

(19) United States

(12) Patent Application Publication (10) Pub. No.: US 2008/0087513 A1 Majeau

(54) PORTABLE LUGGAGE WITH AN ACCESSORY POCKET ADAPTED FOR RECEIVING A LAPTOP COMPUTER

(75) Inventor: Bernard H. Majeau, Greenwood Village, CO (US)

> Correspondence Address: SHERIDAN ROSS PC 1560 BROADWAY **SUITE 1200 DENVER, CO 80202**

(73) Assignee: EBAGS.COM, Greenwood Village, CO (US)

(21) Appl. No.: 11/831,215 (22) Filed: Jul. 31, 2007

Related U.S. Application Data

Apr. 17, 2008

(60) Provisional application No. 60/820,927, filed on Jul. 31, 2006.

Publication Classification

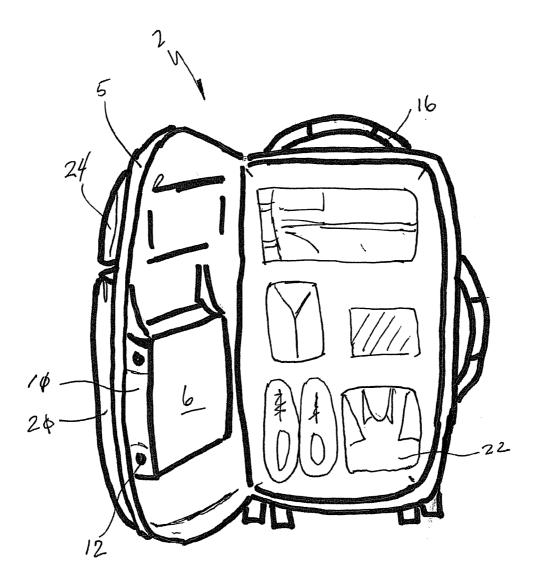
(51)Int. Cl. A45C 5/00 (2006.01)

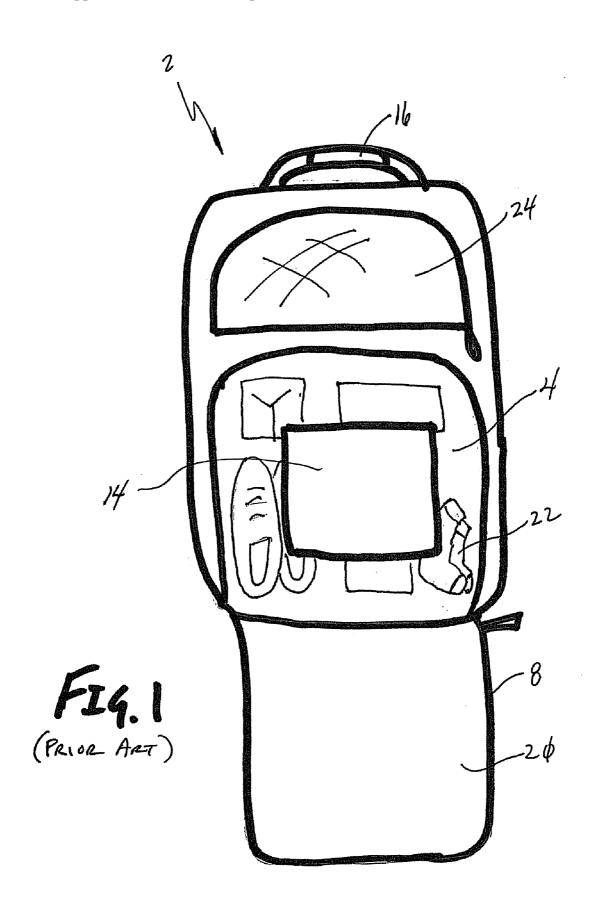
(43) **Pub. Date:**

U.S. Cl. 190/111; 190/127 (52)

