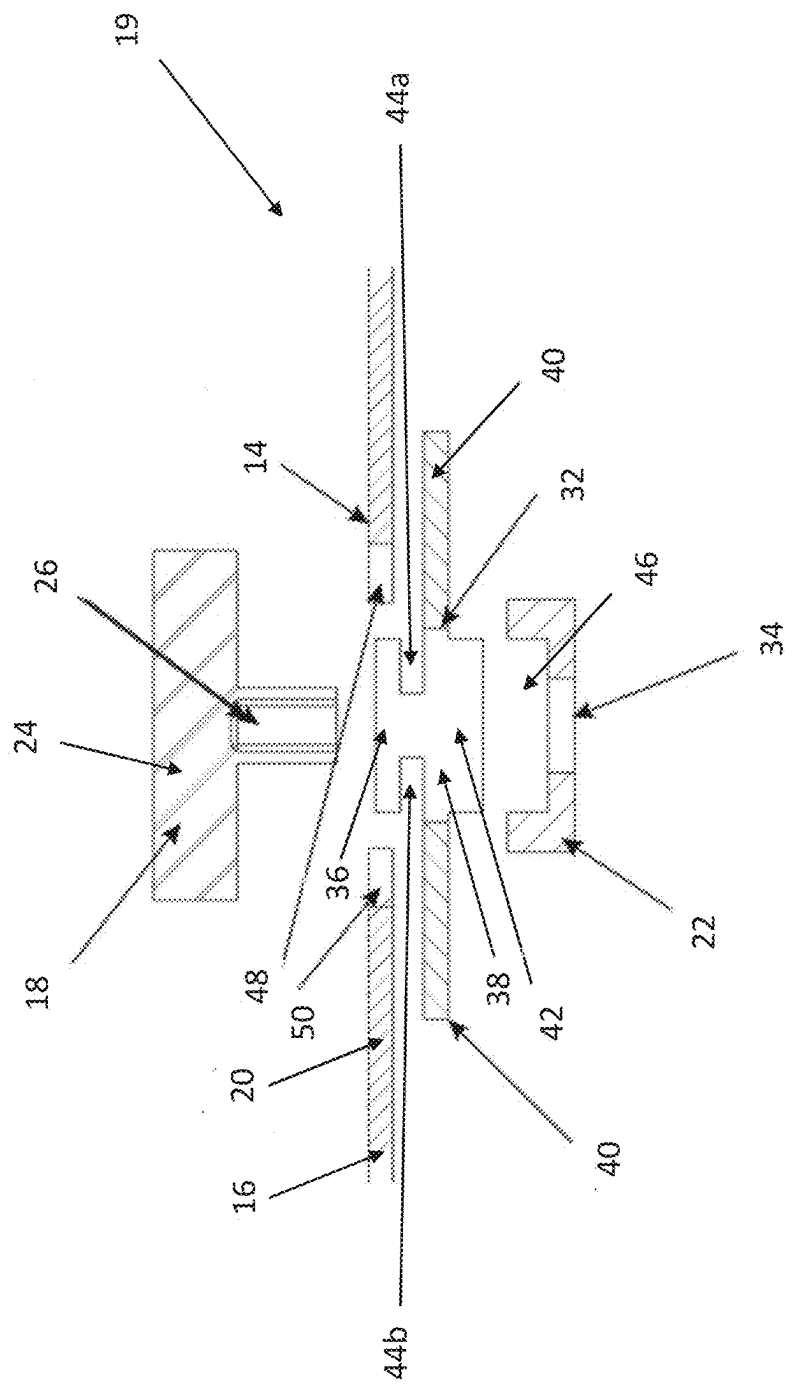
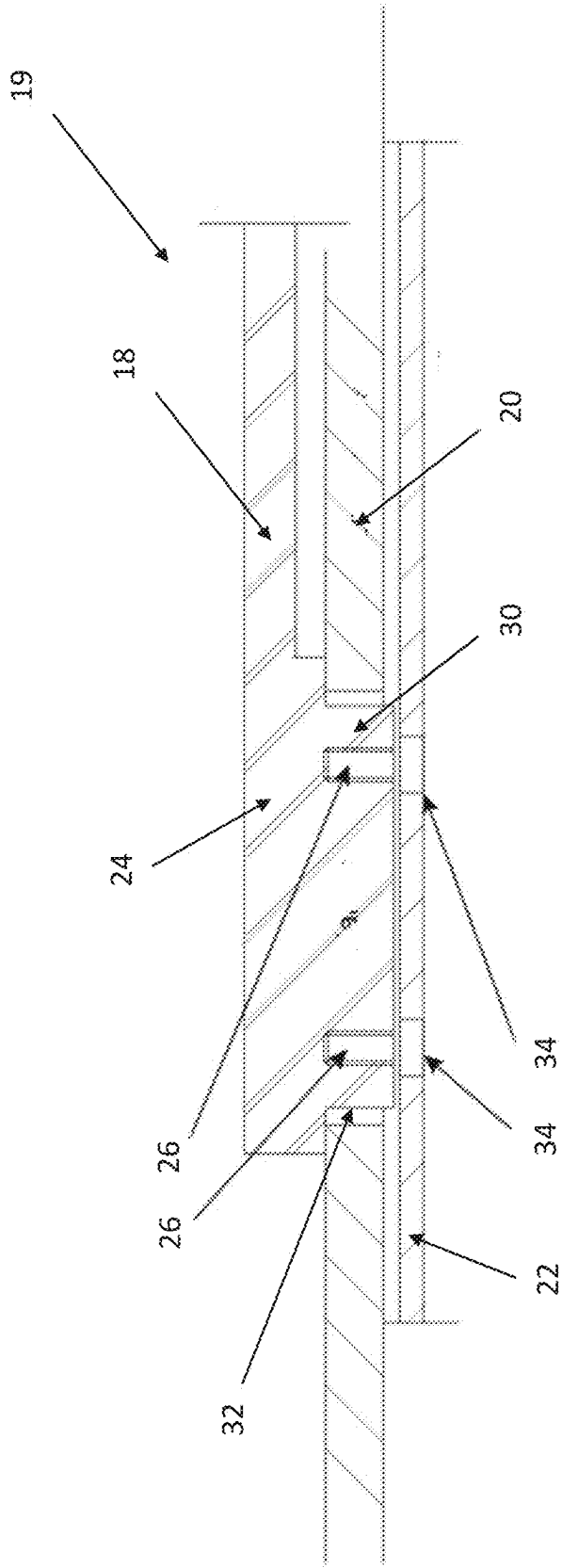
