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(54) **SOFT-SIDED CARRYING CASE**

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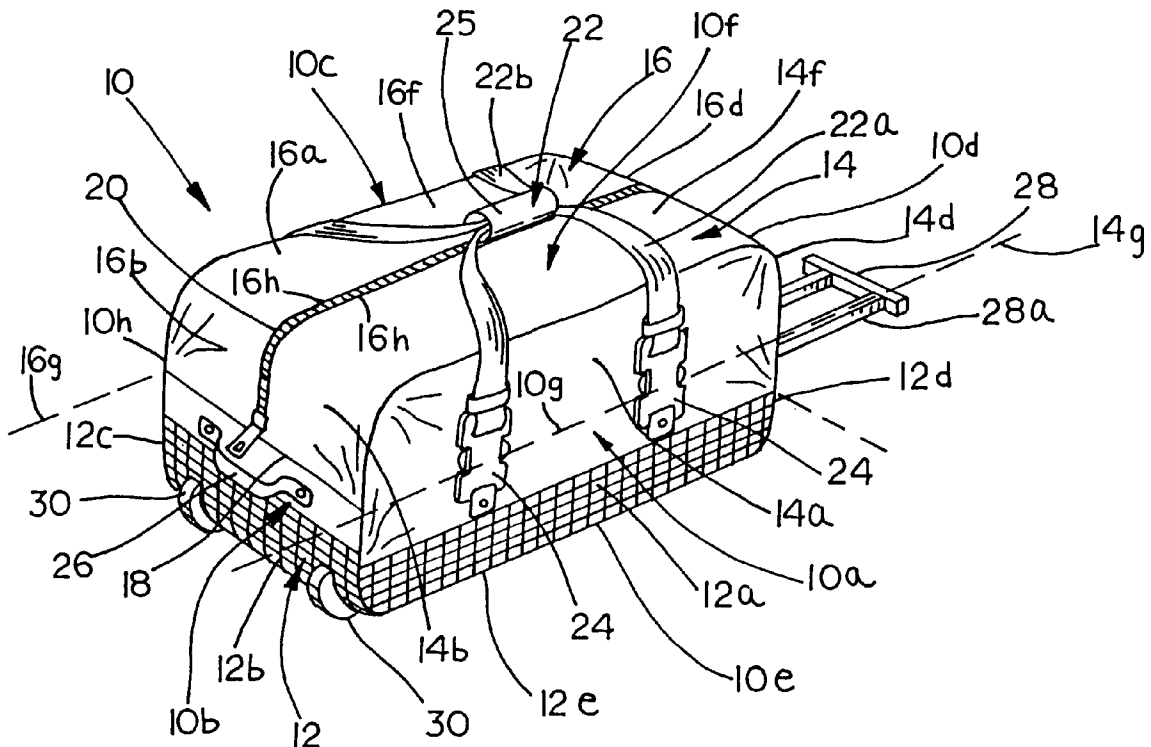
Related U.S. Application Data

(63) Continuation of application No. 09/759,683, filed on Jan. 12, 2001, now Pat. No. 6,644,448.

(60) Provisional application No. 60/227,214, filed on Aug. 23, 2000.

(57) **ABSTRACT**

A soft-sided carrying case having pivotable upper compartments is disclosed. The soft-sided carrying case includes a lower compartment, with the lower compartment including a plurality of sidewalls, a top wall and a bottom wall. A first upper compartment is provided, with the first upper compartment having a plurality of sidewalls, a top wall, and a bottom wall, and with the first upper compartment pivotally meeting the lower compartment along a first line of intersection. A second upper compartment is disclosed, with the second upper compartment having a plurality of sidewalls, a top wall, and a bottom wall, and with the second upper compartment pivotally meeting the first upper compartment along a second line of intersection. The first and second upper compartments are both pivotable about their respective lines of intersection between folded positions in which the first and second upper compartments overlie the lower compartment and unfolded positions.