(57)ABSTRACT

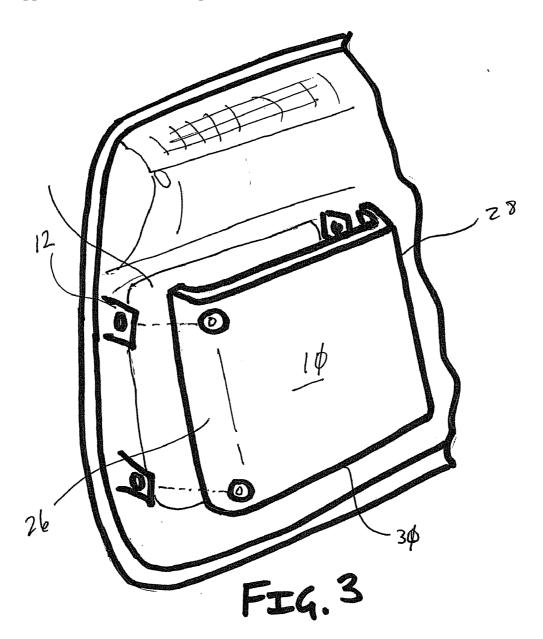
A storage system is provided that includes an accessory storage compartment that is isolated from a main storage compartment of a piece of luggage. More specifically, the accessory storage compartment is provided that selectively interconnects to a primary opening panel of the piece of luggage wherein a secondary opening is integrated into the primary opening that provides access to the items stored in the accessory storage compartment.

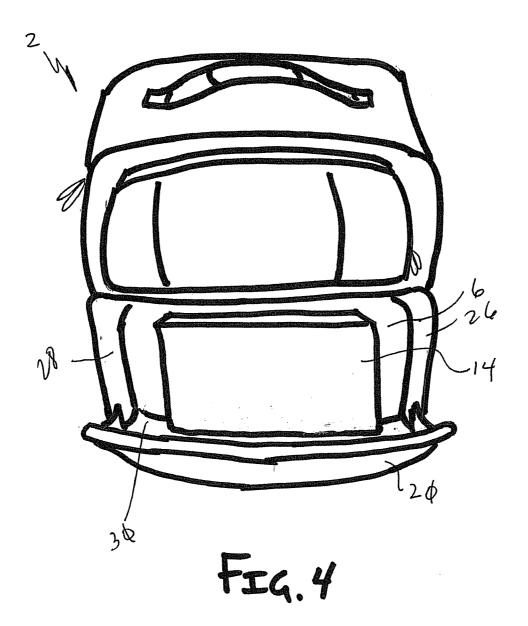


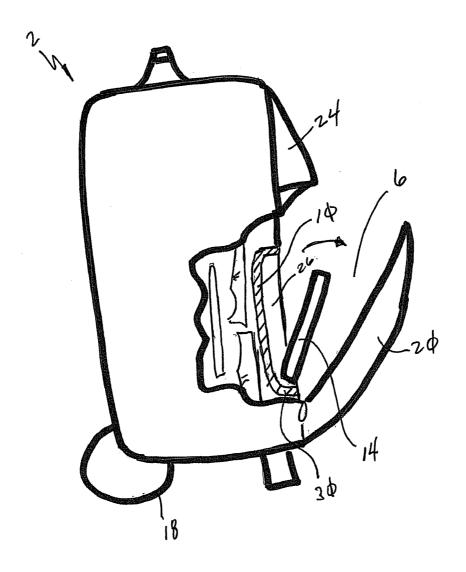




F14.2







FI4.5

PORTABLE LUGGAGE WITH AN ACCESSORY POCKET ADAPTED FOR RECEIVING A LAPTOP COMPUTER

[0001] This application claims the benefit of U.S. Provisional Patent Application Ser. No. 60/820,927, filed Jul. 31, 2006, the entire disclosure of which is incorporated by reference herein.

FIELD OF THE INVENTION

[0002] The present invention relates to portable luggage adapted for use with an electronic device such as a laptop computer or other similar device.

BACKGROUND OF THE INVENTION

[0003] Luggage is well known in the art and is used for transporting personal effects. With the increased use of electronic apparatus such as laptop computers, digital video disk players and other related fragile items, there is an increasing need for forms of luggage that provide a protective compartment to prevent significant damage associated with impacts or vibrations. Numerous attempts have been made to solve this problem, including suspension systems that cradle the laptop computer when it is positioned within the luggage.

[0004] The shortcomings of prior art protection systems are very apparent to anyone who has ever gone through security screening at an airport. More specifically, security personnel generally require that laptop computers be removed from luggage for further inspection. Once the contents of the luggage has been opened and the laptop computer removed, the items within the luggage are free to move into the space formerly occupied by the laptop computer, thereby making it extremely difficult to reposition the laptop computer or other electronic device within the luggage. Thus there is a need in the luggage industry for a specialized compartment that is designed to retain and protect an electronic device, such as a laptop computer, and that preserves space exclusively for the electronic device.