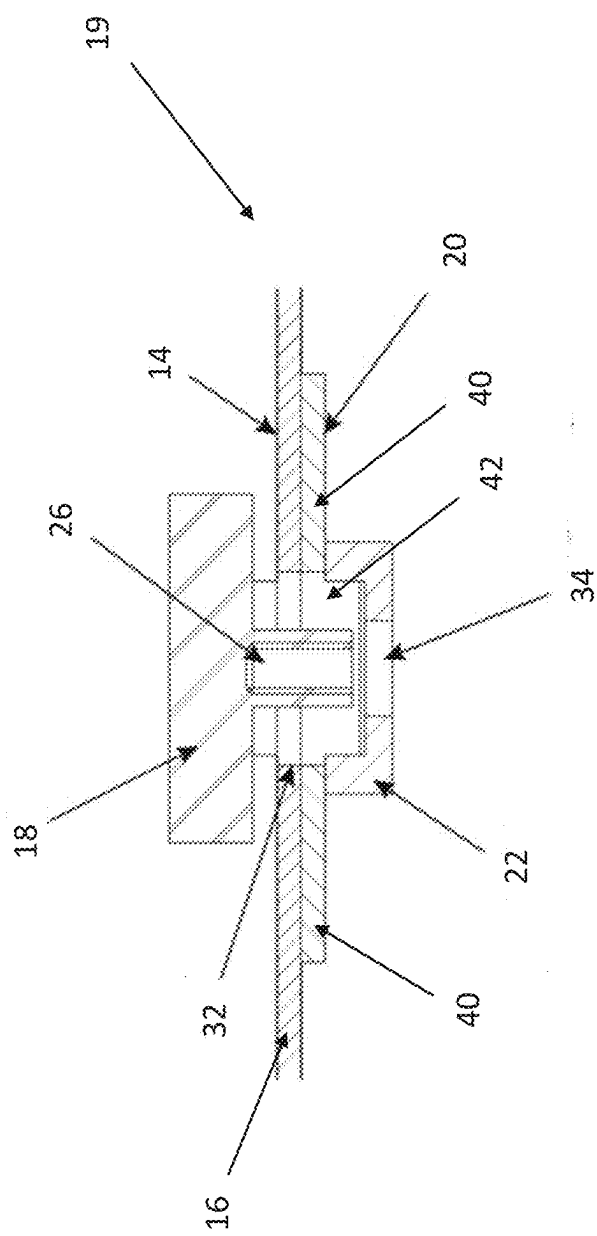


