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(54) **POWER TOOL CARRYING AND STORAGE CASE**

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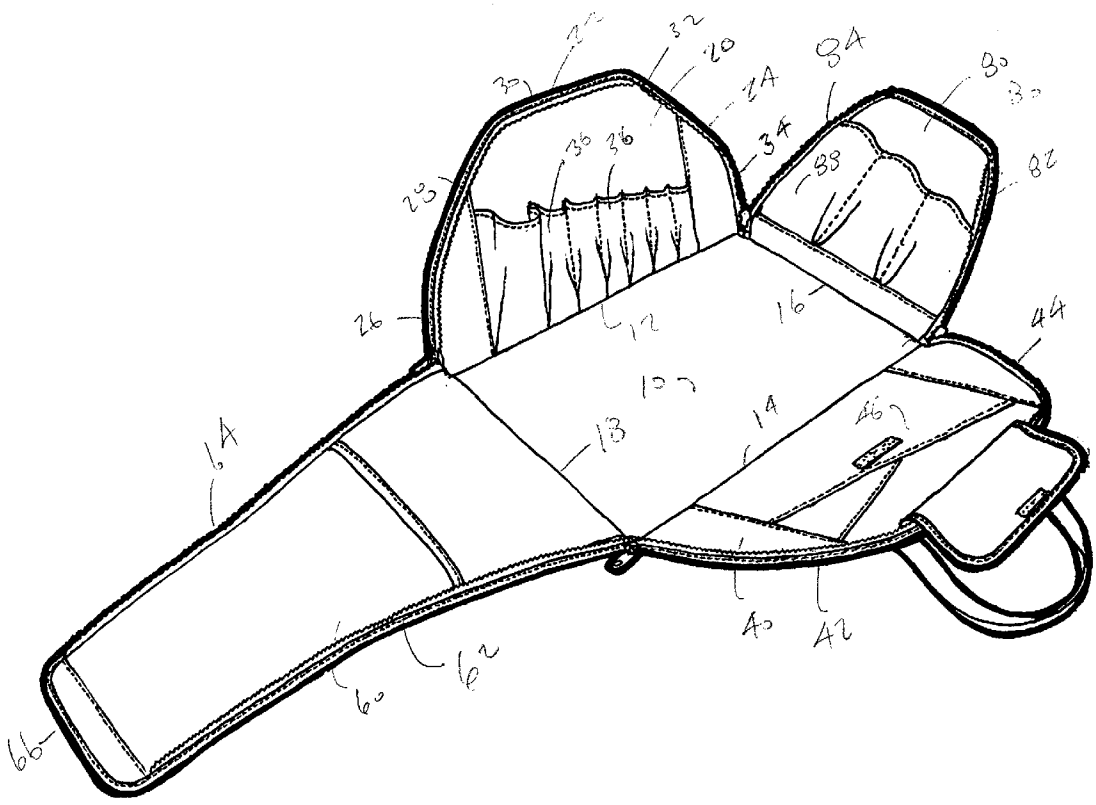
(57) **ABSTRACT**

A power tool carrying and storage case is comprised of four flaps arranged around the four sides of a generally rectangular and rigid bottom panel. The flaps may be folded over the contents of the bag.



