

(22) Date of Filing: **10.11.2011**

(56) Documents Cited:
GB 0358759 A
US 4122925 A
WO 2009/029244 A1

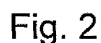
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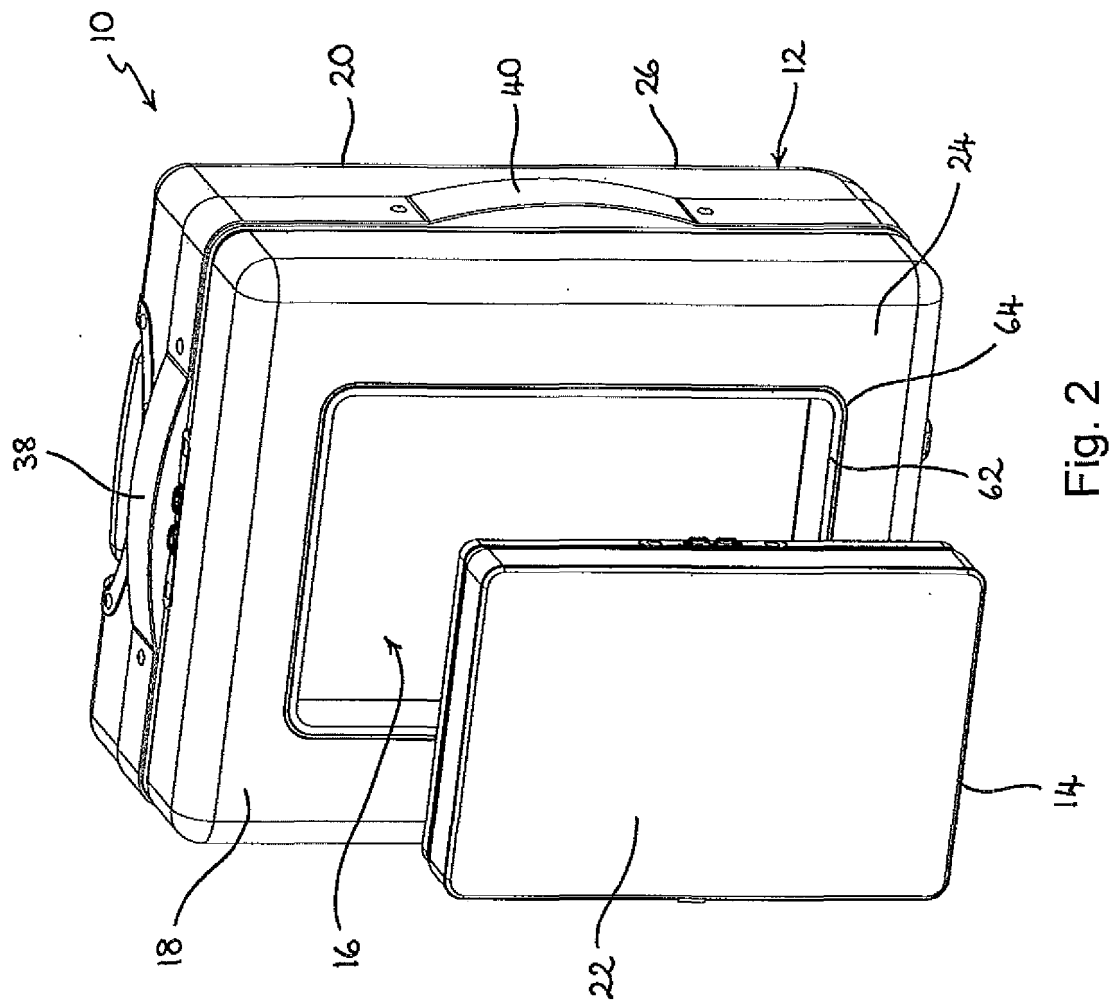
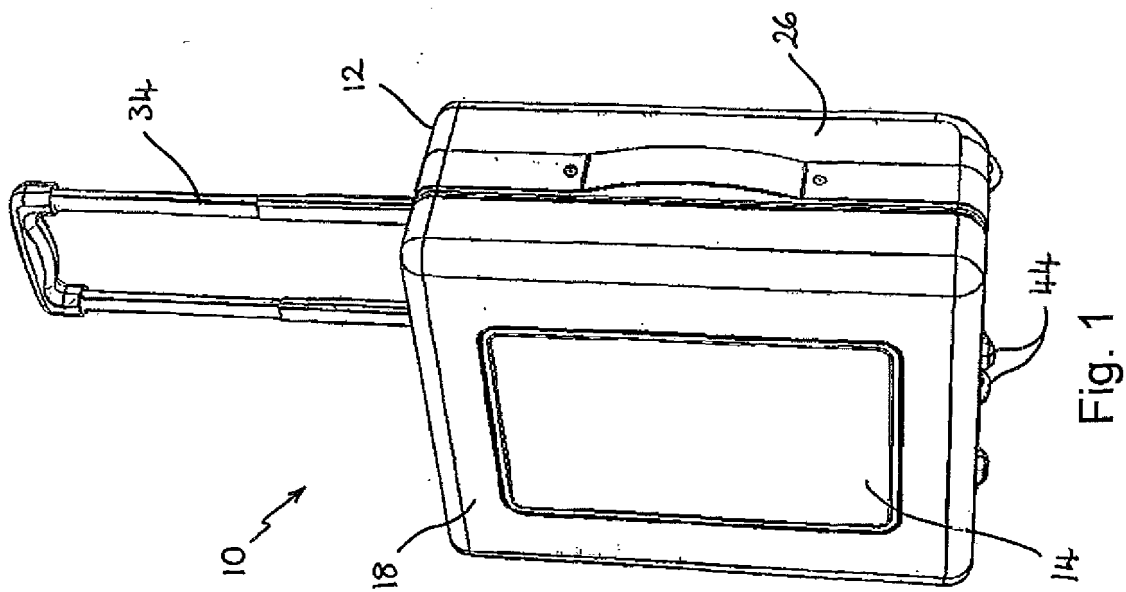
(58) Field of Search:
INT CL **A45C**
Other: **EPODOC, WPI**