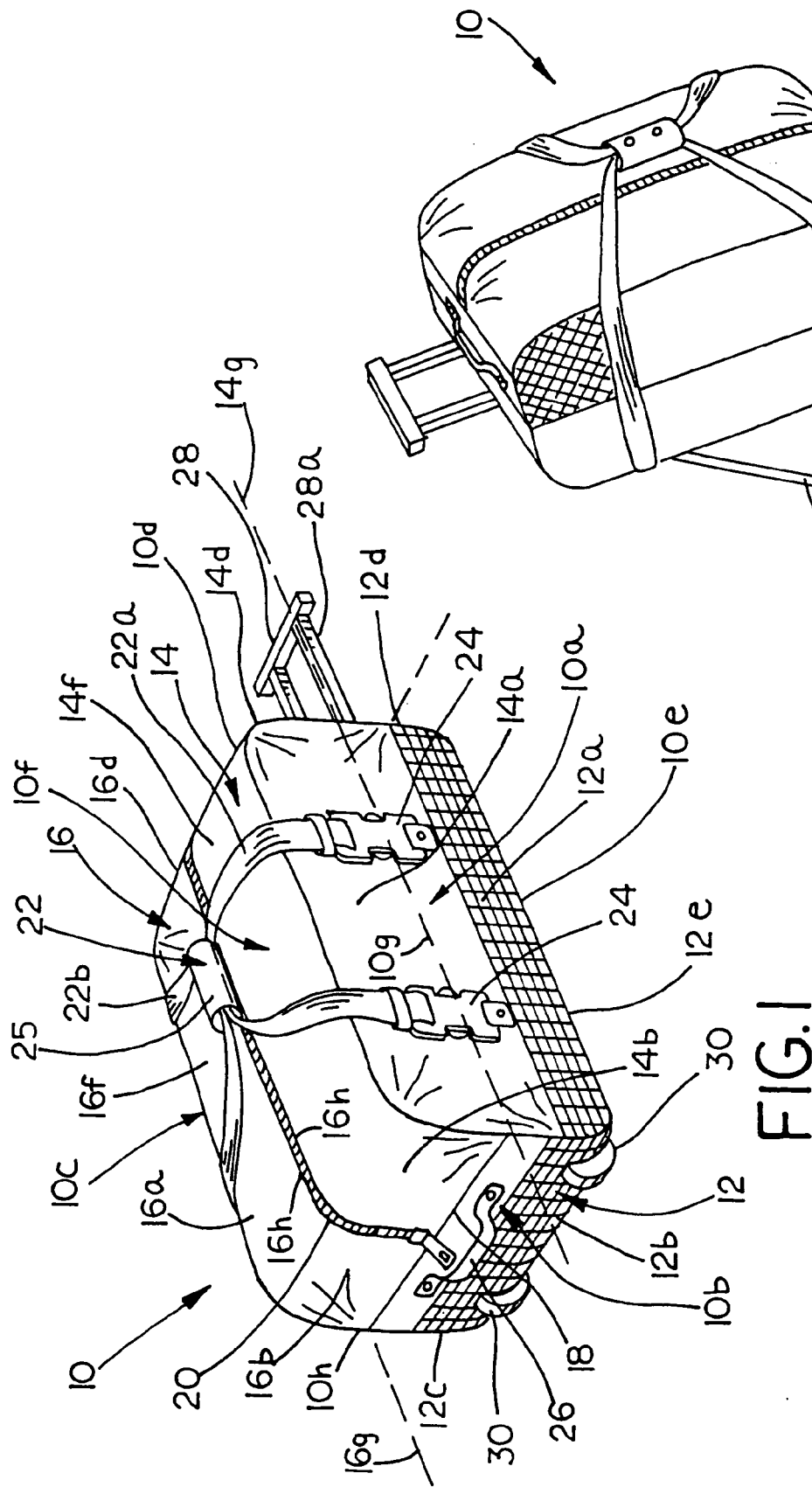


FIG. 1

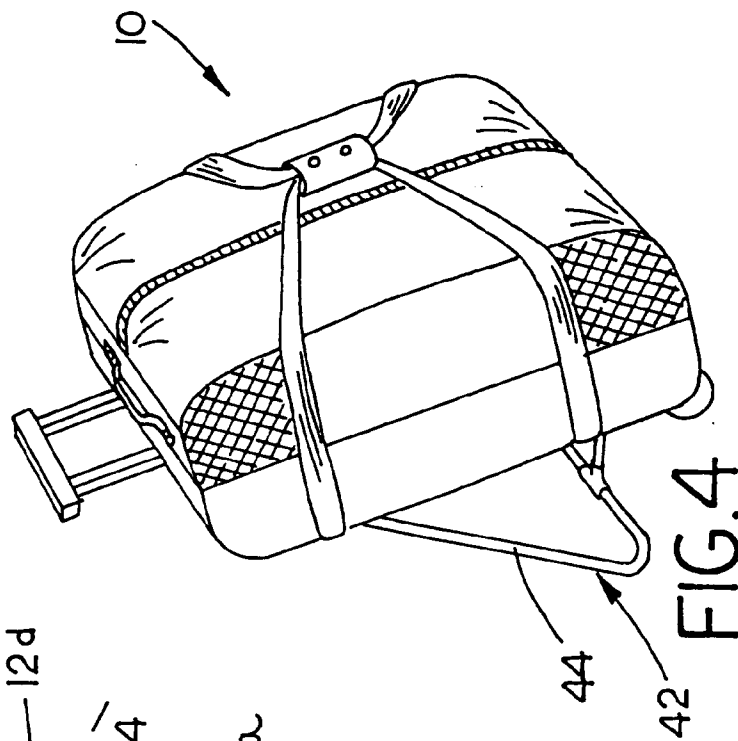


FIG. 4

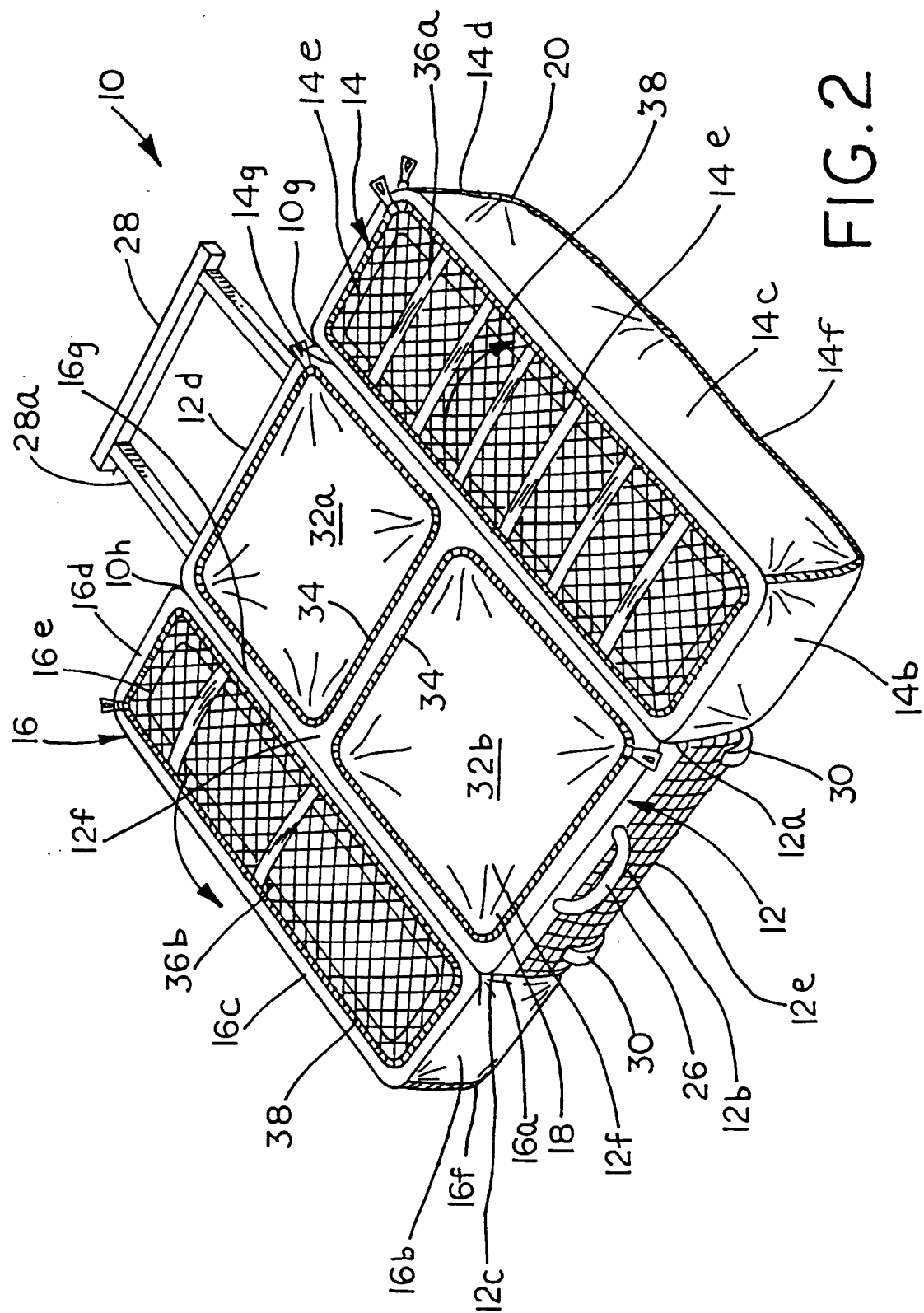
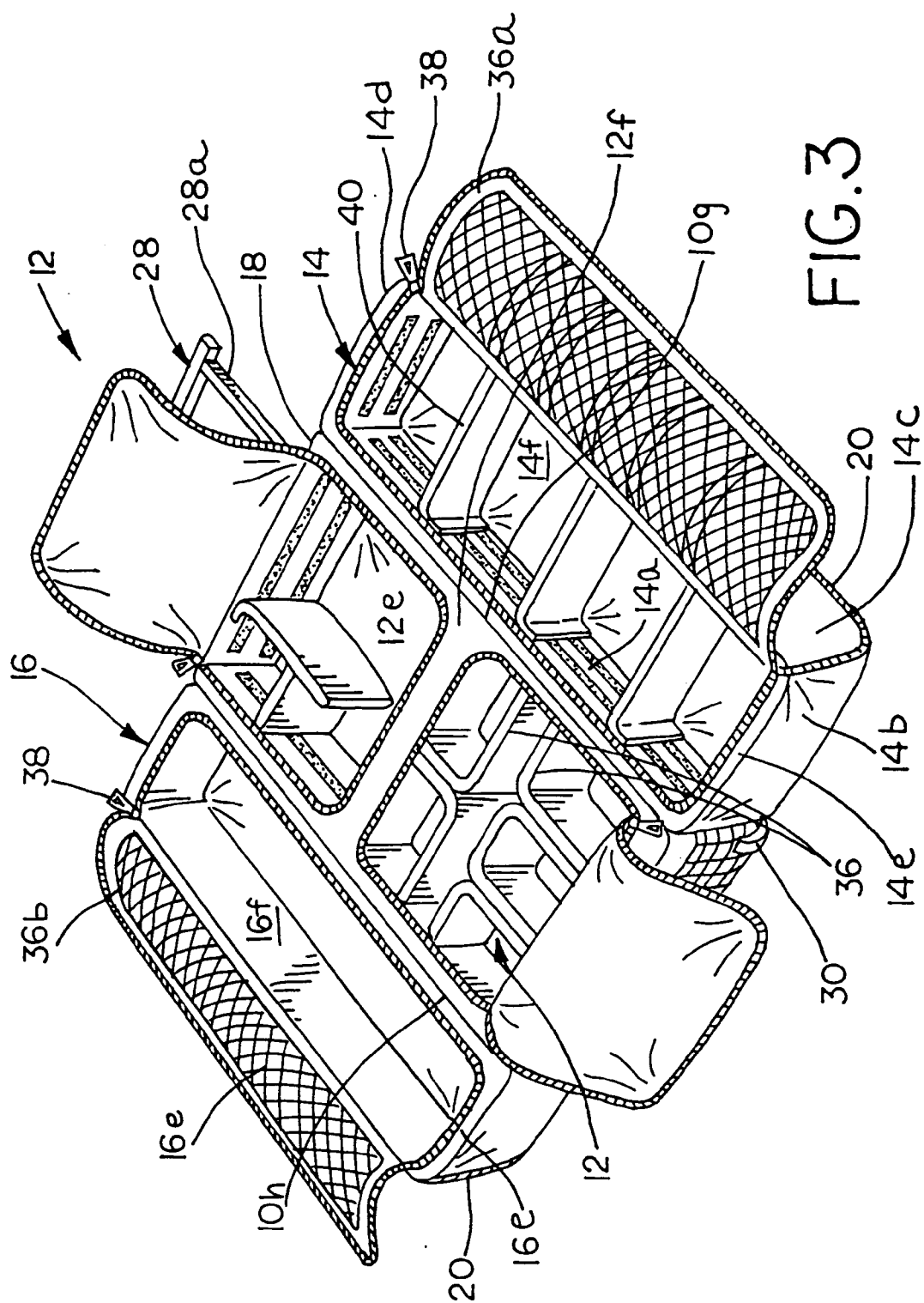
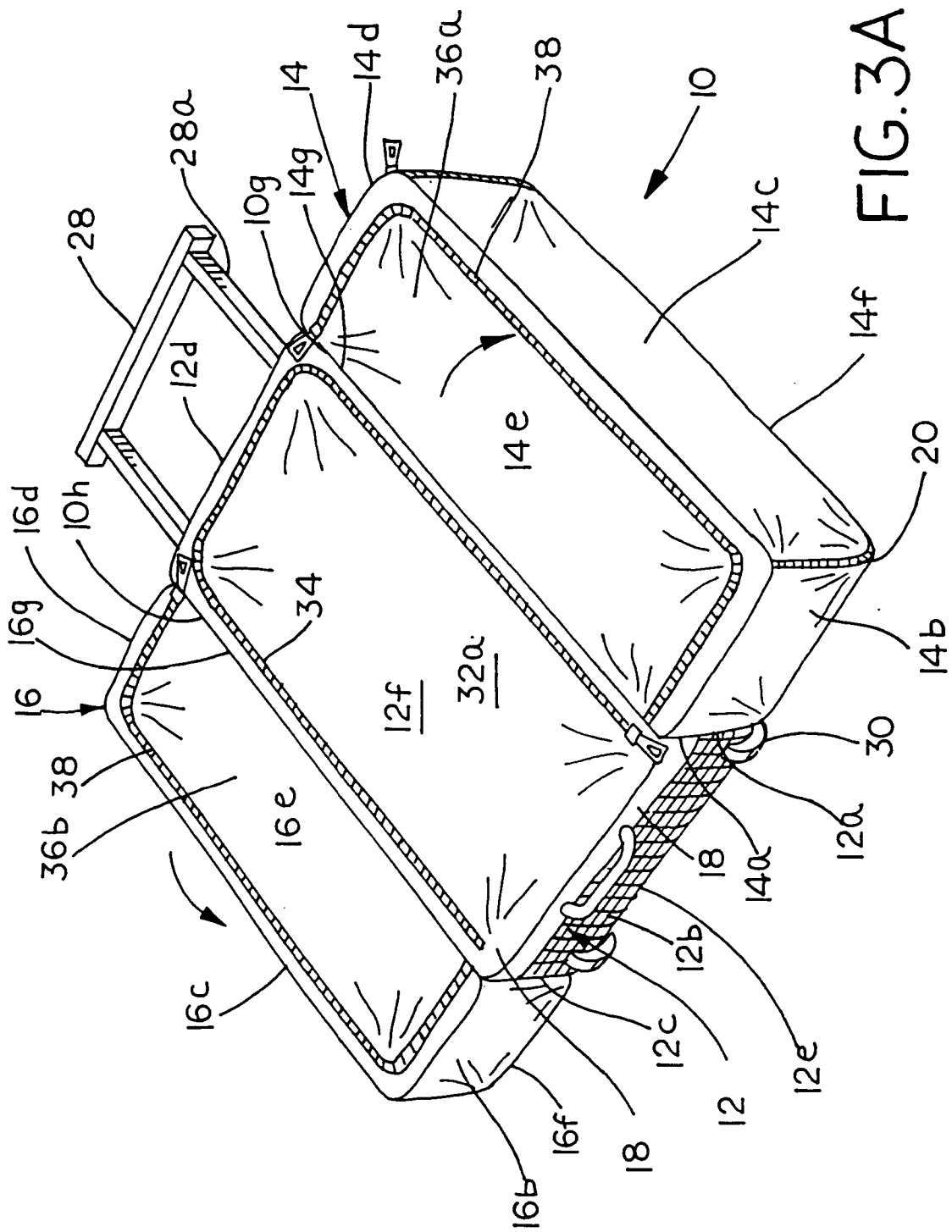
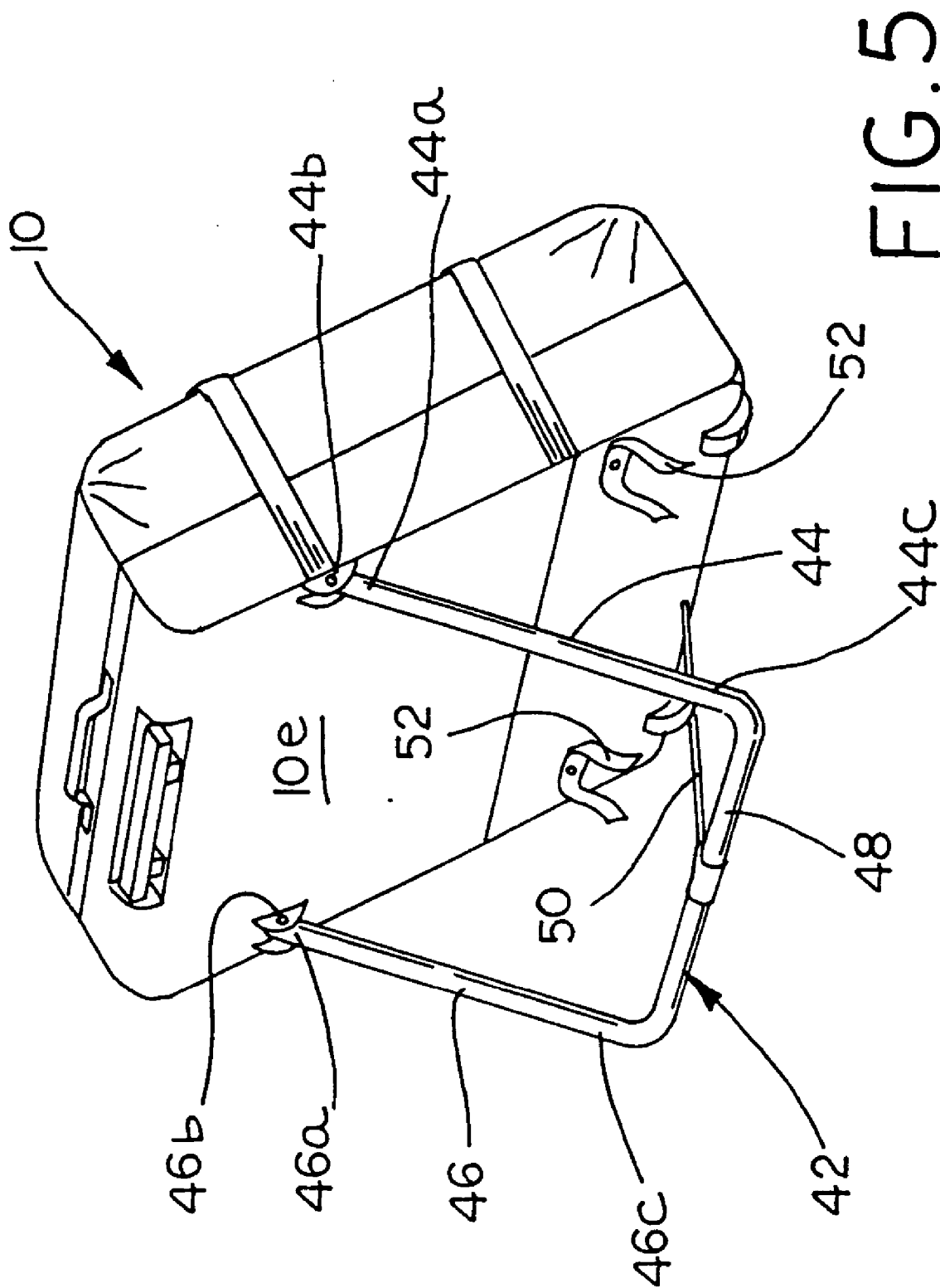
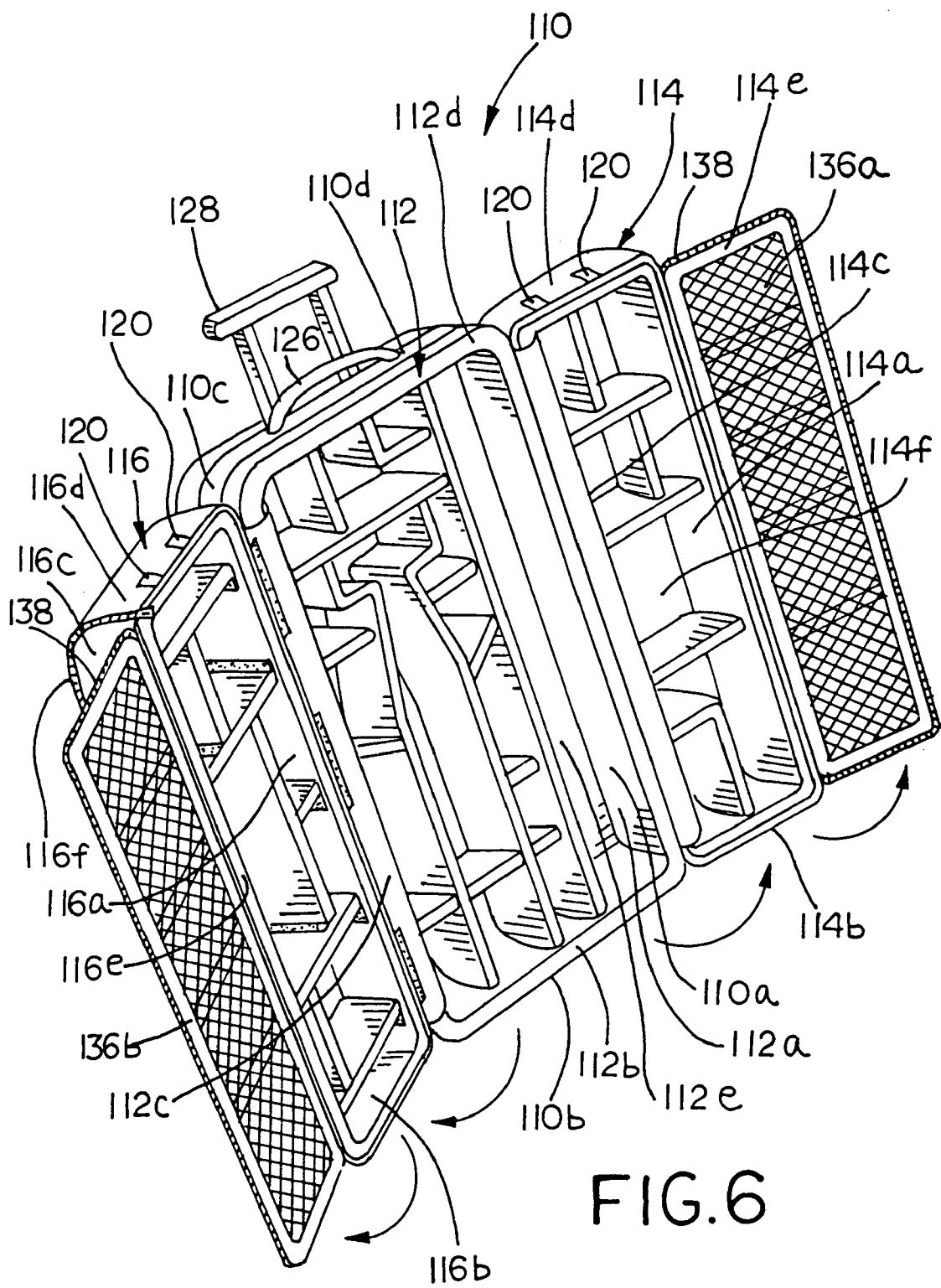