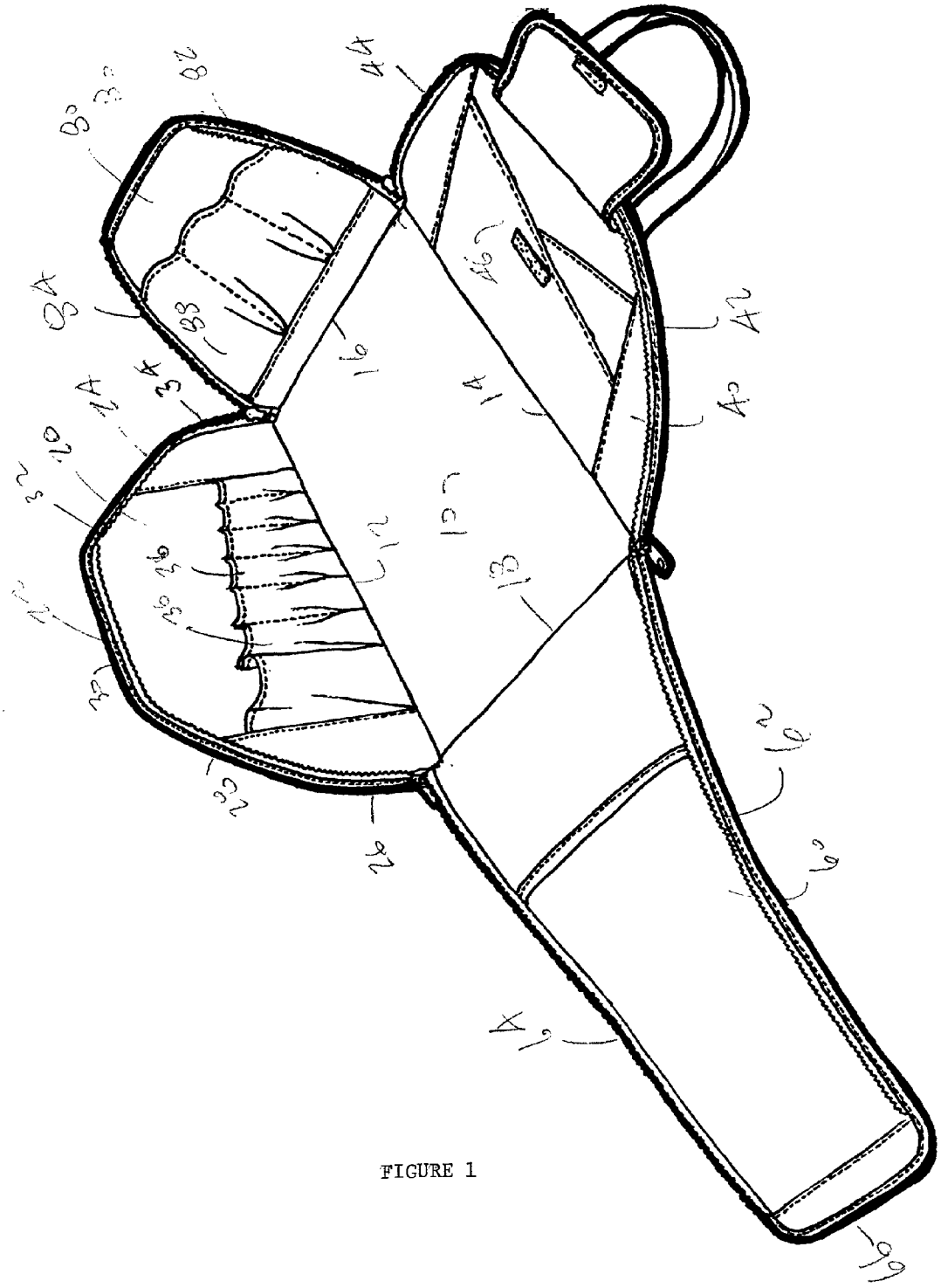


FIGURE 1

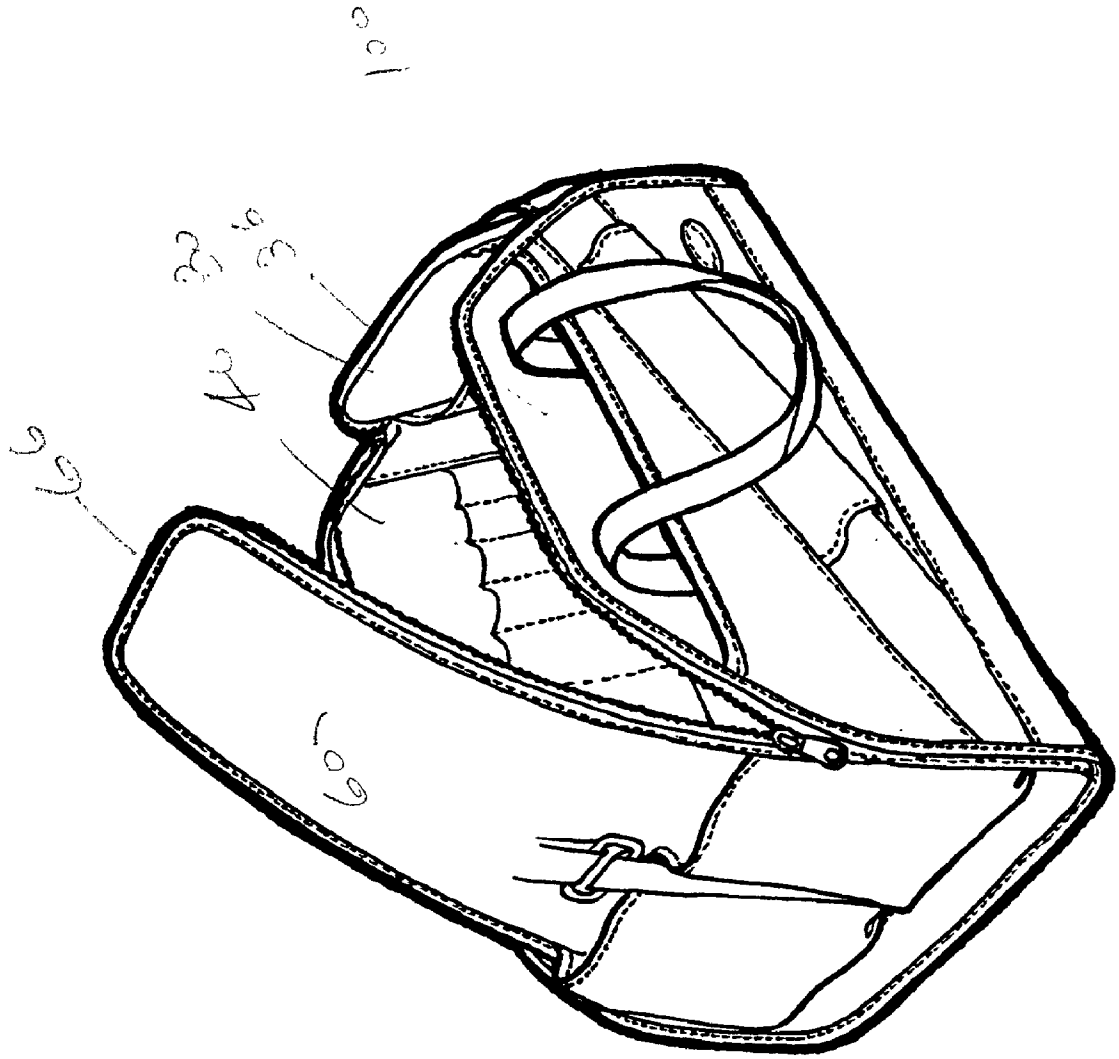


FIGURE 2

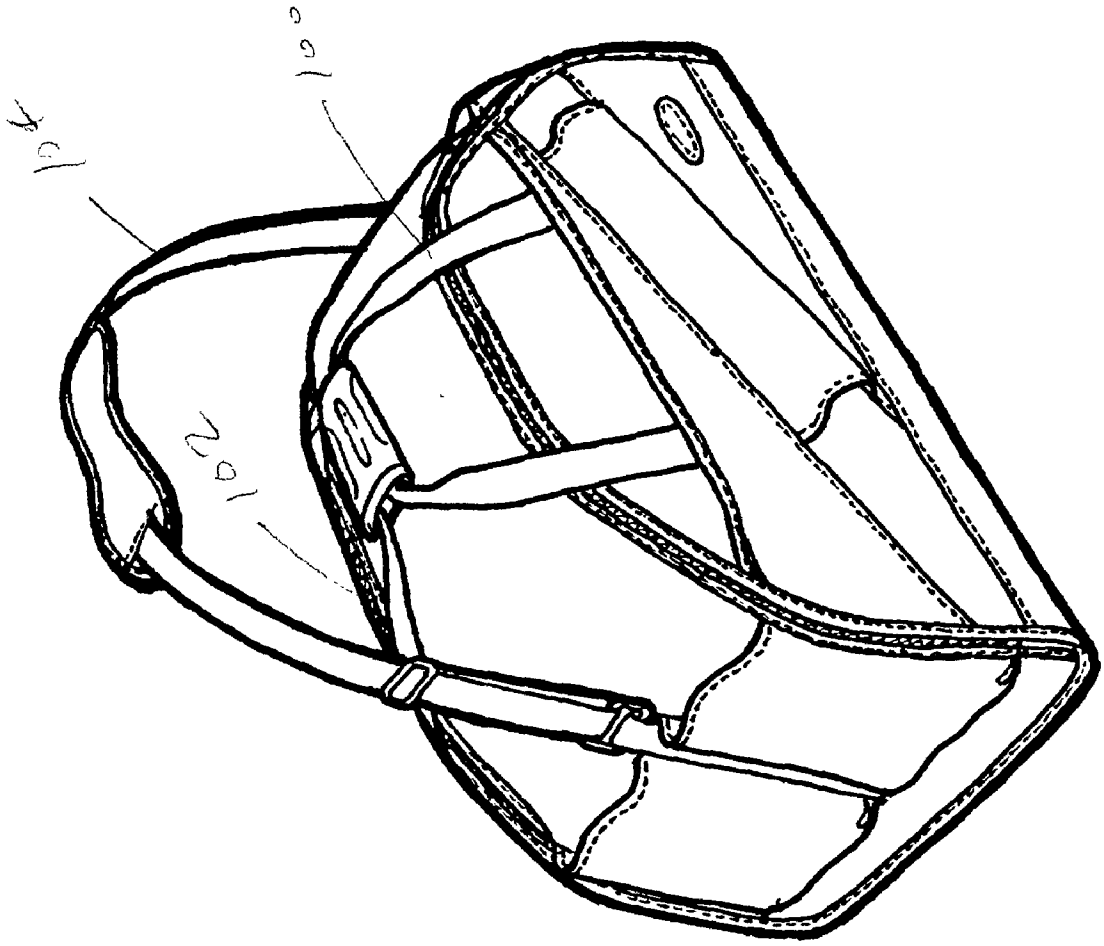


FIGURE 3

POWER TOOL CARRYING AND STORAGE CASE

BACKGROUND OF THE INVENTION

[0001] In a principal aspect the present invention relates to a case for carrying power tools and other bulky items having unique shapes.

[0002] Workmen traveling to a worksite will often require power tools, such as drills, saws, grinders, and the like. Containers for such tools are often quite bulky. Carrying the tools without a container may be dangerous inasmuch as the power cord for the tool may become entangled or loose. Further, the tool in such a circumstance is not necessarily protected.

[0003] Carrying cases or luggage items for such tools, however, are often ill-suited for their particular purpose. That is, the tool which comprises a rather bulky item, may be difficult to fit into a typical tool bag having a top opening, for example. Thus, there has developed a need for an improved bag or carrying case for power tools and other similar bulky items.