SUMMARY OF THE INVENTION

[0005] It is thus one aspect of the present invention to provide a specialized compartment within a conventional piece of luggage, such as a suitcase, attaché, or carry-on bag, that is adapted for storing or protecting an electronic device such as a laptop computer. More specifically, the present invention may be constructed independently within a piece of luggage, or designed to be selectively removable to allow the retrofitting of existing luggage, and is designed to be accessible upon opening an accessory compartment or main compartment used in a suitcase or other conventional piece of luggage.

[0006] Conventional luggage, such as a suitcase, typically comprises one or more selectively accessible compartments that are used to store personal effects such as clothing, overnight bags, and other items as necessary. That is, many of these pieces of luggage contain two or three distinct compartments that may be selectively opened and closed by the use of a zipper, VELCRO®, loop and buckle, or other means well known in the art to allow quick access to the contents stored in the luggage. In one embodiment of the present invention, a rigid or semi-rigid shell is provided

within one of the compartments of the luggage, that is designed to retain a specific shape and size so as to receive a laptop computer. When the luggage is selectively opened, the shell is readily accessible, and the laptop computer can be removed. Even after the luggage is inspected and the stored contents moved from their original position, the shell retains its original shape and thus allows for the quick and easy reentry of the laptop computer.

[0007] It is thus one aspect of the present invention to provide a rigid or semi-rigid shell that is made of a generally non-conforming material that retrains a specific shape and size. Thus, in one embodiment of the present invention, rigid plastics, fiberglass, polyethylene, or Styrofoam or rigid padding materials are used to define the rigid or semi-rigid shell. The semi-rigid shell may be interconnected to an existing piece of luggage by the use of VELCRO®, snaps, belts, and other interconnecting mechanisms well known in the art. Alternatively, the shell may be integrally interconnected or stitched to an interior portion of the luggage that is easily accessible upon opening the luggage to receive the laptop computer. In another aspect of the present invention, a strap or VELCRO® (i.e., hook & loop material) closure mechanism may be used on the shell to prevent the laptop computer from inadvertently moving from within the luggage. Furthermore, padding materials such as foams, Styrofoam, or other compressible materials may be used for added protection to the laptop computer.

[0008] Thus, in one aspect of the present invention, a piece of luggage or a portable luggage device is provided and which comprises:

[0009] a first storage compartment defined by an upper end, a lower end, a rear surface, a front surface and opposing side surfaces:

[0010] a first opening panel interconnected to said first storage compartment that allows for selective access into said first compartment, said first opening panel including an opening therethrough;

[0011] a second storage compartment interconnected to said first opening panel, said second storage compartment comprising a rigid non-conforming shell that is adapted to receive an electronic device, wherein items contained in said first storage compartment are precluded from occupying a space defined by said rigid, non-conforming shell and

[0012] a second opening panel associated with said first opening panel that provides selective access to said second storage compartment.

[0013] The Summary of the Invention is neither intended nor should it be construed as being representative of the full extent and scope of the present invention. The present invention is set forth in various levels of detail in the Summary of the Invention as well as in the attached drawings and the Detailed Description of the Invention and no limitation as to the scope of the present invention is intended by either the inclusion or non-inclusion of elements, components, etc. in this Summary of the Invention. Additional aspects of the present invention will become more readily apparent from the Detail Description, particularly when taken together with the drawings.

BRIEF DESCRIPTION OF THE DRAWINGS

[0014] The accompanying drawings, which are incorporated in and constitute a part of the specification, illustrate

embodiments of the invention and together with the general description of the invention given above and the detailed description of the drawings given below, serve to explain the principles of these inventions.

[0015] FIG. 1 is a front elevation view of prior art luggage with an access panel;

[0016] FIG. 2 is a front elevation view of one embodiment of the present invention wherein a front panel is in an open position;

[0017] FIG. 3 is a detailed view of an inside of the front panel showing a shell of one embodiment of the present invention that defines a portion of a storage area;

[0018] FIG. 4 is a top perspective view of one embodiment of the present invention wherein the front panel is shown opened with a computer stored therein; and

[0019] FIG. 5 is a left elevation view of the luggage shown in FIG. 2 with a portion cut away to show the storage area of one embodiment of the present invention.