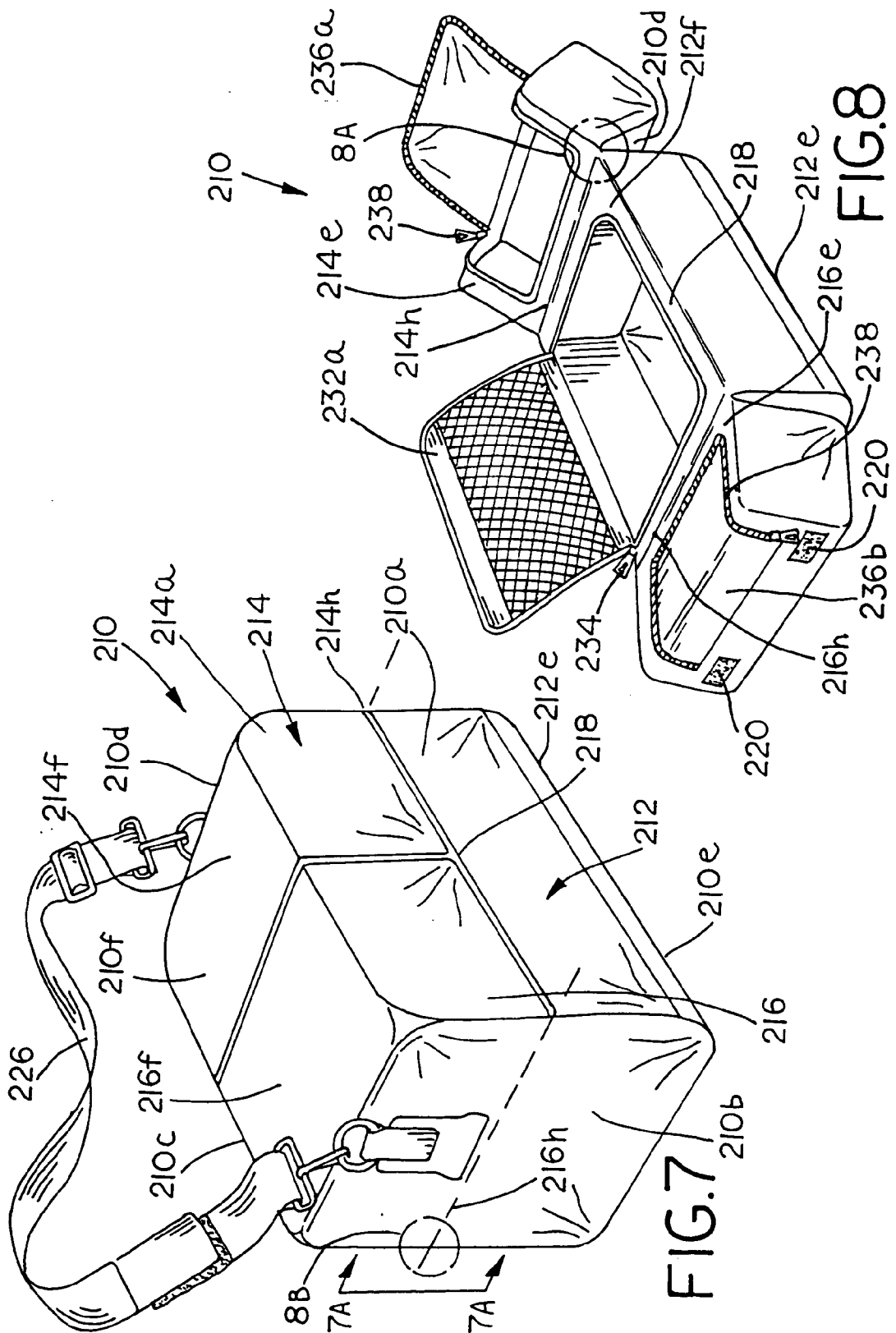
FIG. 2











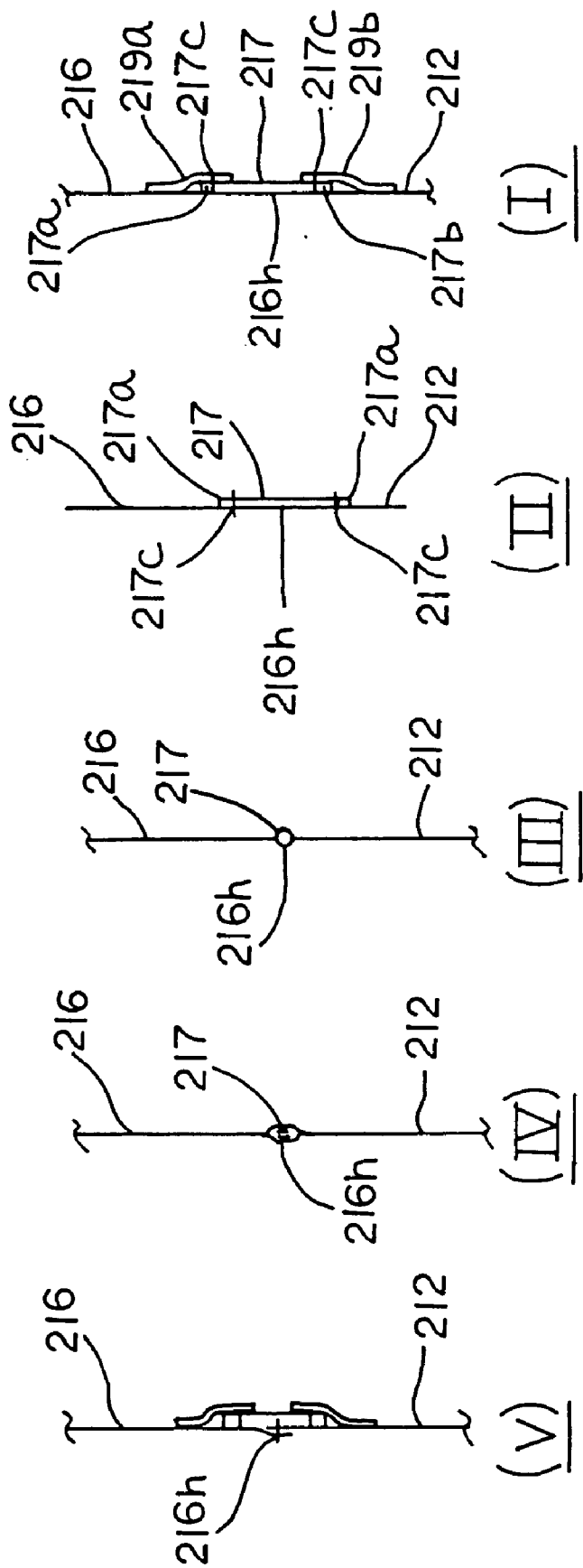
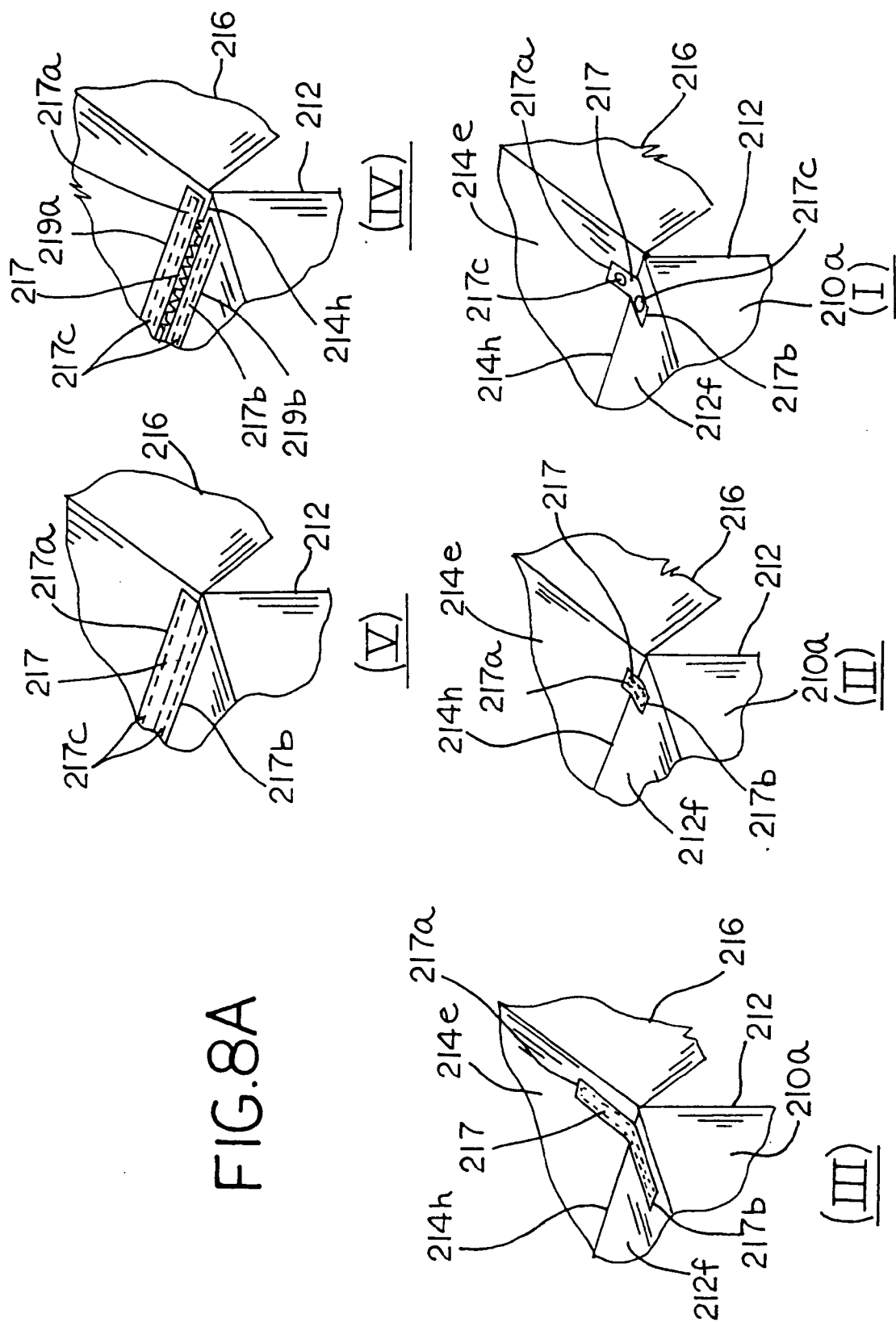