Figure 5

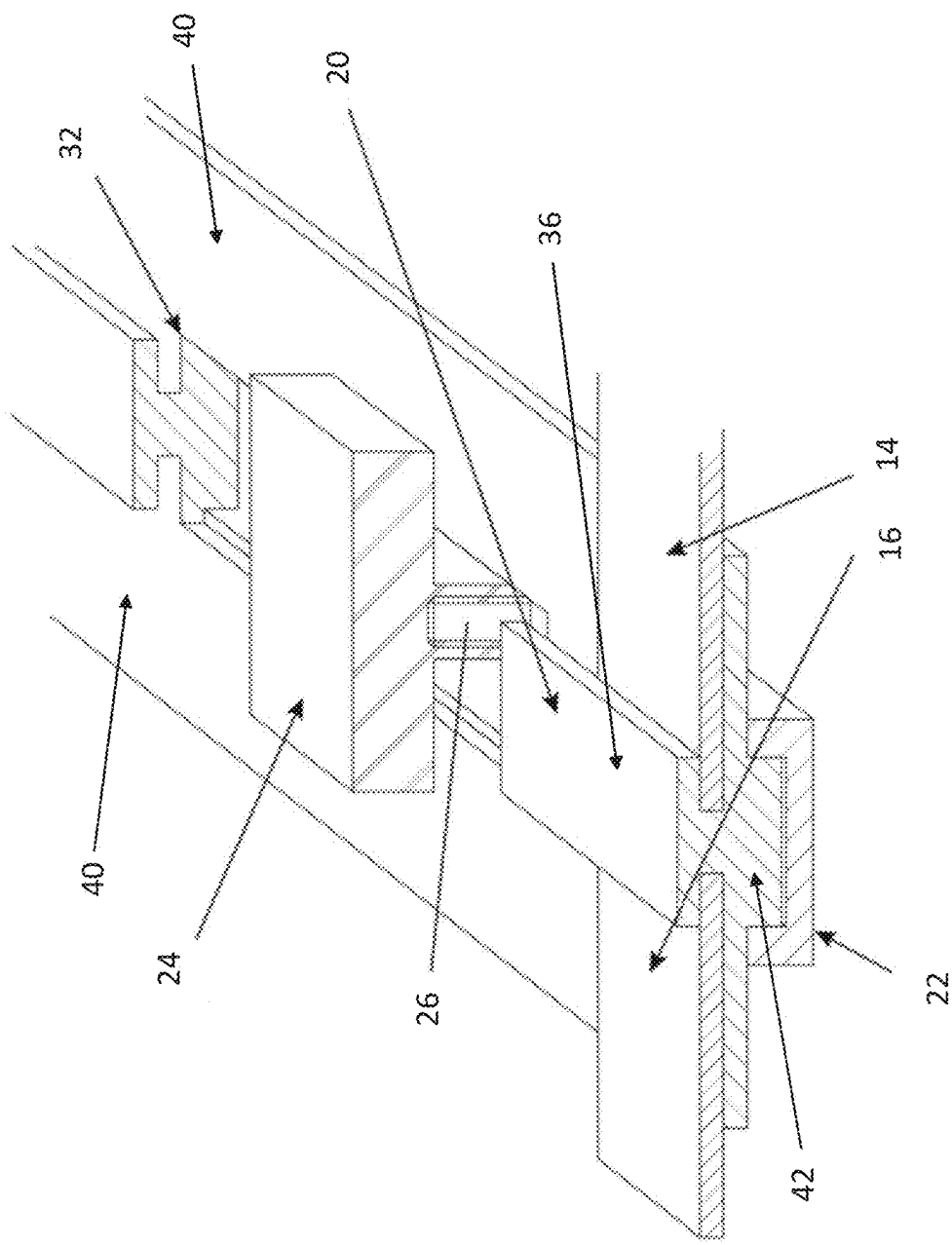


**Figure 6**



**Figure 7**





**Figure 8**

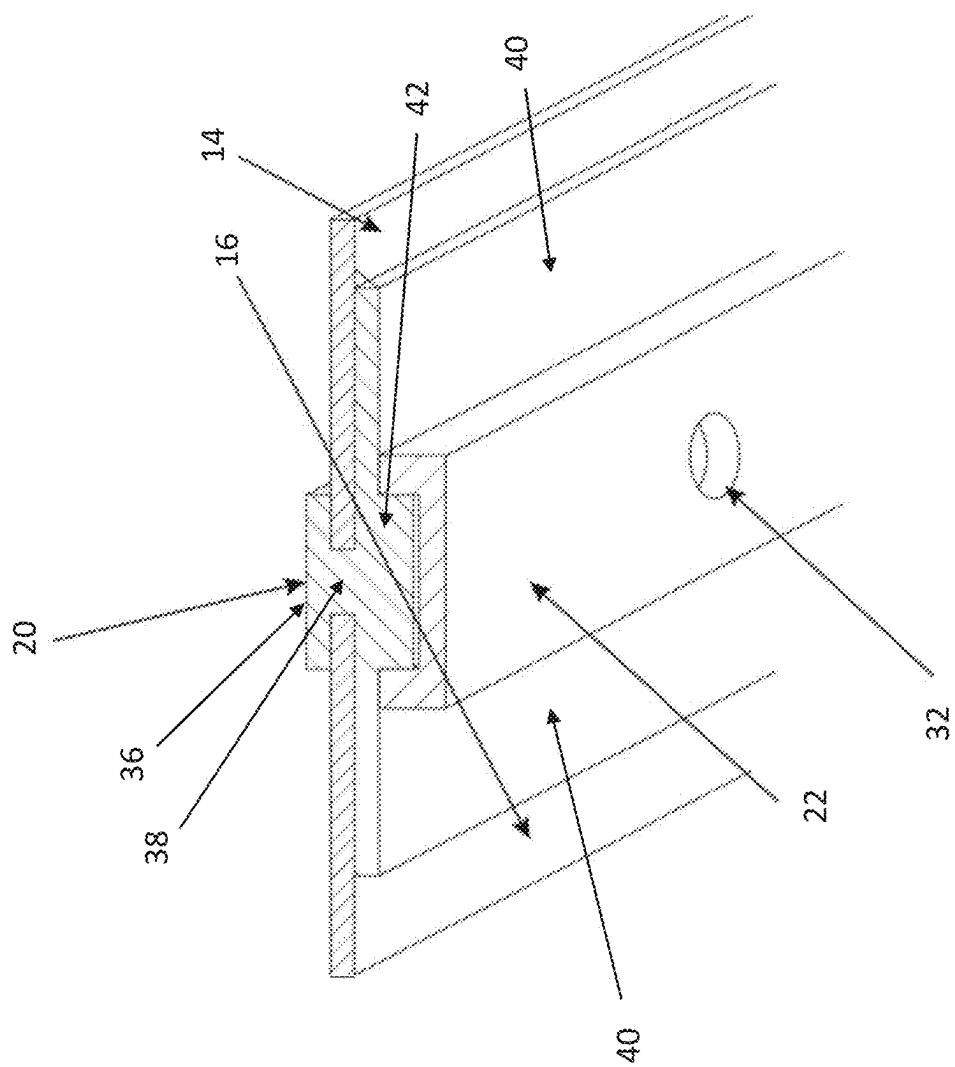


Figure 9

## SUITCASE AND SUITCASE BODY

### BACKGROUND OF THE INVENTION

[0001] This invention relates to a suitcase and a suitcase body, suitable (but not limited) for travelling purposes.

[0002] There are a large number of suitcases in the market, catering for various needs of travellers and users. Such existing suitcases usually have metal (e.g., aluminium) or alloy frames connecting a front shell and a rear shell, which are pivotally connected with each other and collectively form the suitcase. Handles are mounted on one of such metal frames of each of these conventional suitcases, and thus off-centre of such suitcases. Because of such an arrangement, the front shell and the rear shell of each suitcase are of different structural constructions, and two moulds have to be provided for production of the differently-constructed front shell and rear shell, thus resulting in higher development time and cost. Mounting the handles on the metal frames would also limit the height and/or width of the suitcase body, and thus the packing volume of the suitcase.

[0003] It is thus an object of the present invention to provide a suitcase and a suitcase body in which at least one of the aforesaid shortcomings are mitigated or at least to provide a useful alternative to the trade and public.