[0020] To assist in the understanding of the present invention the following list of components and associated numbering found in the drawings is provided herein:

#	Component
2	Luggage
4	Main Storage Compartment
5	Front Panel
6	Accessory Storage Area
8	Zipper
10	Shell
12	Shell Attachment Mechanism
14	Laptop Computer
16	Luggage Handle
18	Luggage Wheels
20	Access Panel
22	Articles
24	Secondary Storage Pocket
26	Left panel
28	Right panel
30	Bottom panel

[0021] It should be understood that the drawings are not necessarily to scale. In certain instances, details that are not necessary for an understanding of the invention or that render other details difficult to perceive may have been omitted. It should be understood, of course, that the invention is not necessarily limited to the particular embodiments illustrated herein.

DETAILED DESCRIPTION

[0022] Referring now to FIG. 1, a prior art method of securing a laptop computer 14 within luggage 2 is shown. Previously, users of luggage 2 simply placed items that they wanted to access quickly atop their stored articles 22. When an article, such as a laptop computer 14, was needed, the user would simply unzip the access panel 20, thereby providing selective access to the main storage compartment 4. However, during security checks at an airport, for example, the laptop computer 14 must be quickly removed and activated for security personnel. Often this task is done while the luggage 2 is in an upright position such that when the access panel 20 is opened and the laptop computer 14

removed, the stored articles 22 shift and occupy the space previously occupied by the laptop computer 14 wherein reinsertion of the laptop computer 14 is difficult or impossible. This situation leads to security inspection delays and also may require repacking of the luggage 2 subsequent to the security check.

[0023] Referring now to FIGS. 2-5, one embodiment of the present invention is shown that comprises a shell 10 that interconnects to an inner portion of the luggage 2 and isolates the stored laptop computer 14, or other items, from the stored articles 22. The shell 10 defines an accessory storage area 6 that is adapted to receive the laptop computer 14, for example. Embodiments of the present invention have the advantage of allowing access through the access panel 20 into the accessory storage area 6 without disturbing the articles 22 stored within the main storage compartment of the luggage 2. The shell 10 of embodiments of the present invention is interconnected to an inner surface of the luggage 2 via a shell attachment mechanisms 12, such as snaps or hook and loop fasteners. Although the accessory storage area 6 is shown interconnected to the front panel 5 of the luggage, one skilled in the art will appreciate that accessory storage areas 6 may be incorporated into the rear sides or top of the luggage. In addition, the accessory storing area 6 may be of any shape and size and is not limited to the configuration provided herein. The shell 10 as contemplated herein may be constructed of a rigid, semi-rigid or soft material. Preferably, the shell 10 is rigid such that pressure applied by the stored articles 22 does not deform the shell 10 so that the laptop computer 14 may be quickly and easily placed back into the accessory storage pocket 6 subsequent to removal.

[0024] Referring now to FIGS. 2-4, one embodiment of the present invention is provided. Here, the accessory storage area 6 includes a left panel 26, a right panel 28 and a bottom panel 30 for the storage of the laptop computer 14. It is also clearly shown how the articles stored within the luggage are isolated from the accessory storage area 6. One skilled in the art will appreciate that further cushioning and shock isolation mechanisms may be employed within the accessory storage area 6 to further protect the laptop computer 14 or other electronic device stored therein, without departing from the scope of the invention. For example, the shock isolation mechanism disclosed in U.S. Patent Publication No. 2005/0248913, published Nov. 10, 2005, which is incorporated by reference herein, may be integrated into embodiments of the present invention.

[0025] Referring specifically to FIG. 3, the shell 10 of one embodiment of the present invention is shown adjacent to the shell attachment mechanisms 12. Here, snaps are employed to interconnect the shell 10 to an inner portion of the luggage, however, one skilled in the art will appreciate other interconnection mechanisms may be employed without departing from the scope of the invention. For example, attachment mechanisms 12 that are composed of hook and loop fasteners may be employed. The accessory storage area 6 may be large enough to accommodate a brief case, for example. Further, the shell 10 may be configured to form a brief case or attaché, perhaps similar to a mail bag. In operation, one could configure the shell, and any straps or handles included therewith, for incorporation to the piece of luggage.