FIG. 7A



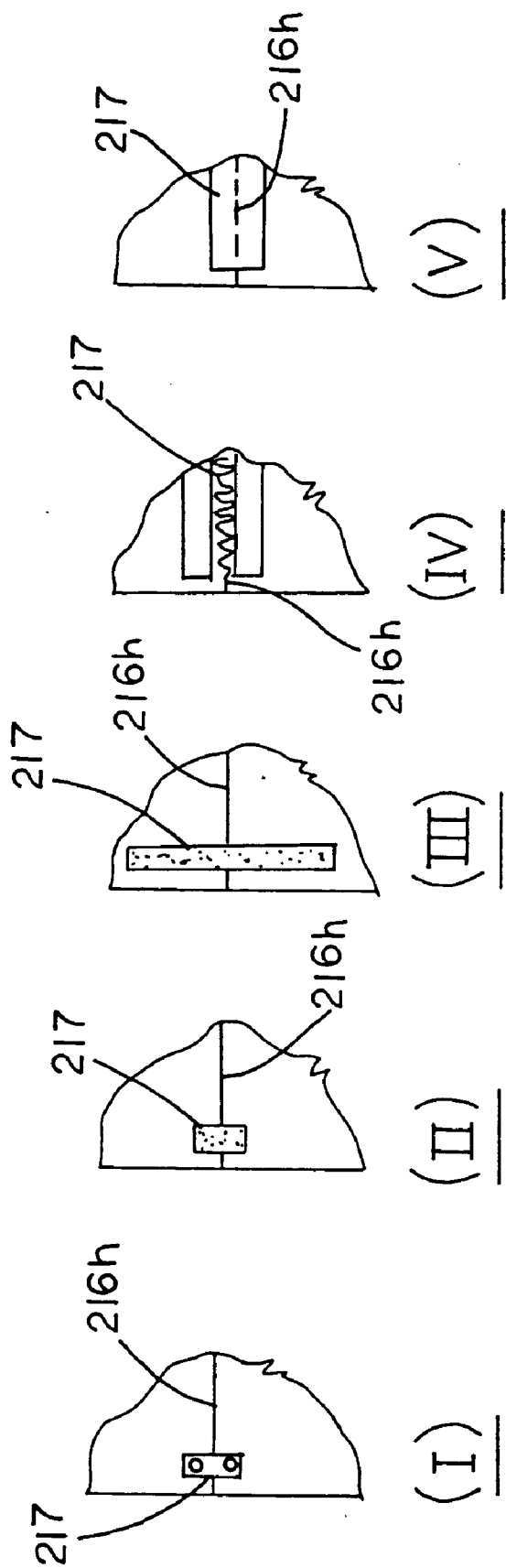
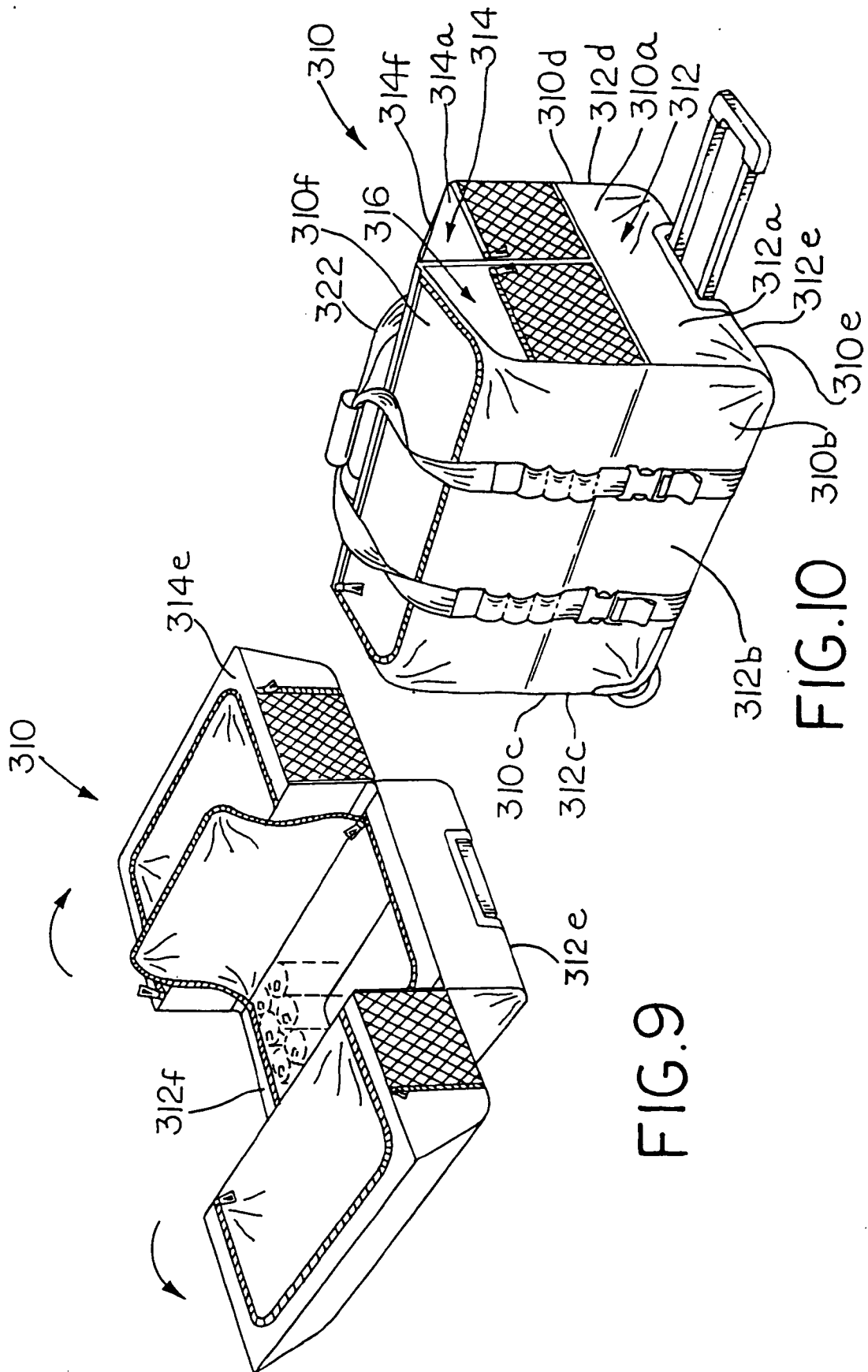
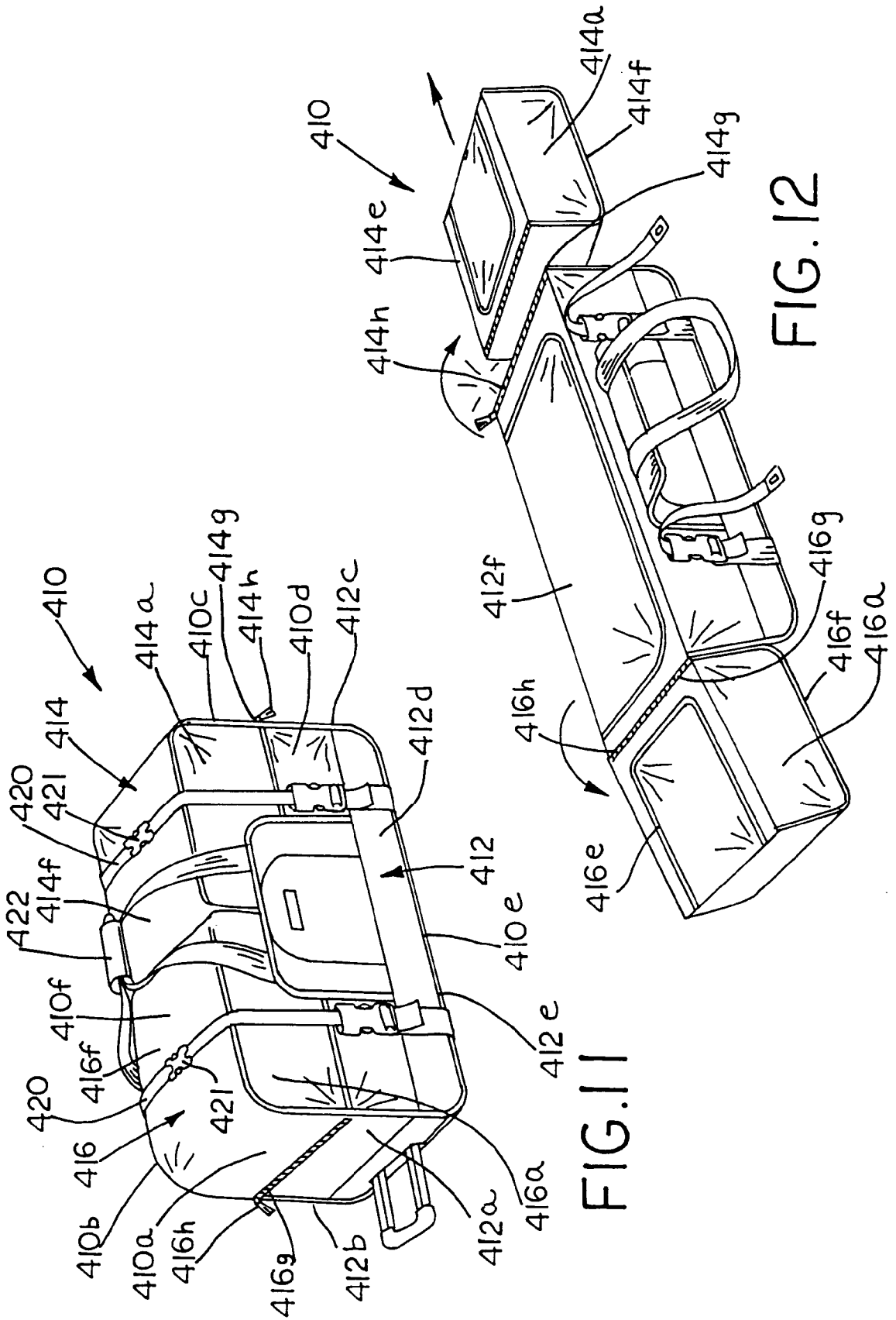
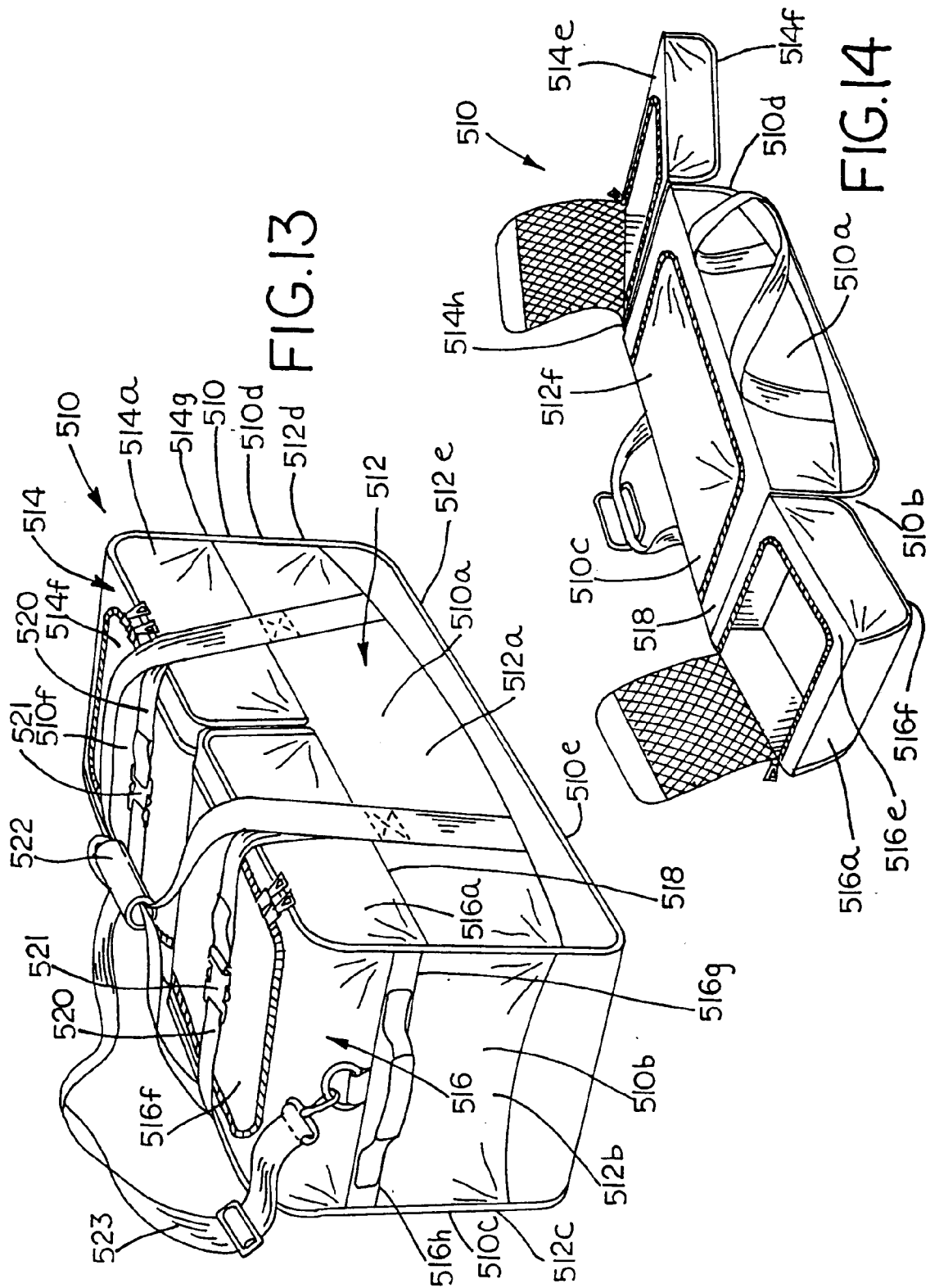
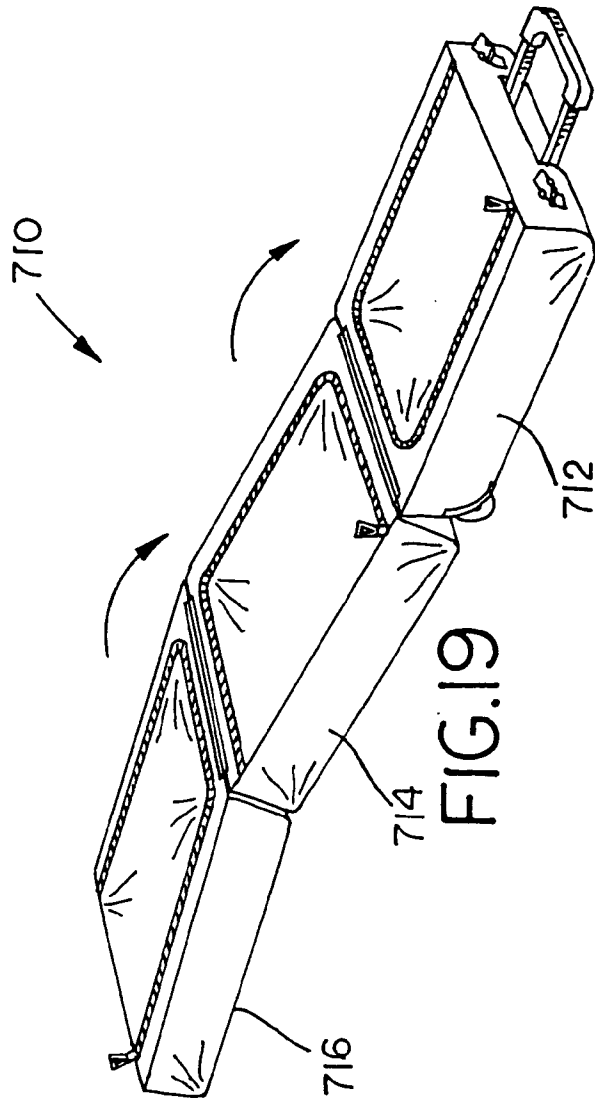
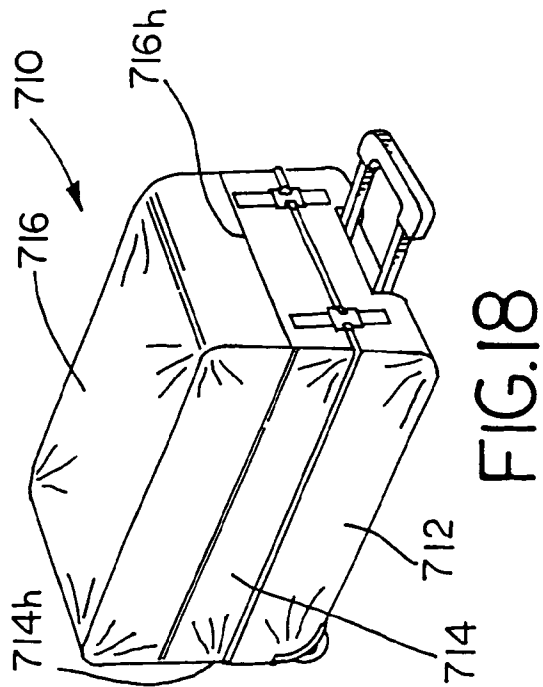