### SUMMARY OF THE INVENTION

[0004] According to a first aspect of the present invention, there is provided a suitcase body including a first body part, a second body part fixedly engaged with said first body part via a first engagement member, a second engagement member fixedly engaged with said first engagement member, and a handle member fixedly engaged with and between said first body part and said second body part.

[0005] According to a second aspect of the present invention, there is provided a suitcase including a suitcase body including a first body part, a second body part fixedly engaged with said first body part via a first engagement member, a second engagement member fixedly engaged with said first engagement member, and a handle member fixedly engaged with and between said first body part and said second body part.

### BRIEF DESCRIPTION OF THE DRAWINGS

[0006] A suitcase and a suitcase body according to an embodiment of the present invention will now be described, by way of examples only, with reference to the accompanying drawings, in which:

[0007] FIG. 1 shows a first partial perspective view of a suitcase with a suitcase body according to an embodiment of the present invention;

[0008] FIG. 2 shows a second partial perspective view of the suitcase shown in FIG. 1;

[0009] FIG. 3 shows an exploded view of the suitcase shown in FIG. 1;

[0010] FIG. 4 shows a partial sectional longitudinal exploded view of a handle assembly of the suitcase shown in FIG. 1;

[0011] FIG. 5 shows a partial sectional transverse exploded view of the handle assembly shown in FIG. 4;