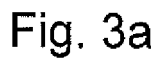
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(54) Title of the Invention: **Luggage**
Abstract Title: **Luggage with a removable insert case**

(57) This invention relates to a suitcase 12 incorporating a smaller removable case 14. Suitcase 12 comprises a hinged base portion 26 and lid portion 18, a recess 16 being formed in the lid portion 18. The recess 16 has sidewalls (54, fig.3a) and a base (56, fig.3a). An insert case 14 is securable within and removable from the recess 16. The insert case 14 has a base (70, fig.6), side walls (68a, fig.6) and a lid (72, fig.6). The side walls and base of the recess (54, 56, fig.3a) extend into the interior space of the suitcase, and the heights of the sidewalls of the insert case (68a, fig.6) are not greater than 120% of the heights of respective sidewalls of the recess (54, fig). Preferably the insert case sits flush with the lid of the suitcase and is fastened thereto by means such as a zip (66, fig.6).







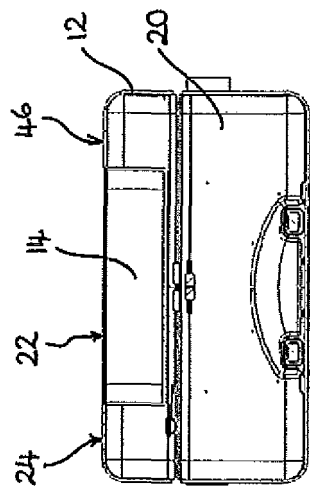


Fig. 5a

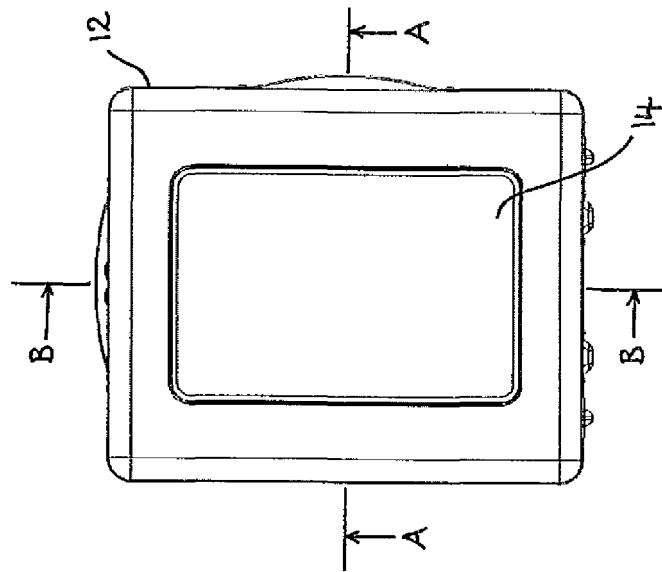