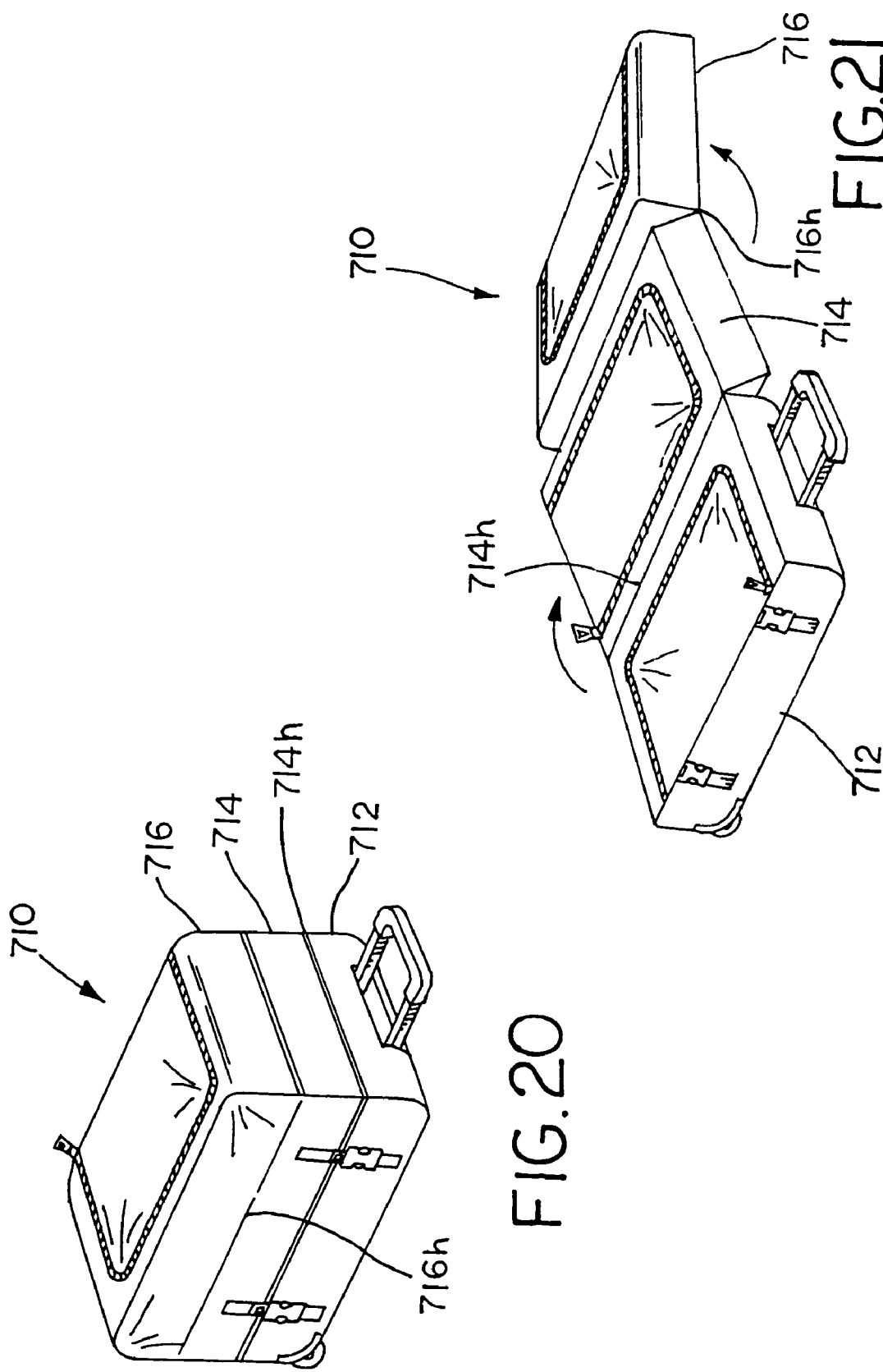
FIG. 8B

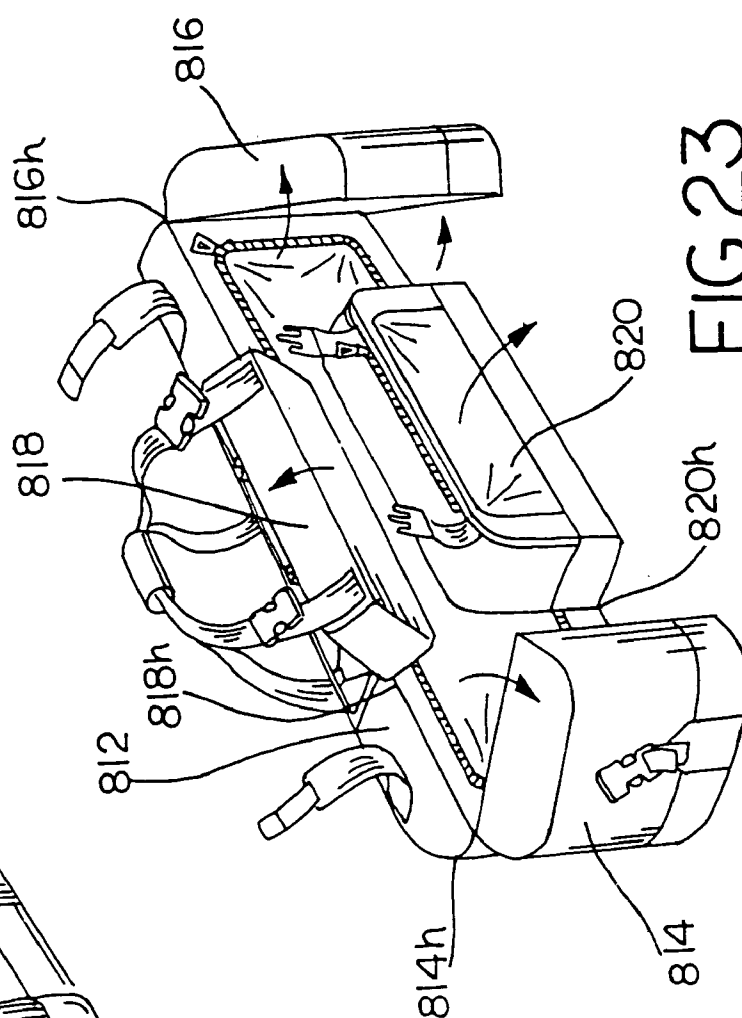
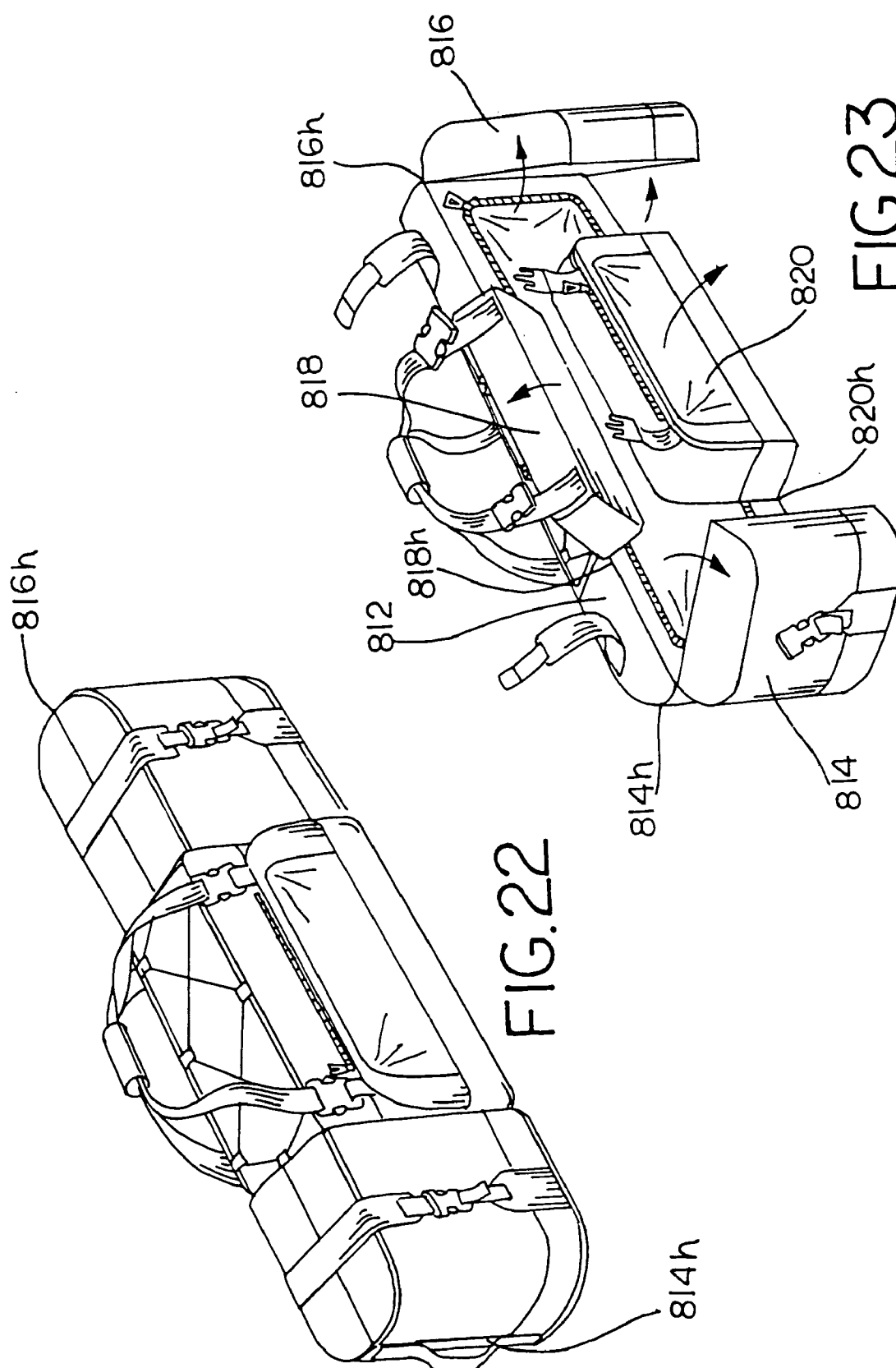












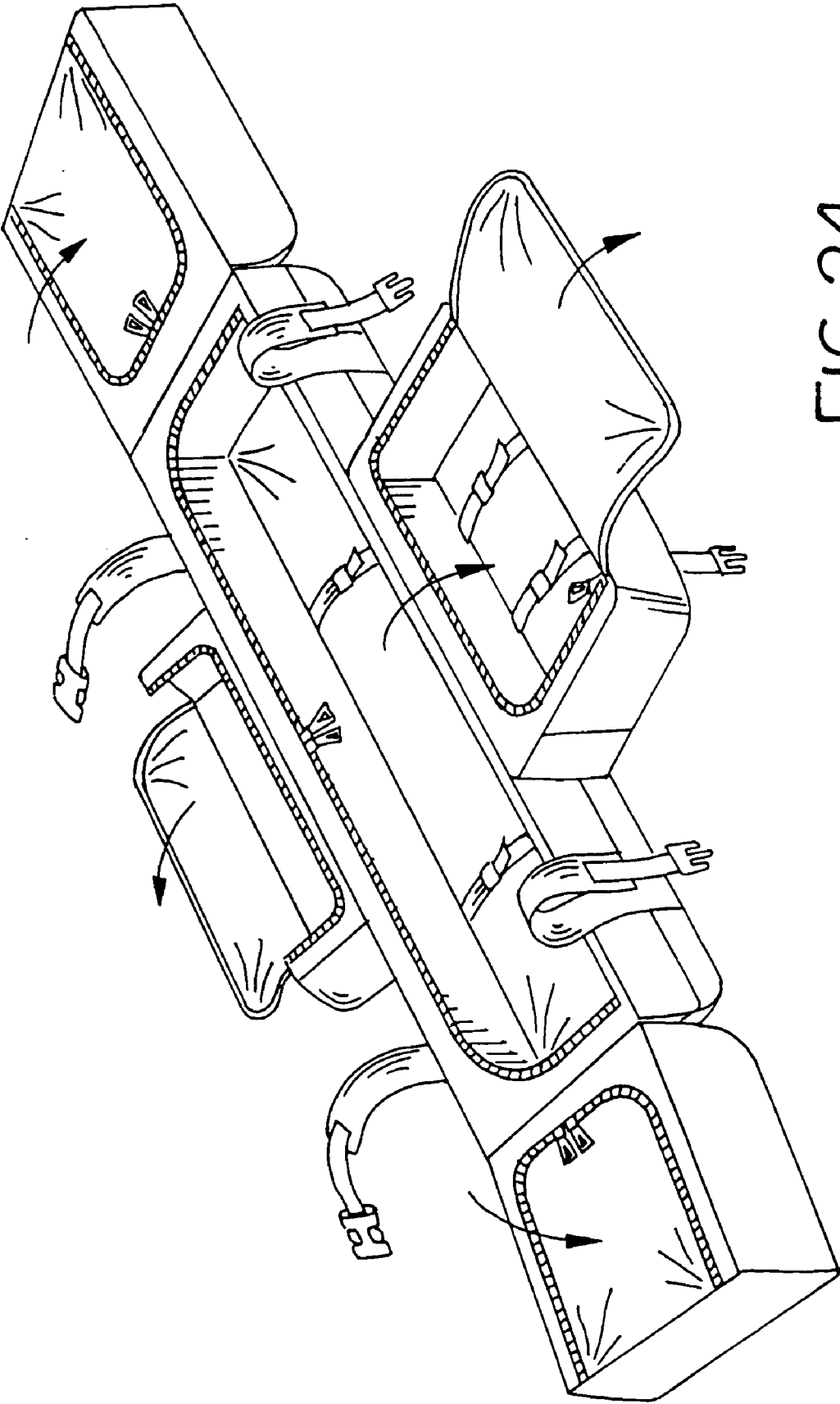
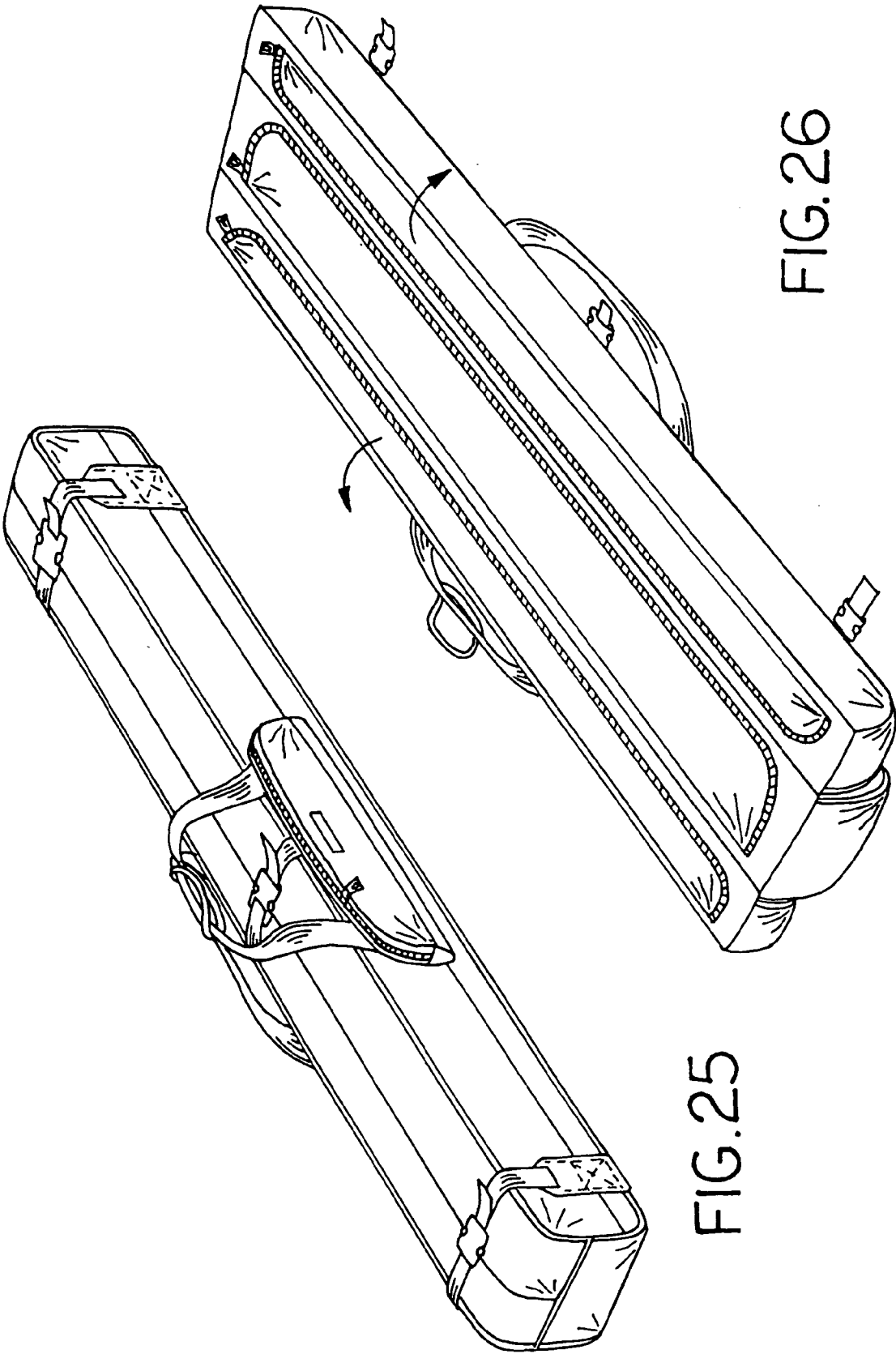