SUMMARY OF THE INVENTION

[0004] Briefly, the present invention comprises a carrying storage case for tools, such as power tools, comprised of a generally rigid, four-sided bottom panel having four flexible, zipper attachable side panels that fold over an item placed on the bottom panel. When the zippers, or fasteners, are detached one from the other, all of the panels fold flat thereby enabling a worker or user to place the power tool or other bulky item on the center bottom panel of the carrying case. Thereafter, the sides may each be folded over the tool and attached one to the other by fasteners, such as zippers. Opposite sides of the carrying case include handles or straps which facilitate carrying of the power tool, or item, within the case. Inasmuch as the sides of the case are flexible, yet the bottom is rigid, the tool is properly supported, yet protected. Moreover, because the sides of the carrying case are flexible, power tools of significantly different size and shape may be carried using the case.

[0005] Thus, it is an object of the invention to provide a power tool carrying case which permits ease of access to the interior of the case, yet which provides a significant protective barrier or enclosure for the case.

[0006] A further object of the invention is to provide an inexpensive, yet rugged and durable carrying case for power tools and the like.

[0007] Another object of the invention is to provide a power tool carrying case which folds flat when one desires to place a power tool within the case and which includes sides that fold up and over the power tool to retain and protect a tool within the bag forming the case.

[0008] These and other objects, advantages and features of the invention will be set forth in the detailed description which follows.