Fig. 5b

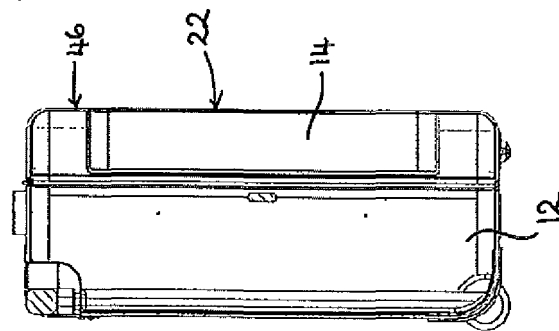


Fig. 5c

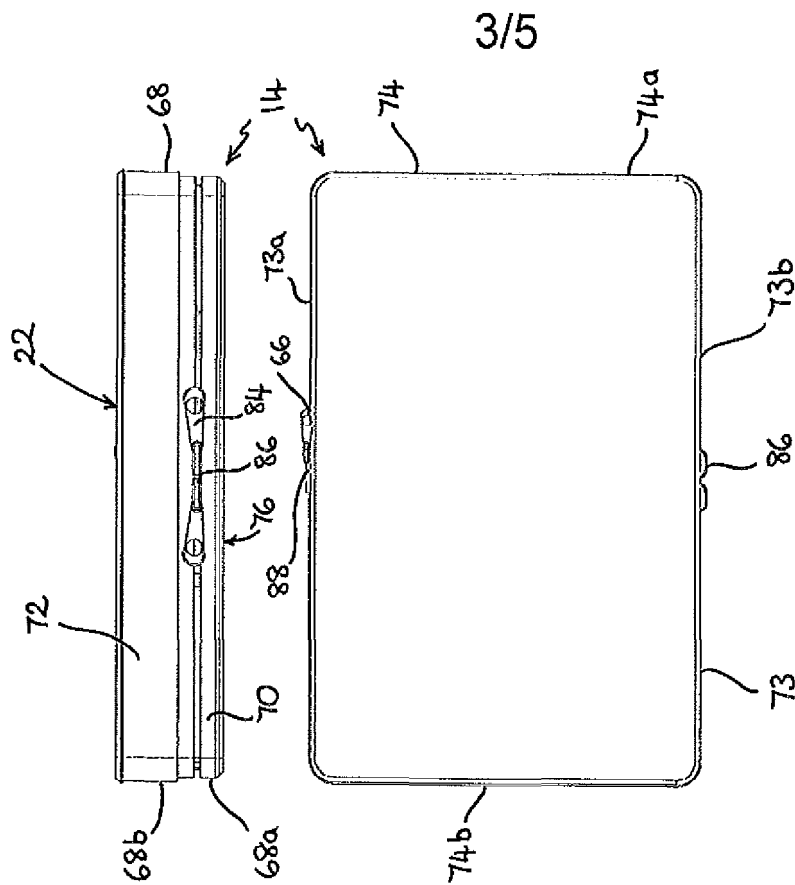


Fig. 6

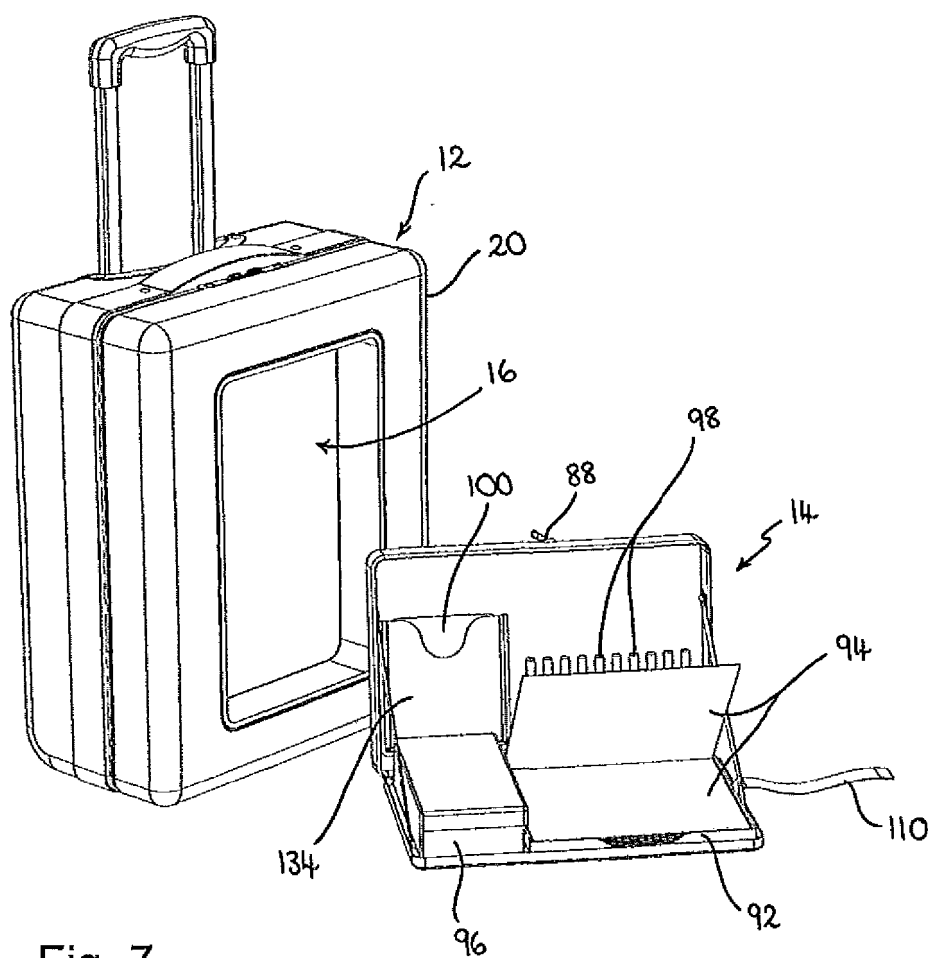


Fig. 7

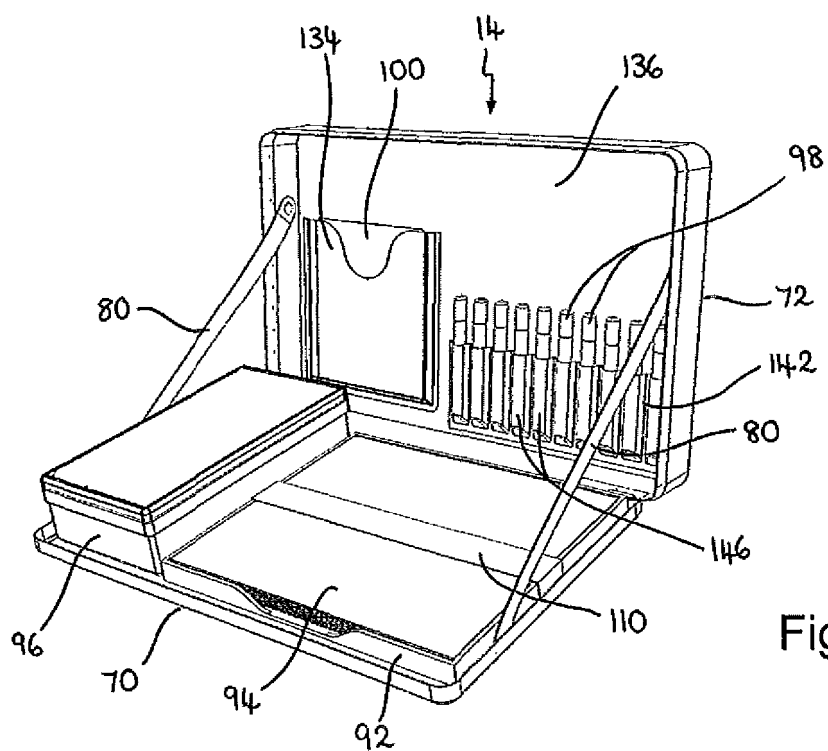


Fig. 8

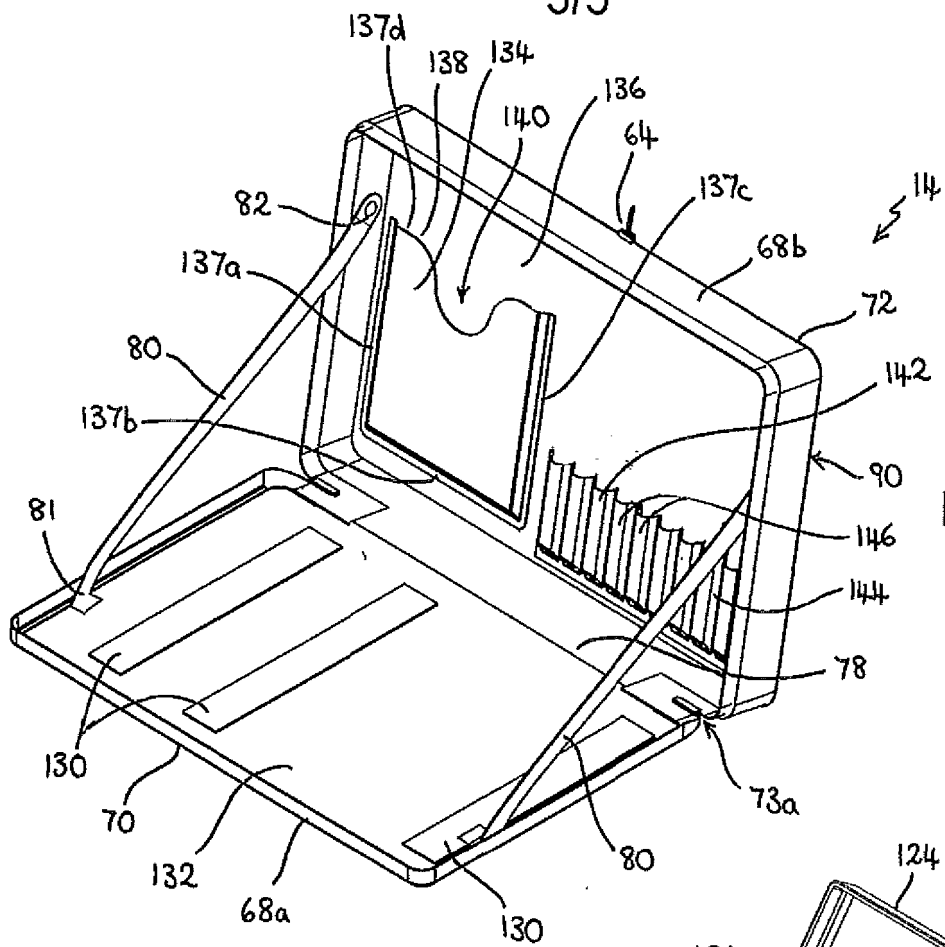


Fig. 9

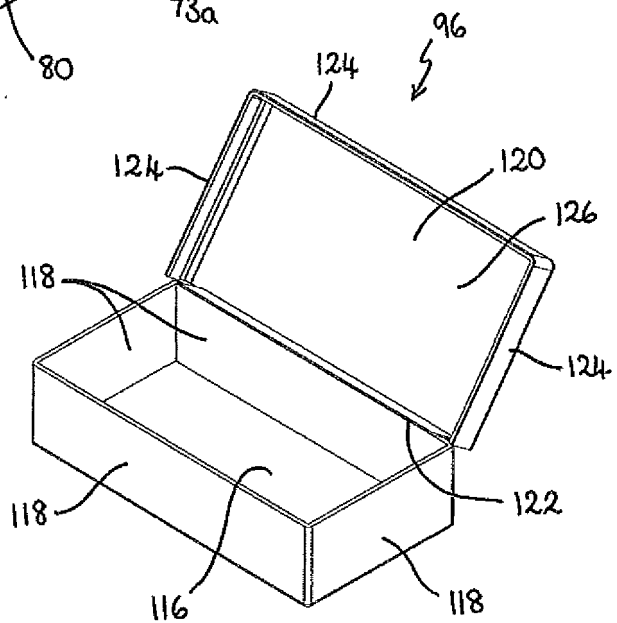


Fig. 10

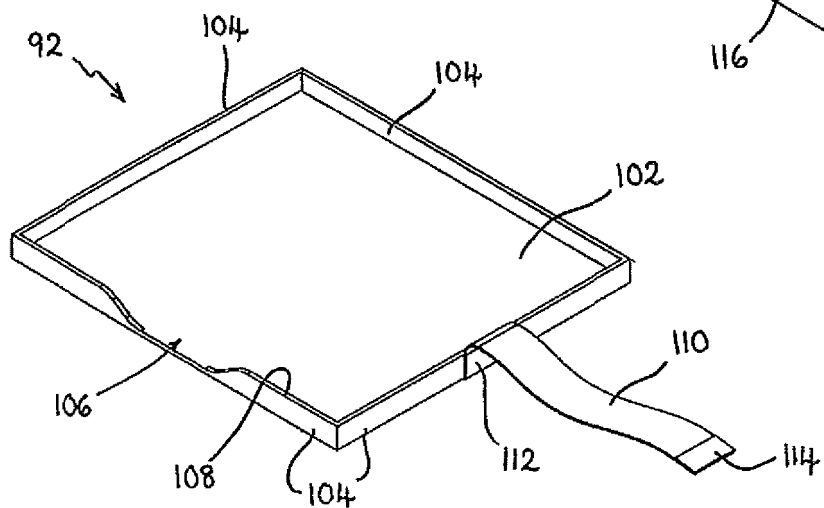


Fig. 11

Luggage

BACKGROUND

5

a. Field of the Invention

This invention relates to luggage, and in particular to suitcases incorporating a smaller removable case.