FIG. 24



SOFT-SIDED CARRYING CASE

CROSS REFERENCE TO RELATED APPLICATION

[0001] This application is a continuation of U.S. application Ser. No. 09/759,683, entitled "Soft-Sided Carrying Case" and filed Jan. 12, 2001, which is a non-provisional application claiming priority from Provisional Application Serial No. 60/227,214, filed Aug. 23, 2000.

FIELD OF THE INVENTION

[0002] The present invention relates to soft-sided carrying cases. More specifically, the present invention relates to a soft-sided carrying case having a number of compartments, with at least some of the compartments being shiftable between folded and unfolded positions.

BACKGROUND OF THE INVENTION

[0003] Soft-sided luggage or soft-sided carrying cases are generally well known in the art. Soft-sided carrying cases typically offer one or more distinct advantages over conventional luggage. For example, soft-sided luggage is typically lighter weight than conventional luggage, it can typically be carried using a shoulder strap, it typically includes external pockets that can be accessed without completely opening the case, and, if it is well built, it is less prone to damage from improper handling.

[0004] Despite the popularity of known soft-sided carrying cases or luggage, there is a continuing need for improved soft-sided luggage.

BRIEF DESCRIPTION OF THE DRAWINGS

[0005] Certain features and advantages in the apparatus disclosed and claimed herein will become apparent to those skilled in the art from the following detailed descriptions and the accompanying drawings, in which:

[0006] FIG. 1 is a perspective view illustrating a soft-sided carrying case assembled in accordance with the teachings of a first preferred embodiment of the invention;

[0007] FIG. 2 is a perspective view of the soft-sided carrying case of claim 1 shown with the upper compartments opened to their unfolded positions;

[0008] FIG. 3 is a perspective view similar to FIG. 2 but illustrating the flaps to the various compartments opened;

[0009] FIG. 3A is a perspective view similar to FIG. 2 but showing an alternate form for the panels or flaps;

[0010] FIG. 4 is a perspective view of the device of FIGS. 1-3 but illustrating an optional leg assembly;

[0011] FIG. 5 is a view of the device of FIG. 4 but taken from a different perspective;

[0012] FIG. 6 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a second preferred embodiment of the invention;

[0013] FIG. 7 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a third preferred embodiment of the invention;

[0014] FIGS. 7A(i) through 7A(v) are enlarged fragmentary cross-sectional views of a number of alternative

arrangements in the area of the hinge line, which alternative arrangements are equally applicable to any of the embodiments disclosed herein;

[0015] FIG. 8 is a perspective view of the device of FIG. 7 but illustrating the upper compartments in the unfolded positions;

[0016] FIG. 8A(i) through 8A(v) are enlarged fragmentary views in perspective taken about the circumscribed portion of FIG. 8 and illustrating a number of alternative details in the area surrounding the hinge, which details are equally applicable to any of the embodiments disclosed herein;

[0017] FIG. 8B(i) through 8B(v) are enlarged fragmentary elevational views taken about the circumscribed portion of FIG. 7 and illustrating alternative details similar to those shown in FIGS. 8A(i) through 8A(v), but illustrating those details applied to the outside surface of the soft-sided carrying case;

[0018] FIG. 9 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a fourth preferred embodiment of the invention;

[0019] FIG. 10 is a perspective view of the device of FIG. 9 but illustrating the upper compartments in the unfolded positions;

[0020] FIG. 11 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a fifth preferred embodiment of the invention;

[0021] FIG. 12 is a perspective view of the device of FIG. 11 but illustrating the upper compartments in the unfolded positions;

[0022] FIG. 13 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a sixth preferred embodiment of the invention;

[0023] FIG. 14 is a perspective view of the device of FIG. 13 but illustrating the upper compartments in the unfolded positions;

[0024] FIG. 15 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a seventh preferred embodiment of the invention;

[0025] FIG. 16 is a perspective view of the device of FIG. 15 but illustrating all of the upper compartments in the unfolded positions;

[0026] FIG. 17 is a perspective view of two of the upper compartments that have been separated from the balance of the soft-sided carrying case of any of the previously shown embodiments and which are being shown being attached to each other to form an additional smaller soft-sided carrying case;

[0027] FIG. 18 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of an eighth preferred embodiment of the invention;

[0028] FIG. 19 is a perspective view of the device of FIG. 18 but illustrating the upper compartments in the unfolded positions;

[0029] FIG. 20 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a ninth preferred embodiment of the invention;

[0030] FIG. 21 is a perspective view of the device of FIG. 20 but illustrating the upper compartments in the unfolded positions;

[0031] FIG. 22 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of a tenth preferred embodiment of the invention;

[0032] FIG. 23 is a perspective view of the device of FIG. 22 but illustrating the upper compartments in partially unfolded positions;

[0033] FIG. 24 is a perspective view similar to FIG. 23 but illustrating the upper compartments in more fully unfolded positions;

[0034] FIG. 25 is a perspective view of a soft-sided carrying case assembled in accordance with the teachings of yet another preferred embodiment of the invention; and

[0035] FIG. 26 is a perspective view of the device of FIG. 2 but illustrating the upper compartments in unfolded positions.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0036] The following description of the preferred embodiments is not intended to limit the scope of the invention to the precise forms disclosed, but instead is intended to be illustrative of the principles of the invention so that others skilled in the art may follow its teachings.

[0037] Referring now to FIGS. 1-3 of the drawings, a soft-sided carrying case assembled in accordance with the teachings of the present invention is generally referred to by the reference numeral 10. The soft-sided carrying case generally includes four sidewalls 10a, 10b, 10c, and 10d, a bottom wall 10e and a top wall 10f (FIG. 1). The case 10 further includes a lower compartment 12 and a pair of upper compartments 14 and 16. The lower compartment 12 includes a plurality of sidewalls 12a, 12b, 12c, and 12d. The lower compartment 12 also includes a bottom wall 12e and a top wall 12f (visible in FIGS. 2 and 3). The first upper compartment 14 includes four sidewalls 14a, 14b, 14c (obscured in FIG. 1 but visible in FIGS. 2 and 3), and 14d. The first upper compartment 14 also includes a bottom wall 14e and a top wall 14f (the bottom wall 14e being visible in FIGS. 2 and 3). The second upper compartment 16 includes sidewalls 16a, 16b, 16c (visible in FIG. 3), and 16d. The second upper compartment also includes a bottom wall 16e and a top wall 16f (visible in FIG. 2). The first and second upper compartments 14, 16 are separated from the lower compartment 12 by a boundary or interface 18.

[0038] As will be outlined in greater detail below, the first upper compartment 14 is pivotable about a first hinge line 14g between the closed or folded position of FIG. 1 and the open or unfolded positions of FIGS. 2 and 3. Similarly, the second upper compartment 16 is pivotable about a hinge line 16g between the closed or folded position of FIG. 1 and the open or unfolded positions of FIGS. 2 and 3. It will be noted that the hinge lines 14g and 16g are generally adjacent to the interface 18 (i.e., the hinge lines 14g and 16g may lie in the same plane as the interface 18).

[0039] In the embodiment of FIGS. 1 through 3, it will be noted that the sidewall 14a of the first upper compartment 14 is generally contiguous with the sidewall 12a of the lower

compartment (i.e., the sidewall 14a of the first upper compartment 14 is an extension of the sidewall 12a of the lower compartment). Similarly, the sidewall 16a of the second upper compartment 16 is contiguous with or is an extension of the sidewall 12c of the lower compartment 12.

[0040] The soft-sided carrying case 10 preferably includes a zipper 20 which engages each of the first and second upper compartments 14, 16 in order to secure each of the first and second upper compartments 14, 16 in their respective closed positions, such as is shown in FIG. 1. Upon release of the zipper 20, the first and second upper compartments 14, 16 may be pivoted about their respective hinge lines 14g, 16g to their respective unfolded positions as shown in FIGS. 2 and 3. The zipper 20 may be disposed along a longitudinal edge 14h, 16h (FIG. 1), of the first and second upper compartments 14, 16.

[0041] Instead of the zipper 20, it will be appreciated that alternate closure mechanisms may be provided in order to secure the first and second upper compartments 14, 16 in their respective folded positions. At least some of these possible alternate mechanisms are discussed below with respect to other forms of preferred embodiments. It will be understood that the closure mechanisms of the various embodiments may be readily substituted for each other as would be apparent to those of skill in the art.

[0042] Referring to FIG. 1, the soft-sided carrying case 10 will preferably include a handle 22, which in the preferred embodiment shown will include a pair of straps 22a, 22b, which straps 22a and/or 22b may be removably attached to the soft-sided carrying case 10 by a releaseable mechanism such as one or more buckles 24, such as commercially available Litelocke buckles. Alternatively, the straps 22a and 22b may be permanently affixed to the soft-sided case 10, such as by sewing, etc. The straps 22a and 22b will preferably be joinable to form the handle 22 using a section 25 of flexible material which is joinable using hook and loop closures or similar material as is known in the art. Additional handles 26, 28 may also be provided as desired, with the number of additional handles being within the choice of the designer. At least one of the handles (i.e., the handle 28) may be extendable, and when used in conjunction with a plurality of wheels 30 will enable the soft-sided carrying case 10 to be wheeled in a fashion similar to a luggage cart. The handle 28 may be made of commercially available materials, and further will preferably have a telescoping handle 28a enabling the entire handle 28 to be stowed in a zipper pocket in the bottom wall 10e of the carrying case 10. The wheels 30 are preferably commercially available in-line skate style wheels using sealed ball bearings. Other commercially available wheels may also be used.

[0043] Referring now to FIGS. 2 and 3, the lower compartment 12 preferably includes one or more panels or flaps 32a, 32b in the top wall 12f of the lower compartment 12. As shown, the flaps 32a, 32b each include a zipper 34, which enable the flaps 32a, 32b to be opened as shown in FIG. 3 to provide access to the lower compartment 12. It will be appreciated that one or more interior dividers 36 may be provided as desired inside the lower compartment 12.

[0044] Each of the bottom walls 14f, 16f of the first and second upper compartments 14, 16, respectively, will preferably include a panel or flap 36a, 36b, respectively. A zipper 38 may be provided for each of the flaps 36a, 36b,

thus enabling the flaps **36a**, **36b** to be secured in the closed position shown in **FIG. 2** or opened to provide access to the first and second upper compartments **14**, **16**, as is shown in **FIG. 3**. One or more interior dividers **40** may be provided in either of the upper compartments **14**, **16**.

[0045] It will be appreciated that the soft-sided carrying case **10** may include additional compartments, such as side compartments or pockets (not shown) and/or end compartments or pockets (not shown), all of which are commonly used in the art. The soft-sided carrying case **10** may also include one or more mesh pockets of known construction.