BRIEF DESCRIPTION OF THE DRAWING

[0009] In the detailed description which follows, reference will be made to the drawing comprised of the following figures:

[0010] **FIG. 1** is an isometric view of the carrying and storage case of the invention wherein the bottom and sides are unfolded to reveal a flat or generally flat case adapted to receive an item to be carried;

[0011] **FIG. 2** is an isometric view of the case of **FIG. 1** wherein the flexible sides of the case have been partially folded to encircle or encompass a tool within the case; and

[0012] **FIG. 3** is an isometric view of the case of **FIG. 1** in the fully enclosed and folded condition.

DESCRIPTION OF THE PREFERRED EMBODIMENT

[0013] The power tool carrying case of the invention comprises a bottom panel **10** which preferably has a quadrilateral shape. In the most preferred embodiment, the bottom panel **10** is rectangular in shape. However, other quadrilateral shapes, such as an isosceles, trapezoidal shape, may be utilized. The bottom panel **10** is fabricated from a generally rigid material or is reinforced so as to be substantially rigid to support the weight of a power tool which will be carried by the case. Thus, in the preferred embodiment, the panel **10** is a generally rigid, four sided panel covered by flexible or padded material and which includes a first side **12**, a second opposite side **14**, a top end or side **16** and a bottom end or side **18**. Assuming that the panel **10** is a rectangular configuration, then sides **12** and **14** are parallel, as are sides **16** and **18**.

[0014] Attached to each of the sides is a flexible folding panel. Thus, a first side panel **20** is attached by a flexible hinge to the first side **12** of the bottom panel **10**. In the embodiment shown, the first side panel **20** includes a fastener **22** along its peripheral edge and a second fastener **24** along a section of its peripheral edge. The shape of the panel **20** may be varied according to the size of the case and the particular shape of the case. In the embodiment shown, the panel **20** includes five distinct sides, or sections **26**, **28**, **30**, **32** and **34**. The sides or sections **26**, **28**, **30**, **32**, and **34** are generally linear and are smoothly connected. The particular configuration and shape of the side panel **20**, however, is not necessarily a limiting feature of the invention. However, the preferred embodiment is directed to a shape of the type described which may be formed from regular polygonal sections as discussed, or from smooth continuous arcuate or regular curved configurations incorporated in the side panel **20** as well as the other side panels. The panel **20** is foldable along the side edge **12** and in the embodiment shown includes a series of storage pockets **36** on the inside face of the panel **20**.

[0015] Affixed to the bottom panel **10** along the side edge **14** is a second side panel **40**. The second side panel **40** is congruent with the first side panel **20**. In a similar manner, a fastener **42**, as well as a secondary fastener **44**, are provided along the outer edge of the panel **40**. A storage pocket **46** is also optionally provided. The panels **20** and **40** both fold flat or coplanar with the bottom panel **10**.

[0016] A third side panel **60** is provided along the bottom edge **18** and folds about the bottom edge along a flexible hinge. The third side panel **60** includes elongate side edges **62** and **64** which generally converge one with the other and which extend upwardly toward a crown **66**. Note that the fastener **62**, as well as the fastener **64**, do not cross over the

crown **66**. Note also that the extent of the flap or side enclosure **60** is greater than the opposite side strap of flap **80** associated with the top edge **16** of the bottom panel and which is flexibly attached to the bottom panel **10** along the edge **16**. A fourth panel **80**, thus, includes fasteners **82** and **84** along the opposite edges or sides thereof. The sides **82** and **84** of the panel **80** converge slightly and are connected by a crown **86**. Pockets **88** again are optionally incorporated on the inside of the flap or side **80**.

[**0017**] As shown in **FIG. 2**, handles, such as handle **100**, may be attached to the opposite sides **20** and **40**. Thus, handles **100** and **102** may be joined together as shown in **FIG. 3** when the carrying case is fully assembled. A shoulder strap **104** may connect the outside of the opposite end **16** and **18** to facilitate carrying of the case also.