[0012] FIG. 6 shows a partial sectional longitudinal assembled view of the handle assembly shown in FIG. 4;

[0013] FIG. 7 shows a partial sectional transverse assembled view of the handle assembly shown in FIG. 6;

[0014] FIG. 8 shows a top perspective assembled view of the handle assembly shown in FIG. 6; and

[0015] FIG. 9 shows a bottom perspective assembled view of the handle assembly shown in FIG. 8.

### DESCRIPTION OF THE EMBODIMENTS

[0016] Partial perspective views of a suitcase according to an embodiment of the present invention are shown in FIGS. 1 and 2, the suitcase being generally designated as 10.

[0017] The suitcase 10 has a suitcase body 12 with a first body part 14 and a second body part 16 fixedly engaged with each other, such that the first body part 14 and the second body part are immovable relative to each other. The suitcase 10 has a number of handles 18 around the suitcase body 12. In the embodiment as shown in FIGS. 1 and 2, the handles 18 are all fixedly engaged with and between the first body part 14 and the second body part 16. In particular, the handles 18 are each dead-centre of the first body part 14 and the second body part 16. Put another way, the first body part 14 and the second body part 16 are symmetrically disposed relative to the handles 18. In other embodiments of a suitcase according to the present invention, one or more of the handles 18 may be fixedly engaged with only the first body part 14 or the second body part 16.