10

b. Related Art

It is becoming increasingly common for children to take their own suitcases on holiday rather than adding their clothes and belongings to the parent's suitcase.

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This has been driven in part by the rules imposed by airlines, limiting each person to a single piece of luggage. In addition, many children like having their own suitcase which they can help to pack themselves.

20

Additionally, it is increasingly common for travellers to use small suitcases as hand luggage on flights. There are maximum dimensions to any bag to be used as hand luggage as it must fit within the overhead lockers. Increasingly, many suitcases are being designed having these dimensions so that the maximum volume of belongings can be packed into hand luggage.

25

In both of these situations it is often desirable to remove some of the contents from the case before it is stowed away; for example, children may wish to keep toys or books with them for entertainment during the flight.

30

It is an object of the present invention to provide a piece of luggage that fulfils these requirements.

SUMMARY OF THE INVENTION

According to the invention there is provided a piece of luggage comprising:

- a suitcase having a hinged base portion and lid portion, together defining an interior space of the suitcase;
- a recess formed in the lid portion, the recess having sidewalls, a base and an opening; and
- an insert case securable within and removable from the recess, the insert case having a base, side walls and a lid,

10 wherein the opening of the recess is in an exterior surface of the lid portion of the suitcase and the side walls and base of the recess extend into the interior space of the suitcase, and wherein the heights of the sidewalls of the insert case are not greater than 120% of the heights of respective sidewalls of the recess.

15 Preferably the heights of the sidewalls of the insert case are greater than 80% of the heights of respective sidewalls of the recess. More preferably the heights of the sidewalls of the insert case are greater than 90% of the heights of respective sidewalls of the recess. Preferably the heights of the sidewalls of the insert case are less than 110% of the heights of respective sidewalls of the recess. More
20 preferably the heights of the sidewalls of the insert case are substantially 100% of the heights of respective sidewalls of the recess.

More preferably the heights of the sidewalls of the insert case are equal to the heights of respective sidewalls of the recess such that a front face of the insert
25 case is flush with the external surface of a front face of the lid portion when the insert case is secured within the recess. In this way, the retention of the insert case in the recess does not increase the overall external dimensions of the piece of luggage.

30 Typically the recess and the insert case will have a substantially rectangular cross-sectional shape. Generally a length and width of the recess is less than a height and width of the suitcase so that a peripheral region is defined around the full

periphery of the recess. As such, the recess does not fill the whole of the internal space of the lid portion of the suitcase, and the rigidity of the suitcase is not compromised.

- 5 To secure the insert case within the recess, fastening means are preferably provided around a peripheral edge of the opening of the recess and a peripheral edge of a front face of the insert case. Preferably the fastening means comprises a zip. Alternatively, other fastening means may be provided, for example on the base of the recess and a corresponding rear face of the insert case.

10

In a preferred embodiment the insert case comprises a hinged base section and lid section. More preferably the insert case comprises at least one strap extending between the base section and the lid section, the length of the at least one strap limiting the opening of the insert case.

15

The insert case is designed to contain a number of items to provide activities for a child, for example wipe-clean drawing boards, pens and small toys. In other embodiments the insert case may provide a vanity case or jewellery box, or the insert case may provide a space for documents and a laptop computer or similar portable device.

20

Preferably fastening means used to secure the insert case closed are concealed when the insert case is retained within the recess. In this way, the insert case is prevented from being opened when the insert case is secured within the recess.

25

BRIEF DESCRIPTION OF THE DRAWINGS

The invention will now be further described, by way of example only, with reference to the following drawings in which:

30

Figure 1 is a perspective view of a suitcase 12 according to a preferred embodiment of the present invention;

Figure 2 is a perspective view of the suitcase 12 of Figure 1 showing an insert case 14 removed from the lid of the suitcase;

5 Figure 3a is a perspective view from the front of the suitcase 12 of Figure 2 showing a recess 16 in the lid of the suitcase;

Figure 3b is a perspective view from the rear of the suitcase 12 of Figure 3a;

10

Figure 4 is a perspective view of the suitcase 12 of Figure 1 with the suitcase 12 open;

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Figure 5a is a cross-sectional view through the suitcase 12 of Figure 5b along the line A-A;

Figure 5b is a plan view from the front of the suitcase 12 of Figure 1;

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Figure 5c is a cross-sectional view through the suitcase 12 of Figure 5b along the line B-B;

Figure 6 shows a plan view from the side and from the front of the insert case 14 of Figure 2;

25

Figure 7 is a perspective view of the suitcase 12 of Figure 2 showing the insert case 14 removed from the suitcase 12 and opened;

Figure 8 is a perspective view of the insert case 14 of Figure 7, opened and showing one alternative set of contents of the insert case;

30

Figure 9 is a perspective view of the insert case 14 of Figure 8 with some of the contents removed;

Figure 10 is a perspective view of a box securable within the insert case 14 of Figure 9; and

5 Figure 11 is a perspective view of a tray securable within the insert case 14 of Figure 9.

10 DETAILED DESCRIPTION

Figure 1 shows a piece of luggage 10 comprising a suitcase 12 according to a preferred embodiment of the present invention. The suitcase 12 includes a removable insert case 14 that is securable within a recess 16 in a lid portion 18 of the suitcase 12, as shown most clearly in Figure 2. The insert case 14 may include children's activities or games or other personal belongings that can be easily separated from the main body 20 of the suitcase 12.