[0046] The zippers used herein are preferably heavy-duty zippers, which zippers preferably have been taped as is known in the art. Further, the soft-sided case **10** may be constructed of any one of a variety of commercially available fabrics and/or materials, all of which may be chosen based on design considerations for the specific application and all of which would be known to those of skill in the art. Rip-stop materials, which are readily available, may also be used.

[0047] In operation, the soft-sided carrying case **10** would normally be used and/or transported in the configuration of **FIG. 1** with the first and second upper compartments **14**, **16** in their respective closed or folded positions, generally overlying the lower compartment **12**. The zipper **20** is shown securing the upper compartments **14**, **16** in the folded positions. Using the section **25** the straps **22a** and **22b** may be joined together to form the handle **22**. It will be understood that the soft-sided carrying case **10** may be readily assembled using known methods of manufacturing.

[0048] When it is desired to access the lower compartment and/or the first and second upper compartments **14**, **16**, the zipper **20** (or other closing mechanism) should be disengaged, as should the section **25** holding the straps **22a** and **22b** together. Either or both of the upper compartments **14**, **16** may be pivoted about their respective hinge lines **14g**, **16g** to the unfolded positions shown in **FIGS. 2 and 3**. Access to the upper compartments **14**, **16** may be gained by disengaging the zippers **38** (or other closing mechanism), thus enabling the flaps **36a** and **36b** to be opened. Access to the lower compartment **12** is gained by disengaging the zippers **34** (or other closing mechanism) thus enabling the flaps **32a** and/or **32b** to be opened.

[0049] In the embodiment of **FIGS. 1-3** the hinge line **14g** may be defined solely by a flexible portion **10g** of the sidewall **10a**, while the hinge line **16g** may be formed solely by a flexible portion **10h** of the sidewall **10c**, with no actual physical hinge structure being employed. It will be appreciated that the flexible portions **10g** and **10h** are disposed substantially in line with the interface **18** between the lower compartment **12** and the first and second upper compartments **14** and **16**. Alternatively, the hinge lines **14g** and **16g** may be defined by actual physical hinge structures as shown and described below with respect to the other embodiments.

[0050] Each of the upper compartments **14**, **16** may also include an additional exterior flap or zipper (not shown) in order to provide access to the first and second upper compartments **14**, **16** without pivoting the upper compartments **14**, **16** to their unfolded positions. Further, additional side pockets may be provided on the soft-sided carrying case **10** in a manner that is known to those skilled in the art. Further,

it will be understood that the bottom wall **10e** may be constructed of a relatively stiff material or a rigid material for greater durability. Such relatively stiff and/or rigid materials are known to those skilled in the art and are readily available.

[0051] Compression straps (not shown) may be provided in order to secure the upper compartments in their closed positions.

[0052] Also, it will further be appreciated that zippers shown above may be replaced with any number of known closing or securing mechanisms, such as, by way of example and not limitation, straps, buckles, snaps, buttons, and hook and loop closure materials.

[0053] Referring now to **FIG. 3A**, an alternate form for the soft-sided carrying case is shown, also designated as **10** for ease of reference. The soft-sided carrying case **10** illustrated therein is substantially similar to the soft-sided case **10** discussed above, with each of the like elements retaining the same reference characters. As shown in **FIG. 3A**, the lower compartment **12** includes only a single flap **32a** with a zipper **34**. It will be appreciated that the lower compartment **12** may include additional access flaps (not shown), with the actual number and configuration of the access flaps being governed by design considerations.

[0054] Referring now to **FIGS. 4 and 5**, any of the embodiments of the soft-sided carrying case disclosed herein may optionally be equipped with a retractable stand **42**. In the embodiment shown in **FIGS. 4 and 5**, the soft-sided carrying case **10** is shown equipped with the optional stand **42**. As shown in **FIG. 5**, the stand **42** may include a pair of legs **44** and **46**. The leg **44** includes an upper end **44a** attached to the soft-sided carrying case **10** by a pivot **44b**, while the leg **46** includes an upper end **46a** attached to the soft-sided case **10** by a pivot **46b**. A cross bar **48** is disposed to connect a lower end **44c** of the leg **44** to a lower end **46c** of the leg **46**. A strap **50** engages the cross bar **48** and the case **10** in order to limit the extension of the stand **42** away from the case **10**. A pair of hook and loop retaining straps **52** are provided in order to retain the stand **42** in a retracted position against the bottom wall **10e** of the carrying case **10** when the stand **42** is not in use.

[0055] Referring now to **FIG. 6**, a soft-sided carrying case assembled in accordance with the teachings of a second preferred embodiment of the invention is generally referred to by the reference numeral **110**. For ease of reference, all elements that are the same or similar to the elements described above with respect to the first embodiment will retain the same reference numerals, but which have been increased by **100**. The soft-sided carrying case **110** generally includes four sidewalls **110a**, **110b**, **110c**, and **110d**, a bottom wall **110e**, which may be rigid, and a top wall. The case **110** further includes a lower compartment **112** and a pair of upper compartments **114** and **116**. The lower compartment **112** includes a plurality of sidewalls **112a**, **112b**, **112c**, and **112d**. The lower compartment **112** also includes a bottom wall **112e**. It will be noted that no top wall is shown for the compartment **112**, with the upper extent of the compartment **112** being defined upon the closing of the compartments **114** and **116**. Alternatively, a top wall (not shown) or a mesh panel (not shown) may be provided.

[0056] The first upper compartment **114** includes encircling sidewalls **114a**, a bottom wall **114e** and a top wall **114f**,

which may be defined by a flap or a mesh panel. The second upper compartment 116 includes sidewalls 116a, and includes a bottom wall 16e and a top wall 16f, which may be defined by a flap or a mesh panel. The first and second upper compartments 114, 116 are pivotally joined to the lower compartment 112 by one or more hinges 14g, 16g which lie along an interface 118 between the upper compartments 114, 116 and the lower compartment 112, and which permit pivotal movement of the upper compartments between the folded positions (i.e., with the upper compartments 114, 116 disposed above the lower compartment 112 in the manner described above with respect to the first embodiment) and the open or unfolded positions shown in FIG. 6. Preferably, the embodiment of FIG. 6 will include a seal 119 disposed at the interface 118 of the lower compartment 112 and the upper compartments 114, 116. Flaps 136a, 136b are provided for the compartments 114, 116, respectively, each of the flaps 136a and 136b being closeable with a zipper 138 or similar closing mechanism. The carrying case 110 preferably includes one or more closing buckles 120. The soft-sided carrying case 110 will also preferably include one or more handles 126, 128, with the handles 128 being extendable. A plurality of wheels (not shown) may also be provided.

[0057] Referring now to FIGS. 7 and 8, a soft-sided carrying case assembled in accordance with the teachings of a third preferred embodiment of the invention is generally referred to by the reference numeral 210. For ease of reference, all elements that are the same or similar to the elements described above with respect to the first embodiment will retain the same reference numerals, but which have been increased by 200. The soft-sided carrying case 210 generally includes four sidewalls 210a, 210b, 210c, and 210d, a bottom wall 210e and a top wall 210f. The case 210 further includes a lower compartment 212 and a pair of upper compartments 214 and 216. The lower compartment 212 includes a plurality of sidewalls 212a, 212b, 212c, and 212d. The lower compartment 212 also includes a bottom wall 212e and a top wall 212f (FIG. 8).

[0058] The first upper compartment 214 includes a plurality of sidewalls 214a, a bottom wall 214e (FIG. 8) and a top wall 214f (FIG. 7). The second upper compartment 216 includes a plurality of sidewalls 216a, and includes a bottom wall 216e (FIG. 8) and a top wall 216f (FIG. 7). The first and second upper compartments 214, 216 are pivotally joined to the lower compartment 212 by a flexible fabric hinge 214h, 216h, respectively, defined in the sidewalls 210b and 210d of the soft-sided carrying case 210, and lying generally along an interface 218 between the upper compartments 214, 216 and the lower compartment 212. The fabric hinges 214h, 216h permit pivotal movement of the upper compartments 214, 216 between the folded positions (i.e., with the upper compartments 214, 216 disposed above the lower compartment 212 in the manner described above with respect to the first embodiment) and the open or unfolded positions shown in FIG. 8.

[0059] An access flap 232a having a zipper 234 is provided in the top wall 212f of the lower compartment 212. Flaps 236a, 236b are provided for the compartments 214, 216, respectively, each of the flaps 236a and 236b being closeable with a zipper 238 or similar closing mechanism. The carrying case 210 preferably includes one or more sections of hook and loop closure mechanisms 220. Alter-

natively, straps or other mechanisms may be used. The soft-sided carrying case 210 will also preferably include a shoulder strap 226 (FIG. 7), or a handle (not shown).

[0060] Referring now to FIGS. 7A(i) through 7A(v), alternative details are shown for the construction of the soft-sided carrying case 210 in the region of the hinge line 216h. It will be understood that the details shown therein are equally applicable to the hinge line 214h, and also are equally applicable to any of the other embodiments described herein. However, for the sake of brevity, the details will be discussed only with respect to the embodiment of FIGS. 7 and 8. For ease of reference, to the extent possible similar elements will retain like reference numerals through each of FIGS. 7A(i) through 7A(v).

[0061] As shown in FIG. 7A(i), a fabric strap 217 having an upper edge 217a and a lower edge 217b is secured to the soft-sided carrying case 210. The upper edge 217a is secured to the upper compartment 216 by a line of stitching 217c, while the lower edge 217b is secured to the lower compartment 212 by a line of stitching 217d. Two additional straps 219a and 219b are provided, with the strap 219a being stitched to the upper edge 217a as well as to the upper compartment 216, and with the strap 219b being stitched to the lower edge 217b as well as to the lower compartment 212. Preferably, the lines of stitching may be bartack stitching for greater durability in high stress areas.

[0062] As shown in FIG. 7A(ii), a single fabric strap 217 may be employed, having an upper edge 217a stitched at 217c to the upper compartment 216, and further having a lower edge 217b stitched at 217d to the lower compartment 212.

[0063] As shown in FIG. 7A(iii), a line of piping 217 may be employed along the hinge line 216h.

[0064] As shown in FIG. 7A(iv), a zipper 217 may be disposed along the hinge line 216h. The zipper 217 is preferably a #8 or #10 heavy-duty, taped, clear coil zipper.

[0065] FIG. 7A(v) is similar in all respects to FIG. 7A(i), except for the addition of a line of stitching 217 at the hinge line 216h which may be required when the upper compartment 216 and the lower compartment 212 are manufactured of dissimilar materials or dissimilar colors.

[0066] Referring now to FIGS. 8A(i) through 8A(v), further alternative details are shown for the construction of the soft-sided carrying case 210 in the region of the hinge line 216h. It will again be understood that the details shown therein are equally applicable to the hinge line 214h, and also are equally applicable to any of the other embodiments described herein. Again, for the sake of brevity, the details will be discussed only with respect to the embodiment of FIGS. 7 and 8. For ease of reference, to the extent possible similar elements will retain like reference numerals through each of FIGS. 7A(i) through 7A(v).

[0067] As shown in each of FIGS. 8A(i) through 8A(v), a fabric strap 217 having edges 217a and 217b is secured to each of the upper and lower compartments shown, 216 and 212, respectively. In each of the details shown, the straps are secured such that the straps 217 are only revealed upon opening of the upper compartment 216 to its unfolded position. In FIG. 8A(i), the strap 217 is secured by one or

more fasteners **217c**, such as a snap, a rivet, a threaded bolt, a button, or any other suitable fastener, either alone or in combination with stitching.

[**0068**] FIGS. **8A(ii)** and **8A(iii)** illustrate straps **217** having different overall dimensions secured by bartack stitching. FIGS. **8A(iv)** and **8A(v)** illustrate straps **217** secured in a manner similar to that shown in FIGS. **7A(i)** and **(ii)**, albeit with the details being applied to the inside of the hinge line **216h** rather than to the outside of the case **210**.

[**0069**] Referring now to FIGS. **8B(i)** through **8B(v)**, illustrated therein are arrangements similar to FIGS. **8A(i)** through **(v)**, but with each of the respective arrangements being shown secured to the outside of the soft-sided carrying case **210**.

[**0070**] Referring now to FIGS. **9** and **10**, a soft-sided carrying case assembled in accordance with the teachings of a fourth preferred embodiment of the invention is generally referred to by the reference numeral **310**. For ease of reference, all elements that are the same or similar to the elements described above with respect to the first embodiment will retain the same reference numerals, but which have been increased by **300**. The soft-sided carrying case **310** generally includes four sidewalls **310a**, **310b**, **310c**, and **310d**, a bottom wall **310e** and a top wall **310f**. The case **310** further includes a lower compartment **312** and a pair of upper compartments **314** and **316**. The lower compartment **312** includes a plurality of sidewalls **312a**, **312b**, **312c**, and **312d**. The lower compartment **312** also includes a bottom wall **312e** and a top wall **312f** (FIG. **10**).

[**0071**] The first upper compartment **314** includes a plurality of sidewalls **314a**, a bottom wall **314e** (FIG. **10**) and a top wall **314f**. The second upper compartment **316** includes a plurality of sidewalls **316a**, and includes a bottom wall **316e** and a top wall **316f**. The first and second upper compartments **314**, **316** are pivotally joined to the lower compartment **312** along a pair of hinge lines **314g**, **316g**, respectively, defined in the sidewalls **310b** and **310d** of the soft-sided carrying case **310** by a two lines of stitching **314h**, **316h**, respectively. The lines of stitching **314h**, **316h** are disposed lying generally along an interface **318** between the upper compartments **314**, **316** and the lower compartment **312**. Other suitable, hinges may be employed. Thus, the upper compartments **314**, **316** are shiftable between the folded positions (i.e., with the upper compartments **314**, **316** disposed above the lower compartment **312** in the manner described above with respect to the first embodiment) and the open or unfolded positions shown in FIG. **10**.

[**0072**] An access flap **332a** having a zipper **334** is provided in the top wall **312f** of the lower compartment **312**. Flaps **336a**, **336b** are provided for the compartments **314**, **316**, respectively, each of the flaps **336a** and **336b** being closeable with a zipper **338** or similar closing mechanism. The carrying case **310** preferably includes one or more sections of hook and loop closure mechanisms **320**. Alternatively, straps or other mechanisms may be used. The soft-sided carrying case **310** will also preferably include a suitable handle **322** and or an extendable handle **328**.