[0018] The body 12 is in the form of an endless loop with a number of walls 13 surrounding and defining an interior space, and a first opening and a second opening which are opposite to each other. To a side of the body 12 is pivotally engaged a first cover 15a. The first cover 15a is pivotally movable relative to the body 12 between an opened position in which access to the interior space of the suitcase body 12 through the first opening is allowed and a closed position in which access to the interior space of the suitcase body 12 through the first opening is prevented.

[0019] Similarly, to an opposite side of the body 12 is pivotally engaged a second cover 15b. The second cover 15b is pivotally movable relative to the body 12 between an opened position in which access to the interior space of the suitcase body 12 through the second opening is allowed and a closed position in which access to the interior space of the suitcase body 12 through the second opening is prevented.

[0020] As shown in FIG. 3, the first body part 14 of the body 12 of the suitcase 10 is fixedly engaged with an outer frame 20 in the form of an endless loop, which may be made in one piece of a metal or alloy, such as aluminium. The suitcase 10 also includes an inner frame 22 in the form of an endless loop, at least part of which being made of a metal or alloy, such as aluminium.

[0021] FIGS. 4 and 5 show partial sectional exploded views of a handle assembly 19 of the suitcase 10, including the handle 18, the outer frame 20 and the inner frame 22.

[0022] The handle 18 has two ends, of which only one end 24 is shown in FIG. 4. Two screw-threaded holes 26 are provided in a downward-facing side 28 of the end 24 of the handle 18. The end 24 of the handle 18 has a reduced lower portion 30 sized and configured to be received within an opening 32 of the outer frame 20. The inner frame 22 also has two holes 34 (which may be screw-threaded) which, when assembled, are aligned with the two screw-threaded holes 26 of the end 24 of the handle 18. The same arrangement is provided between the other end (not shown) of the handle 18 and the inner frame 22.

[0023] Referring in particular to the outer frame 20, when viewed transversely, and as shown in FIG. 5, such has an

upper portion 36, a middle portion 38 with two side wings 40, and a lower portion 42, which are integrally formed with one another. The middle portion 38 with the two side wings 40 is wider than the upper portion 36 and the lower portion 42. The upper portion 36 is spaced apart from the middle portion 38, thus forming two recesses 44a, 44b running parallel to the length and along both sides of the outer frame 20. The lower portion 42 of the outer frame 20 is sized and configured to be received at least partly within an elongate trough 46 of the inner frame 22.

[0024] When the suitcase 10 is assembled, the outer frame 20 is fixedly engaged with and between the handle 18 and the inner frame 22. As shown in FIGS. 6 to 9, at least a part of the lower reduced portion 30 of the end 24 of the handle 18 is received within the opening 32 of the outer frame 20, and the screw-threaded holes 26 of the end 24 of the handle 18 are aligned with the two holes 34 of the inner frame 22. Screws (not shown) are threaded through the two holes 34 and into the screw-threaded holes 26 of the end 24 of the handle 18 to fixedly engage the end 24 of the handle 18, the outer frame 20 and the inner frame 22 with one another. Similar arrangement is provided to fixedly engage the other end of the handle 18, the outer frame 20 and the inner frame 22 with one another, to thereby fixedly engage the handle 18, the outer frame 20 and the inner frame 22 with one another. Although screws are disclosed here for fixedly engaging the handle 18, the outer frame 20 and the inner frame 22 with one another, it is envisaged that other engagement elements or means, such as rivets or adhesive material, may also be used.

[0025] When the suitcase 10 is thus assembled, and as shown in FIGS. 7 to 9, the inner frame 22 is out of contact with both the first body part 14 and the second body part 16. In addition, at least a part of a respective side edge 48, 50 of each of the first body part 14 and the second body part 16 is fixedly received within a respective of the elongate recesses 44a, 44b between the upper portion 36 and the middle portion 38 of the outer frame 20, thus fixedly engaging the handle assembly 19, the first body part 14 and the second body part 16 with one another.