[**0018**] Referring to **FIG. 2**, it will be noted that the side flaps **20** and **40** may be folded one toward the other. Similarly, the bottom end flap **60** and the top end flap **80** may also be folded toward one another with the flaps **20**, **40**, **60** and **80** fastened together by means of zippers previously identified. Note that the crown **66** of the flap **60**, however, will, in the preferred embodiment, fit over and overlap the crown **86** of the flap **80**. Thus, the contents of the carrying case or bag are fully protected and generally inaccessible inasmuch as the zippers or fasteners previously described will hold those component parts together.

[**0019**] When one desires to place a tool within the bag, all of the zippers or fasteners are released and the carrying case will assume the configuration depicted in **FIG. 1**. A tool may then be placed on the panel **10**. Thereafter, the sides **20** and **40**, as well as the ends **60** and **80**, may all be attached one to the other to form an enclosure, such as depicted in **FIG. 3**. In this manner, a power tool or other item is easily retained in a safe manner within the carrying case.

[**0020**] The carrying case is extremely light considering the contents of the case. The carrying case is easy to "load" or "unload". That is, the contents of the case are easily accessed. On the other hand, the case may be easily formed around an item with a minimum of difficulty. The carrying case accommodates tools of a wide variety of sizes and shapes. The case acts to protect the contents thereof including any damage to the tool. Additionally, the case protects the tool from the elements in view of the configuration of the overlapping flaps as described. Note that with respect to the sides **20** and **40**, there are two fasteners associated therewith. One set of fasteners is associated with the bottom or third flap **60** and the second set of fasteners is associated with the top or end flap **80**. In this manner, it will be noted that one or both of the flaps, **60** or **80** may be independently disengaged or detached and lay flat to facilitate access to the contents of the bag. At the same time, the other flap can remain in the closed or partially closed position.

[**0021**] It is possible to vary the construction of the invention without departing from the true spirit and scope. The arrangement of handles, buckles, attachment mechanisms and the like may be altered. Zippers have been disclosed as being extremely utilitarian in the combination comprising the invention. However, other fasteners, such as hook and eye fasteners (Velcro), may be utilized. Thus, the invention is to be limited only by the following claims and equivalents thereof.

What is claimed is:

1. A power tool carrying and storage case comprising, in combination:

a generally rigid, four-sided, flat planar bottom panel having first and second spaced, side edges, a top edge connecting the side edges and a spaced bottom edge connecting the side edges;

a first, flexible side enclosure panel attached to the first side edge of the bottom panel by a flexible hinge connection, said first side enclosure panel including a first, continuous peripheral edge extending between the opposite ends of the flexible hinge connection for the first panel, said first peripheral edge including a fastener on said edge;

a second, flexible side enclosure panel attached to the second side edge of the bottom panel by a flexible hinge connection, said second side enclosure panel substantially congruent with the first side enclosure panel and also including a peripheral edge with a fastener on said edge;

a third flexible side panel attached to the bottom edge of the bottom panel by a flexible hinge connection, said third side panel including spaced converging elongate side edges and a connecting crown between the side edges, said elongate side edges of said third panel at least equal in length to one-half of the length of the edge of the first and second panels and each including a fastener along the edge;

a fourth flexible side panel attached to the top edge of the bottom panel by a flexible hinge connection, said fourth side panel including spaced converging side edges and a connecting crown, said converging side edges of said fourth panel each including a fastener;

said first, second, third and fourth panels in combination with said bottom panel foldable between a flat planar configuration and an enclosure configuration with the first and second panels fastened to the third and fourth panels by said fasteners at the edges of said panels;

said third side panel at least in part overlying the bottom panel to form the enclosure; said first and second panels forming opposite sides of the enclosure, said third and fourth panels forming remaining opposite sides of the enclosure;

a first handle attached to the first side panel; and

a second handle attached to the second side panel, said first and second handles aligned whereby an item enclosed within the case is supported in a balanced manner on the bottom panel when the case is supported by the handles.

2. The case of claim 1 wherein the fasteners are zippers.

3. The case of claim 1 including pockets on the inside wall of at least one flexible panel.

4. The case of claim 1 including a carrying strap between the bottom side edges.

5. The case of claim 1 wherein the first and second side panels comprise a polygonal pattern.

6. The case of claim 1 wherein the third panel overlies a majority of the bottom panel whether fasteners are attached.

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