The dimensions of the insert case 14 and recess 16 are such that when the insert case 14 is secured within the recess 16, the insert case 14 does not protrude significantly from the suitcase 12. Preferably, a front face 22 of the insert case 14 is flush with an external surface 24 of the lid portion 18 of the suitcase 12, so that the insert case 14 does not increase the external dimensions of the suitcase 12.

25 The suitcase 12 is generally cuboidal and comprises a base portion 26 and a lid portion 18 which are hinged together along an edge 28 to allow the suitcase 12 to open and close. The base and lid portions 26, 18 may be secured closed using a zip 30 that extends around the periphery of the suitcase 12 as is known in the art. References herein to lid portion and base portion are interchangeable, so that
30 references to lid portion in this example may alternatively refer to a base portion and references to base portion in this example may alternatively refer to a lid portion. The suitcase may be rigid or semi-rigid, and may be a fabric suitcase or

may be a hard-shelled suitcase, as is known in the art.

The base portion 26 and lid portion 18 together define an interior space 32 of the suitcase 12. An extendable handle 34 is housed within the base portion 26 of the
5 suitcase 12 and is arranged to extend from a top wall 36a of the suitcase 12 to enable the suitcase 12 to be easily pulled along by a user, as is known in the art. Additional handles 38, 40 are formed by a strap 42 that extends around the four walls 36a-d of the suitcase 12, as shown in Figures 3a and 3b. One face of the strap 42 is in contact with an external surface of the walls 36a-d around the
10 periphery of the suitcase 12 except for portions on the top wall 36a and one side wall 36b. These portions of the strap 42 are bowed away from the external surface of the suitcase 12 to provide portions of the strap 42 that may be gripped by a user.

15 The suitcase 12 also includes a plurality of wheels 44, in this example four, attached to a bottom wall 36c to allow the suitcase 12 to be wheeled along, typically by pulling it by one of the handles 34, 38, 40. In other embodiments, the suitcase 12 may include only two wheels 44.

20 As shown in Figure 3a, the recess 16 formed in the lid portion 18 of the suitcase 12 is substantially rectangular and is centrally located in a face 46 of the suitcase 12, thereby defining a peripheral region 48 around the recess 16. The recess 16 includes an opening 50 in the external surface 52 of the lid portion 18 and four
sidewalls 54 and a base 56 that extend into the interior space 32 of the suitcase
25 12. The depth of the recess 16, or in other words the height of the sidewalls 54, is preferably not greater than the depth of the lid portion 18 of the suitcase, so that the recess 16 does not protrude into the base portion 26 of the suitcase 12 when the suitcase 12 is closed. This is shown most clearly in Figures 5a and 5c. Preferably the base of the recess is fixed, so that the dimensions of the recess 16
30 cannot be changed.

As shown in Figure 4, because the width and length of the recess 16 is typically

less than the width and height of the suitcase 12, the interior space 32 of the lid portion 18 is in the form of an annular space or channel 58 extending around the periphery of the side walls 54 of the recess 16. This channel 58 may be filled with belongings so that there is no wasted space within the suitcase 12. Additionally, a
5 screen or cover 60 may be provided that extends across the opening of the channel 58 so that any belongings are retained within the channel 58 when the suitcase 12 lid 18 is closed. In this example the cover 60 is designed to extend across the whole area of the lid portion 18.

10 To enable the insert case 14 to be secured within the recess 16, as will be described further below, a first part (not shown) of a fastening means 64 is associated with the recess 16. In this embodiment, the first part of the fastening means 64 comprises a first part of a zip 66 extending around the periphery of the opening 50 of the recess 16. In this example, the first part of the fastening means
15 64 is covered by a flap of material 62, so that the fastening means 64 is not visible. In other embodiments, the fastening means 64 may comprise strips of hook and loop material or press studs, or any other suitable fastening or securing means that may be used to retain the insert case 14 within the recess 16.

20 The removable insert case 14 is substantially cuboidal and has external dimensions equal to the dimensions of the recess 16. In particular the height of sidewalls 68 of the insert case 14 is the same as the depth of the sidewalls 54 of the recess 16, and the length and width of the insert case 14 are substantially equal to the length and width of the recess 16. In this way, when the insert case
25 14 is retained fully within the recess 16, a front face 22 of the insert case 14 does not protrude out beyond a front face 46 of the suitcase 12, as shown most clearly in Figures 1, 5a and 5c. In this way, the front face 22 of the insert case 14 is substantially flush with the external surface 24 of the front face 46 of the lid portion 18 when the insert case 14 is secured within the recess 16.

30

The insert case 14 comprises a base section 70 and a lid section 72 as shown most clearly in Figures 6 and 8. The base section 70 and lid section 72 are both

generally rectangular, having two longer edges 73 and two shorter edges 74. The base section 70 further comprises a rear face 76 of the insert case 14 and sidewalls 68a extending perpendicularly from the edges of the face 76. Similarly, the lid section 72 comprises the front face 22 of the insert case 14 and sidewalls 68b extending perpendicularly from the edges of the face 22. The sidewalls 68a of the base section 70 are preferably of minimal height and are primarily included to provide a means of fastening the lid 72 to the base 70.