[0026] When thus assembled, and as shown in FIGS. 8 and 9, at least a part of the respective side edge 48, 50 of each of the first body part 14 and the second body part 16 is fixedly received within a respective of the elongate recesses 44a, 44b between the upper portion 36 and the middle portion 38 of the outer frame 20. The first body part 14 and the second body part 16 are thus fixedly engaged with each other via and along the outer frame 20. To enhance the fixed engagement between the first body part 14 and the second body part 16, the inner frame 22 is positioned inner of the outer frame 20, the first body part 14 and the second body part 16. In the sense as shown in FIGS. 4 to 9, the inner frame 22 is positioned below the outer frame 20, the first body part 14 and the second body part 16. Engagement elements (for example, screws or rivets) are inserted through the inner frame 20 and the inner frame 22 to fixedly engage the outer frame 20 and the inner frame 22 with each other, thus also fixedly engaging the first body part 14 and the second body part 16 with the inner frame 22. In this way, the inner frame 22 acts as a backing for enhancing the structural integrity of the suitcase body 12, and thus that of the suitcase 10.

[0027] By way of the present invention, it is possible to arrange for both the first body part 14 and the second body

part 16 to be structurally identical with each other. Both the first body part 14 and the second body part 16 may therefore be produced by a single mould. This provides savings in development time and cost. In addition, such an arrangement of the handle 18 would lower the height of the handle 18, and as a result of which the first body part 14 and the second body part 16 may be made taller and wider, thus increasing the packing volume of the suitcase 10.

[0028] It should be understood that the above only illustrates examples whereby the present invention may be carried out, and that various modifications and/or alterations may be made thereto without departing from the spirit of the invention. In particular, various features of the invention which are, for brevity, described in the context of a single embodiment, may be provided or separately or in any suitable sub-combination.

1. A suitcase body including:
  - a first body part,
  - a second body part fixedly engaged with said first body part via a first engagement member,
  - a second engagement member fixedly engaged with said first engagement member, and
  - a handle member fixedly engaged with and between said first body part and said second body part.
2. The suitcase body of claim 1, wherein said first engagement member is in the form of an endless loop.
3. The suitcase body of claim 1, wherein said second engagement member is in the form of an endless loop.
4. The suitcase body of claim 1, wherein said first engagement member is fixedly engaged with said second engagement member via at least one engagement element.
5. The suitcase body of claim 1, wherein said first body part and said second body part are structurally substantially identical with each other.
6. The suitcase body of claim 1, wherein said second engagement member is out of contact with said first body part and said second body part.
7. The suitcase body of claim 1, wherein said first engagement member includes at least one opening receiving a part of said handle member.
8. The suitcase body of claim 1, wherein said first engagement member is in one piece.
9. The suitcase body of claim 1,
  - wherein said first engagement member includes a first elongate recess and a second elongate recess,
  - wherein a part of said first body part is fixedly received within said first elongate recess, and
  - wherein a part of said second body part is fixedly received within said second elongate recess.
10. The suitcase body of claim 1, wherein said suitcase body is in the form of an endless loop with a plurality of wall members defining an interior space, and having a first opening and a second opening which are opposite to each other.
11. The suitcase body of claim 1, wherein said first body part and said second body part are symmetrically disposed relative to said handle member.

12. A suitcase including a suitcase body of claim 1.

13. The suitcase of claim 12, further including a first cover member pivotally engaged and movable relative to said suitcase body between an opened position in which access to an interior space of said suitcase body through said first

opening is allowed and a closed position in which access to said interior space of said suitcase body through said first opening is prevented.

**14.** The suitcase of claim **13**, further including a second cover member pivotally engaged and movable relative to said suitcase body between an opened position in which access to said interior space of said suitcase body through said second opening is allowed and a closed position in which access to said interior space of said suitcase body through said second opening is prevented.

\* \* \* \* \*