[0026] Referring now to FIG. 5, a left elevation view of luggage 2 of one embodiment of the present invention is

shown. The access panel 20 provides access to the accessory storage area 6, thereby allowing exposure of the laptop computer 14. The laptop computer 14 is removed, the shell 10, which comprises a portion of the accessory storage area 6, prevents the articles stored within the luggage to enter into the accessory storage area 6.

[0027] While various embodiments of the present invention have been described in detail, it is apparent that modifications and alterations of those embodiments will occur to those skilled in the art. However, it is to be expressly understood that such modifications and alterations are within the scope and spirit of the present invention, as set forth in the following claims.

What is claimed is:

- 1. A portable luggage device adapted for storing an electronics device, comprising:
 - a first storage compartment defined by an upper end, a lower end, a rear surface, a front surface and opposing side surfaces:
 - a first opening panel interconnected to said first storage compartment that allows for selective access into said first compartment, said first opening panel including an opening therethrough;
 - a second storage compartment interconnected to said first opening panel, said second storage compartment comprising a rigid non-conforming shell that is adapted to receive an electronic device, wherein items contained in said first storage compartment are precluded from occupying a space defined by said rigid, non-conforming shell; and
 - a second opening panel associated with said first opening panel that provides selective access to said second storage compartment.
- 2. The portable luggage device of claim 1, wherein said rigid, non-conforming shell may be selectively removed from said first opening panel.
- 3. The portable luggage device of claim 1, wherein said second storage compartment is adapted to receive a laptop computer.
- **4.** The portable luggage device of claim 1, wherein said second storage compartment is adapted to receive a brief
- **5**. The portable luggage device of claim 1, wherein said second storage compartment is an auxiliary storage case that is selectively interconnected to said first opening panel.
- **6.** The portable luggage device of claim 1, wherein said first opening panel is interconnected to said first storage compartment and said second opening panel is interconnected to said first opening panel by at least one of a zipper, a snap, a hook and loop fastener and a strap and buckle.
- 7. The portable luggage device of claim 1, wherein said rigid non-conforming shell is selectively interconnected to said first opening panel with at least one of snaps, zippers and hook and loop fasteners.
 - 8. A portable luggage device, comprising:
 - a first storage compartment defined by an upper end, a lower end, a rear surface, a front surface and opposing side surfaces;

- a first opening panel interconnected to said first storage compartment that allows for selective access into said first compartment, said first opening panel including an opening therethrough;
- a second storage compartment interconnected to at least one of said first opening panel and said rear surface of said first storage compartment, said second storage compartment comprising a means for protecting, wherein items contained in said first storage compartment are precluded from occupying a storage space defined by said means for protecting; and
- a second opening panel associated with at least one of said first opening panel and said rear panel that provides selective access to said second storage compartment.
- **9**. The portable luggage device of claim 8, wherein said means for protecting includes a padded rigid non-conforming shell.
- 10. The portable luggage device of claim 8, wherein said means for protecting may be selectively removed from said at least one of said first opening panel and said rear surface of said first storage compartment.
- 11. The portable luggage device of claim 8, wherein said means for protecting is adapted to store a laptop computer.
- 12. The portable luggage device of claim 8, wherein said second storage compartment is adapted to receive a brief case.
- 13. The portable luggage device of claim 8, wherein said second storage compartment is an auxiliary storage case that is selectively interconnected to said first opening panel.
- 14. The portable luggage device of claim 8, wherein said means for protecting is selectively interconnected to said first opening panel with at least one of snaps, zippers and hook and loop fasteners.
- 15. The portable luggage device of claim 8, wherein said means for protecting includes at least one of a suspension system and a shock isolation system interconnected to said means for protecting.
- **16**. A device for protecting an electronic device for incorporation into luggage, comprising:
 - a shell having a left panel, a right panel, a bottom panel and a main panel that define a space for storing an electronic device, wherein said shell is adapted for selective interconnection to the luggage; and
 - at least one means for interconnection positioned on said
- 17. The device of claim 16, wherein said shell includes at least one of padding, a shock isolation system and a suspension system.
- 18. The device of claim 16, further comprising a second main panel for selective interconnection to said left panel and said right panel to define an attaché case that is separate from the luggage.
- 19. The device of claim 16, wherein said at least one means for interconnection is at least one of a snap, a zipper and a hook and loop fastener.

* * * * *