The base and lid sections 70, 72 are preferably connected along a respective longer edge 73a by a hinge 78. In the preferred embodiment shown most clearly in Figure 9, the base and lid sections 70, 72 are integrally formed with the hinge 78 being created from a thinner, flexible section of material. Two straps 80 are connected between the base and lid sections 70, 72 to limit the opening of the insert case 14. The straps 80 are connected between respective shorter sidewalls 68a, 68b of the base and lid sections 70, 72, with a first end 81 of a strap 80 attached to a sidewall 68a of the base section 70 and a second end 82 of a strap 80 attached to a sidewall 68b of the lid section 72. The lengths of the straps 80 are preferably such that the maximum extent of opening of the insert case 14 is such that the lid section 72 is held at an angle of between 90° and 100° to the base section 70.

The insert case 14 is secured closed using fastening means 84 in the form of a zip 86 that extends around three edges 73b, 74a, 74b of the base and lid sections 70, 72, as shown most clearly in Figure 6. In other embodiments, the insert case 14 may be secured closed using any other suitable fastening means.

When the insert case 14 is secured within the recess 16, the fastening means 84 of the insert case 14 are preferably concealed, so that a user cannot open the insert case 14 while the insert case is retained within the recess 16. In this example, the fastening means 84 are provided around the sidewalls 68 of the insert case 14 which are located adjacent to respective sidewalls 54 of the recess 16 when the insert case 14 is secured within the recess 16.

The insert case 14 also comprises a second part 88 of the fastening means 64 used to secure the insert case 14 within the recess 16. In this embodiment, the second part 88 of the fastening means 64 comprises a second part of a zip 66 that
5 extends around an external peripheral edge 90 of the front face 22 of the insert case 14.

When the insert case 14 is fully received within the recess 16, the two parts 62, 88 of the fastening means 64 engage to secure the insert case 14 in position. In this
10 preferred embodiment, respective ends of the zip 66 may be engaged and the zip 66 fastened around the complete periphery of the insert case 14.

In this position the front face 22 of the insert case 14 is flush with the external surface 24 of the lid portion 18 so that the insert case 14 does not increase the
15 overall dimensions of the suitcase 12. In this way, the maximum dimensions of the piece of luggage 10 is the same when the insert case 14 secured within the recess 16 and when the insert case 14 is removed from the recess 16. This is important when the suitcase 12 is to be made suitable for use as hand luggage on a flight and it is desirable to maximise the dimensions of the suitcase 12 while still
20 complying with the dimensional limits imposed by the airlines.

In other embodiments the dimensions of the insert case 14 may vary slightly from the dimensions of the recess 16 such that the front face 22 of the insert case 14 protrudes slightly from the external surface 24 of the suitcase 12, or is recessed or
25 set back from the external surface 24 of the suitcase 12. This difference may be due, for example, to the use of different fastening means. Preferably, however, the heights of the sidewalls 68 of the insert case 14 are between 80% and 120% of the depth of the recess 16.

30 In this embodiment, the insert case 14 is designed to contain a number of items to provide activities for a child. It will be appreciated that the contents of the insert case 14 may be changed from what is described below and/or may be modified to

more particularly suit either a boy or a girl.

Referring now to Figures 7 to 11, the insert case 14 comprises a tray 92 for holding sheets of paper or wipe-clean boards 94, a container or box 96 which may be used to store play figures or other small toys (not shown), a set of coloured pens or pencils 98 and a cloth 100 for wiping the wipe-clean boards 94 when included.

The tray 92 includes a generally square or rectangular base 102 and raised edges 104 that extend almost around the complete periphery of the base 102, as shown most clearly in Figure 11. A gap or cut-out 106 in the raised edge 104 along one side of the base 102 allows a user to grab an edge of a sheet of paper or a board 94 that is lying in the tray 92 below the level of the top 108 of the raised edges 104. A retaining strap 110 is attached at a first end 112 to one of the raised edges 104 and is releasably securable at a second end 114 to an opposite raised edge 104. In this way, the strap 110 can be used to hold any paper or boards 94 within the tray 92, even if the tray 92 is tipped upside down.

In a preferred embodiment the tray 92 holds at least two boards 94 having wipe-clean surfaces. Designs or pictures are printed on at least one surface of each board 94 so that the board 94 can act as a background against which, for example, a child can play with figures. The designs may illustrate, for example, the inside of a spaceship, a fairytale castle, a prehistoric landscape or the inside of a house.

The box 96 includes a rectangular base 116 and four walls 118, as shown in Figure 10. A lid 120 is hinged to a top edge 122 of one of the walls 118 and the lid 120 includes side portions 124 that extend down over the walls 118 of the box 96 when the lid 120 is closed. The side portions 124 extend a short distance down the walls 118 of the box 96, preferably less than one third of the height of the box 96, and are designed to have a frictional fit over the walls 118 to keep the box 96 sealed closed. The lid 120 preferably comprises a fabric or mesh cover 126.

The tray 92 and the box 96 are both designed to be securable within and removable from the insert case 14 and, as such, the box 96 and the tray 92 both include first securing means (not shown) on a bottom surface that interact with complementary second securing means 130 on the inside surface 132 of the base section 70 of the insert case 14. In this example, the first and second securing means 130 comprise strips of hook and loop material; however, in other embodiments other suitable securing means 130 may be used.