[**0073**] Referring now to FIGS. **11** and **12**, a soft-sided carrying case assembled in accordance with the teachings of a fifth preferred embodiment of the invention is generally referred to by the reference numeral **410**. For ease of

reference, all elements that are the same or similar to the elements described above with respect to the first embodiment will retain the same reference numerals, but which have been increased by **400**. The soft-sided carrying case **410** generally includes four sidewalls **410a**, **410b**, **410c**, and **410d**, a bottom wall **410e** and a top wall **410f**. The case **410** further includes a lower compartment **412** and a pair of upper compartments **414** and **416**. The lower compartment **412** includes a plurality of sidewalls **412a**, **412b**, **412c**, and **412d**. The lower compartment **412** also includes a bottom wall **412e** and a top wall **412f** (FIG. **12**).

[**0074**] The first upper compartment **414** includes a plurality of sidewalls **414a**, a bottom wall **414e** (FIG. **12**) and a top wall **414f**. The second upper compartment **416** includes a plurality of sidewalls **416a**, and includes a bottom wall **416e** (FIG. **12**) and a top wall **416f**. The first and second upper compartments **414**, **416** are pivotally joined to the lower compartment **412** along a pair of hinge lines **414g**, **416g**, respectively, defined in the sidewalls **410a** and **410c** of the soft-sided carrying case **410** by a releasable zippers **414h**, **416h**, respectively. The zippers **414h**, **416h** are disposed lying generally along an interface **418** between the upper compartments **414**, **416** and the lower compartment **412**. Other suitable releasable mechanisms may be employed. Thus, the upper compartments **414**, **416** are shiftable between the folded positions (i.e., with the upper compartments **414**, **416** disposed above the lower compartment **412** in the manner described above with respect to the first embodiment) and the open or unfolded positions shown in FIG. **12**.

[**0075**] As with the above embodiments, suitable access flaps may be provided to provide access to the various compartments. Also, carrying case **410** preferably includes one or more closing straps **420**, each of which may include one or more buckles **421** or other suitable releasable closing mechanisms, such as straps having hook and loop closures, snaps, buttons, etc. The soft-sided carrying case **410** will also preferably include a suitable handle, such as the handle **422**.

[**0076**] Referring now to FIGS. **13** and **14**, a soft-sided carrying case assembled in accordance with the teachings of a fifth preferred embodiment of the invention is generally referred to by the reference numeral **510**. For ease of reference, all elements that are the same or similar to the elements described above with respect to the first embodiment will retain the same reference numerals, but which have been increased by **500**. The soft-sided carrying case **510** generally includes four sidewalls **510a**, **510b**, **510c**, and **510d**, a bottom wall **510e** and a top wall **510f**. The case **510** further includes a lower compartment **512** and a pair of upper compartments **514** and **516**. The lower compartment **512** includes a plurality of sidewalls **512a**, **512b**, **512c**, and **512d**. The lower compartment **512** also includes a bottom wall **512e** and a top wall **512f** (FIG. **14**).

[**0077**] The first upper compartment **514** includes a plurality of sidewalls **514a**, a bottom wall **514e** (FIG. **14**) and a top wall **514f**. The second upper compartment **516** includes a plurality of sidewalls **516a**, and includes a bottom wall **516e** (FIG. **14**) and a top wall **516f**. The first and second upper compartments **514**, **516** are pivotally joined to the lower compartment **512** along a pair of hinge lines **514g**, **516g**, respectively, defined in the sidewalls **510b** and **510d**

of the soft-sided carrying case **510** by lines of stitching **514h**, **516**, respectively. The lines of stitching **514h**, **516h** are disposed lying generally along an interface **518** between the upper compartments **514**, **516** and the lower compartment **512**. Other suitable hinge mechanisms may be employed. Thus, the upper compartments **514**, **516** are shiftable between the folded positions (i.e., with the upper compartments **514**, **516** disposed above the lower compartment **512** in the manner described above with respect to the first embodiment) and the open or unfolded positions shown in **FIG. 14**.

[0078] As with the above embodiments, suitable internal and/or external access flaps may be provided to provide access to the various compartments. Also, carrying case **510** preferably includes one or more closing straps **520**, each of which may include one or more buckles **521** or other suitable releasable closing mechanisms, such as straps having hook and loop closures, snaps, buttons, etc. The soft-sided carrying case **510** will also preferably include a suitable handle, such as the handle **522**, and/or a shoulder strap **523**.

[0079] Referring now to **FIGS. 15 and 16**, a soft-sided carrying case assembled in accordance with the teachings of a sixth preferred embodiment of the invention is generally referred to by the reference numeral **610**. For ease of reference, all elements that are the same or similar to the elements described above with respect to the first embodiment will retain the same reference numerals, but which have been increased by **600**. The soft-sided carrying case **610** generally includes four sidewalls **610a**, **610b**, **610c**, and **610d**, a bottom wall **610e** and a top wall **610f**. The case **610** further includes a lower compartment **612** and three upper compartments **614**, **615**, and **616**. The lower compartment **612** includes a plurality of sidewalls **612a**. The lower compartment **612** also includes a bottom wall **612e** and a top wall **612f** (**FIG. 16**).

[0080] Each of the upper compartments **614**, **615**, and **616** includes a plurality of sidewalls, a top wall and a bottom wall. As shown in **FIG. 16**, all three compartments **614**, **615**, and **616** are pivotally joined to the lower compartment **612** by hinges **614g**, **615g**, and **616g**, respectively, disposed along an interface **618**. Thus, all three of the upper compartments **614**, **615**, and **616** are shiftable between the folded positions (i.e., with the upper compartments **614**, **615**, and/or **616** disposed above the lower compartment **612**) and the open or unfolded positions shown in **FIG. 16**.

[0081] **FIG. 17** illustrates the manner by which any of the upper compartments of the previously mentioned embodiments (for example, the upper compartments **414** and **416** of the embodiment of **FIGS. 11 and 12**) may be removed from the case and may be joined together to form a second, smaller carrying case **411**. A handle (not shown) may be provided.

[0082] **FIGS. 18-21** illustrate two different configurations for a tri-fold soft-sided carrying case assembled in accordance with the teachings of still further embodiments of the present invention, each designated as **710**. The cases **710** shown therein each include a lower compartment **712** and pair of upper compartments **714** and **716**. It will be noted that the hinge lines **714h** and **716h** are in different planes when the cases **710** are in the folded positions of **FIGS. 18 and 20**. The remainder of the cases shown therein may be constructed in accordance with the teachings of the above-described embodiments.

[0083] **FIGS. 22 and 23** illustrate a soft-sided carrying case **810** having a plurality of compartments **812**, **814**, **816**, **818**, and **820**. The compartments **814** and **816** pivot about vertical hinge lines **814h** and **816h**, while the compartment **818** may pivot about a horizontal hinge line **818h** (**FIG. 23**). The compartment **820** may be removable as shown in **FIG. 23**, or may pivot about a hinge line **820h** (**FIG. 23**).

[0084] **FIGS. 24-26** illustrate two additional embodiments incorporating the teachings of the present invention.

[0085] Although certain exemplary embodiments constructed in accordance with the teachings of the invention have been described herein, the scope of coverage of this patent is not limited thereto. On the contrary, this patent covers all embodiments of the teachings of the invention fairly falling within the scope of the appended claims either literally or under the doctrine of equivalents.

What is claimed:

1. A soft-sided carrying case comprising:

a primary compartment, the primary compartment including a plurality of sidewalls, a top wall and a bottom wall, a first one of the sidewalls and a second one of the sidewalls each formed of a flexible fabric material including an extended portion;

a first upper compartment, the first upper compartment having a plurality of sidewalls, a top wall, and a bottom wall, one of the sidewalls of the first upper compartment being formed of the same contiguous piece of flexible fabric material as the first sidewall of the primary compartment, the sidewall of the first upper compartment and the first sidewall of the primary compartment defining a first hinge line generally adjacent to an interface defined between the primary compartment and the first upper compartment, the first hinge line permitting the first upper compartment to pivot about the first hinge line between a folded position and an unfolded position; and

a second upper compartment, the second upper compartment having a plurality of sidewalls, a top wall, and a bottom wall, one of the sidewalls of the second upper compartment being formed of the same contiguous piece of flexible fabric material as the second sidewall of the primary compartment, the sidewall of the second upper compartment and the first sidewall of the primary compartment defining a second hinge line generally adjacent to an interface defined between the primary compartment and the second upper compartment, the second hinge line permitting the second upper compartment to pivot about the second hinge line between a folded position and an unfolded position; and

the carrying case including a pair of wheels and an extendable handle.

2. The soft-sided carrying case of claim 1, including a releasable closure engaging the first and second upper compartments for maintaining the first and second upper compartments in their respective closed positions.

3. The soft-sided carrying case of claim 2, wherein the closure includes at least one strap.

4. The soft-sided carrying case of claim 3, wherein the strap includes a releasable fastener.

5. The soft-sided carrying case of claim 1, wherein the primary compartment includes a closing flap.

6. The soft sided carrying case of claim 5, wherein the closing flap is secured in a closed position by a releasable fastener.

7. The soft sided carrying case of claim 1, wherein the primary compartment includes a top wall, and wherein each of the upper compartments includes a closing flap, at least a portion of the closing flap of each upper compartment being disposed in confronting relationship with the top wall of the primary compartment when the respective upper compartment is in the folded position, and further wherein the first and second hinge lines are adapted such that the closing flap of each upper compartment and the top wall of the primary compartment are disposed in a common plane when the respective upper compartments are in the unfolded position.

8. The soft sided carrying case of claim 7, wherein the closing flap of each of the upper compartments is secured in a closed position by a fastener.

9. The soft-sided carrying case of claim 7, wherein the closing flap of each of the upper compartments is defined at least in part by the bottom wall of the respective upper compartment.

10. A soft sided carrying case comprising:

- a lower compartment, the lower compartment including a plurality of sidewalls, a top wall and a bottom wall;
- a first upper compartment, the first upper compartment having a plurality of sidewalls, a top wall, and a bottom wall;
- a first hinge pivotally joining the first upper compartment to the lower compartment along a first hinge line, the first hinge permitting the first upper compartment to pivot about the first hinge line between a folded position and an unfolded position;
- a second upper compartment, the second upper compartment having a plurality of sidewalls, a top wall, and a bottom wall;
- a second hinge pivotally joining the second upper compartment to the lower compartment along a second hinge line, the second hinge permitting the second upper compartment to pivot about the second hinge line between a folded position and an unfolded position;
- a plurality of wheels; and
- an extendable handle.

11. The soft-sided carrying case of claim 10, including a closure mechanism engaging the first and second upper compartments for maintaining the first and second upper compartments in their respective closed positions.

12. The soft-sided carrying case of claim 11, wherein the closure mechanism includes a releasable fastener.

13. The soft-sided carrying case of claim 10, wherein the lower compartment and the first and second upper compartments each include a closing flap.

14. The soft-sided carrying case of claim 13, wherein each of the closing flaps are secured in a closed position by a releasable fastener.

15. The soft-sided carrying case of claim 10, wherein a first sidewall of the lower compartment includes an extended portion that extends to form at least a portion of a first sidewall of the first upper compartment, and wherein a second sidewall of the lower compartment includes an extended portion that extends to form at least a portion of a first sidewall of the second upper compartment, and wherein

the first hinge and the second hinge are defined exclusively by the extended portions of the first sidewall and the second sidewall, respectively.

16. A soft-sided carrying case comprising:

- a lower compartment, the lower compartment including a top wall, a bottom wall, and a surrounding sidewall;
- a first upper compartment, the first upper compartment having an upper wall, a lower wall, and a surrounding sidewall;
- a first fabric hinge pivotally joining the first upper compartment to the lower compartment along a first hinge line defined along an upper edge of the lower compartment;
- a second upper compartment, the second upper compartment having an upper wall, a lower wall, and a surrounding sidewall;
- a second fabric hinge pivotally joining the second upper compartment to the lower compartment along a second hinge line defined along an upper edge of the lower compartment;
- both of the upper compartments having a bottom wall in contact with the top wall of the lower compartment when the upper compartments are in their respective folded positions;
- at least one flexible reinforcement member applied adjacent to each of the first and second fabric hinges, each reinforcement member engaging the lower compartment and an adjacent one of the first and second upper compartments, the reinforcement member arranged to reinforce the hinges when the upper compartments are in their respective folded positions and when the upper compartments are in their respective unfolded positions;
- a plurality of wheels; and
- an extendable handle.

17. The soft-sided carrying case of claim 16, wherein the at least one reinforcement member comprises a sewn in place fabric strap.

18. The soft-sided carrying case of claim 16, wherein the at least one reinforcement member comprises a fabric strap secured by a fastener, and wherein the fastener includes an item selected from the group consisting of snaps, buttons, hook and loop closures, rivets, and zippers.

19. A soft-sided carrying case comprising:

- a lower compartment, the lower compartment including a top wall, a bottom wall, and an encircling sidewall;
- a first upper compartment, the first upper compartment having an upper wall, a lower wall, and an encircling sidewall;
- a first hinge pivotally joining the first upper compartment to the lower compartment along a first hinge line, the first hinge permitting the first upper compartment to pivot about the first hinge line between a folded position and an unfolded position;
- a second upper compartment, the second upper compartment having an upper wall, a lower wall, and an encircling sidewall;

a second hinge pivotally joining the second upper compartment to the lower compartment along a second hinge line, the second hinge permitting the second upper compartment to pivot about the second hinge line between a folded position and an unfolded position; and

each of the first and second hinges is defined exclusively by at least one sewn in place fabric strap, the fabric strap including a first edge engaging the lower compartment and a second edge engaging an adjacent one

of the first or the second upper compartments, and further wherein the first edge of each strap is engaged by a lower overlapping fabric member secured to the lower compartment, and wherein the second edge of each strap is engaged by an upper overlapping fabric member secured to the upper compartment.

20. The soft-sided carrying case of claim 19, wherein the overlapping members are secured to the strap by bartack stitching.

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