10 A pocket 134 is attached to an internal surface 136 of the lid section 72 of the insert case 14. The pocket 134 is attached to the lid section 72 around three edges 137a-c with the fourth free edge 137d defining an opening 138 of the pocket 134. A cut-out 140 is formed in the free edge 137d so that a user can grasp the end of an object held within the pocket 134. The pocket 134 is preferably used to
15 store a cloth 100 for wiping clean the boards 94 after use.

A pen holder 142 is also attached to the internal surface 136 of the lid section 72. The pen holder 142 comprises a band of material 144 formed into a series of semi-cylindrical receptacles 146, each receptacle 146 being designed to hold a
20 single pen or pencil 98. In a preferred embodiment, the pen holder 142 contains a plurality of non-permanent felt tipped pens 98 suitable for writing and drawing on the wipe-clean boards 94.

The insert case 14 keeps all of the child's pens, paper and other playthings in a
25 single container which may be easily carried and packed away when not in use. In this way, the insert case 14 forms an activity centre that can be easily set up for example on a fold-down tray table on the back of a seat in a plane or train. The piece of luggage is, therefore, suitable for use for use in the car, on a train or a plane and can be used for longer holidays abroad or shorter weekends away or
30 'sleep overs'.

Although this example has described the contents of the insert case 14 as

providing activities and playthings for children, in other embodiments the contents of the insert case 14 may differ. For example, the insert case 14 may provide a vanity case or jewellery box that can be set up as a 'dressing table' at the user's destination. As such the internal surface 136 of the lid section 72 may comprise a
5 mirror. Alternatively, the insert case 14 may provide space for documents and a laptop computer or similar portable device.

Although the piece of luggage of the present invention has primarily been described in relation to travel and in particular to use on planes and trains, the
10 luggage is also ideally suited for use when a person is admitted to hospital. In these situations the suitcase may hold clothes needed by the patient, and the insert case may be used to contain toiletries and jewellery, or activities to entertain a child whilst in hospital.

15 As previously described, when the insert case 14 is secured in a suitcase 12, the insert case 14 is accessible from an external surface 24 of the lid portion 18. This means that the suitcase 12 does not need to be opened to remove the items, and means that the contents of the main body 20 of the suitcase 12 do not need to be disturbed.

CLAIMS

1. A piece of luggage comprising:
 - a suitcase having a hinged base portion and lid portion, together defining an interior space of the suitcase;
 - a recess formed in the lid portion, the recess having sidewalls, a base and an opening; and
 - an insert case securable within and removable from the recess, the insert case having a base, side walls and a lid,
- 10 wherein the opening of the recess is in an exterior surface of the lid portion of the suitcase and the side walls and base of the recess extend into the interior space of the suitcase, and wherein the heights of the sidewalls of the insert case are not greater than 120% of the heights of respective sidewalls of the recess.
- 15 2. A piece of luggage as claimed in Claim 1, wherein the heights of the sidewalls of the insert case are between 80% and 120% of the heights of respective sidewalls of the recess.
- 20 3. A piece of luggage as claimed in Claim 2, wherein the heights of the sidewalls of the insert case are equal to the heights of respective sidewalls of the recess such that a front face of the insert case is flush with the external surface of a front face of the lid portion when the insert case is secured within the recess.
- 25 4. A piece of luggage as claimed in any preceding claim, wherein the recess and the insert case have a substantially rectangular cross-sectional shape.
5. A piece of luggage as claimed in Claim 4, wherein a length and width of the recess is less than a height and width of the suitcase so that a peripheral region is defined around the full periphery of the recess.
- 30 6. A piece of luggage as claimed in any preceding claim, wherein fastening means are provided around a peripheral edge of the opening of the recess and a

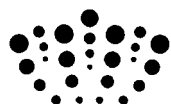
peripheral edge of a front face of the insert case to secure the insert case within the recess.

7. A piece of luggage as claimed in Claim 6, wherein the fastening means
5 comprises a zip.

8. A piece of luggage as claimed in any preceding claim, wherein the insert case comprises a hinged base section and lid section.

10 9. A piece of luggage as claimed in Claim 8, wherein the insert case comprises at least one strap extending between the base section and the lid section, the length of the at least one strap limiting the opening of the insert case.

10. A piece of luggage substantially as herein described, with reference to, or
15 as shown in, the accompanying drawings.



Application No: GB1119414.9

Examiner: Emma Tonner

Claims searched: 1-10

Date of search: 2 March 2012

Patents Act 1977: Search Report under Section 17

Documents considered to be relevant:

Category	Relevant to claims	Identity of document and passage or figure of particular relevance
X	1-4, 6, 8	US4122925 A (SCHULTHEISS) see col.3, lines 4-58
X	1-4, 8	GB358759 A (ASPREY & COMPANY) see page 2, lines 16-32
X	1-6, 8	WO2009/029244 A1 (ENE GROUP) see page 6, paragraph 0050

Categories:

X	Document indicating lack of novelty or inventive step	A	Document indicating technological background and/or state of the art.
Y	Document indicating lack of inventive step if combined with one or more other documents of same category.	P	Document published on or after the declared priority date but before the filing date of this invention.
&	Member of the same patent family	E	Patent document published on or after, but with priority date earlier than, the filing date of this application.

Field of Search:

Search of GB, EP, WO & US patent documents classified in the following areas of the UKC^X :

Worldwide search of patent documents classified in the following areas of the IPC

A45C

The following online and other databases have been used in the preparation of this search report

EPODOC, WPI

International Classification:

Subclass	Subgroup	Valid From
A45C	0005/00	01/01/2006
A45C	0005/03	01/01/2006
A45C	0013/00	01/01/2006