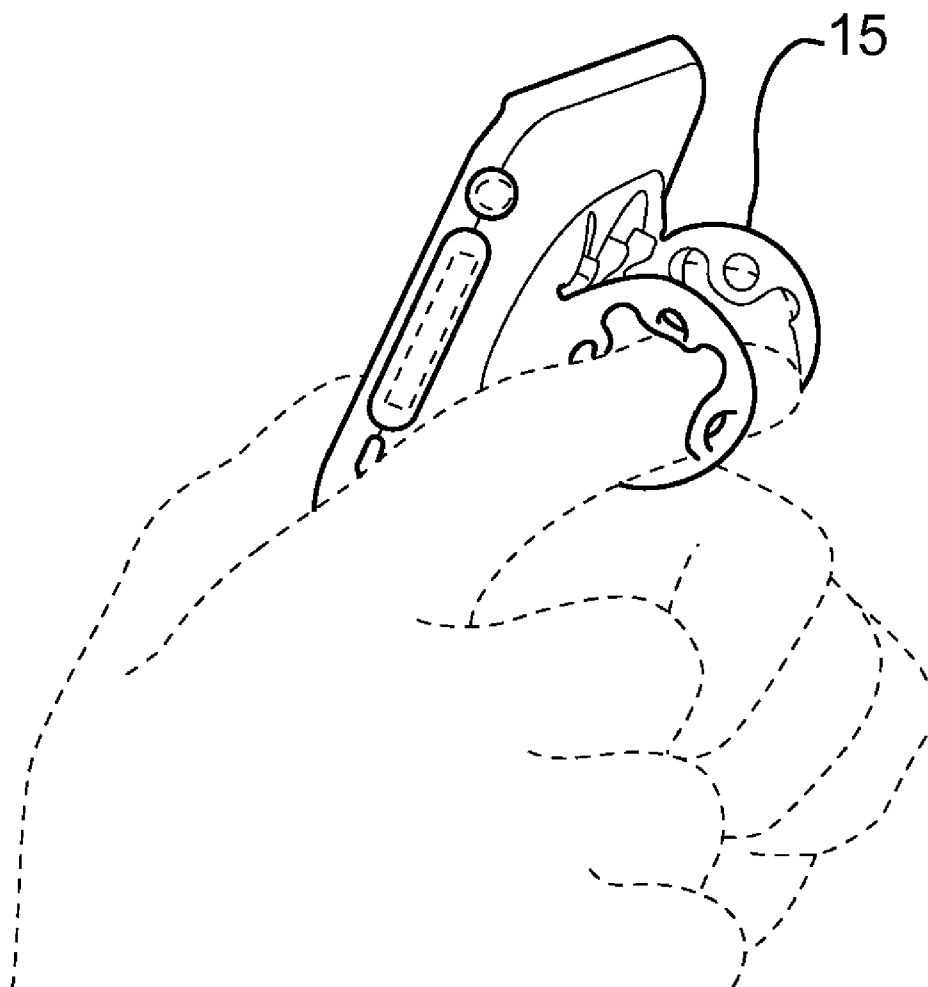


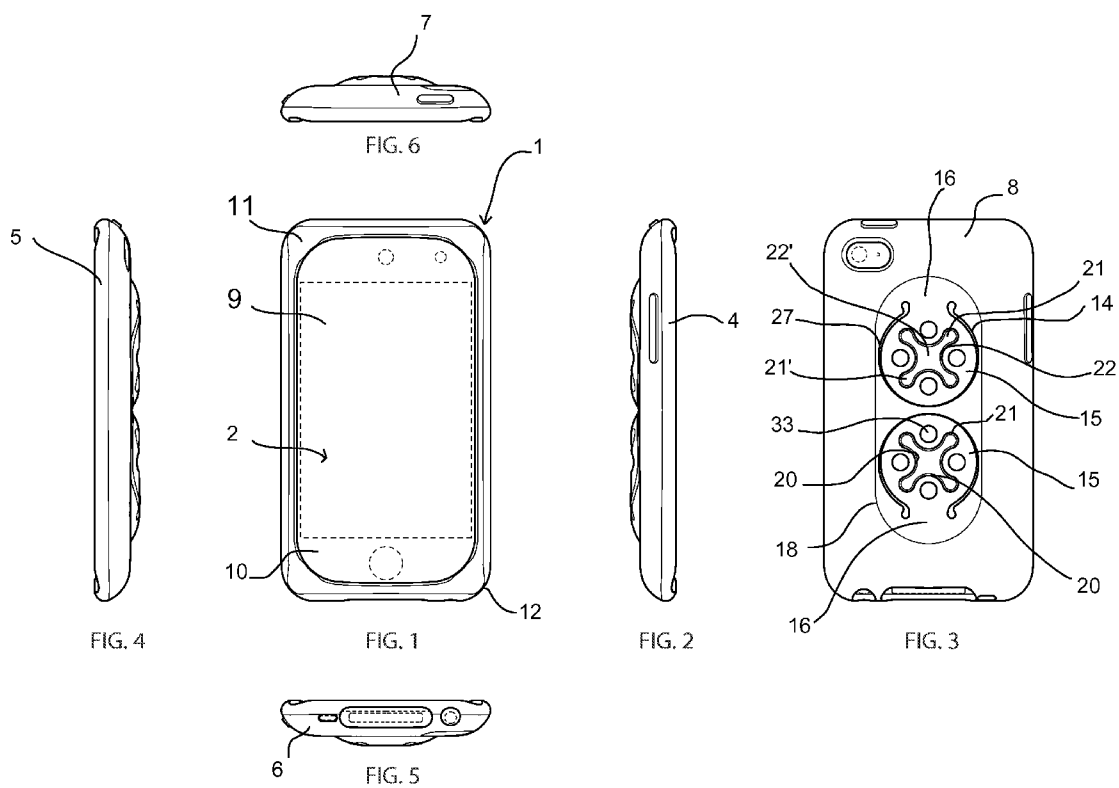


US 20110084081A1

(19) **United States**(12) **Patent Application Publication**
Chung et al.(10) **Pub. No.: US 2011/0084081 A1**(43) **Pub. Date: Apr. 14, 2011**(54) **CASE FOR PORTABLE MEDIA PLAYER
WITH INTEGRAL HANDLES****Publication Classification**(51) **Int. Cl.**
B65D 90/12 (2006.01)(52) **U.S. Cl.** **220/628**(75) Inventors: **Chanseol Chung**, Hollywood, FL
(US); **Edward Martin**, Hollywood,
FL (US); **Christopher Piedra**,
Hollywood, FL (US); **Sean**
Rudolph Etwaroo, Hollywood, FL
(US)(73) Assignee: **MARWARE, INC.**, Hollywood, FL
(US)(21) Appl. No.: **12/898,364**(22) Filed: **Oct. 5, 2010****Related U.S. Application Data**(60) Provisional application No. 61/248,746, filed on Oct.
5, 2009.(57) **ABSTRACT**

A case for a portable media player includes a holder for the portable media player and a rear wall having at least one handle movable between a closed position for storage and an open position for engagement by a finger of a user operating the portable media player. Two handles may be provided with respective insertion and engagement openings formed therein for the finger of the user. The handle may be cut out of the rear wall, may be formed in one piece with the rear wall, may move freely back and forth between the open and closed positions at a living hinge and may be flush with the rear wall in the closed position.





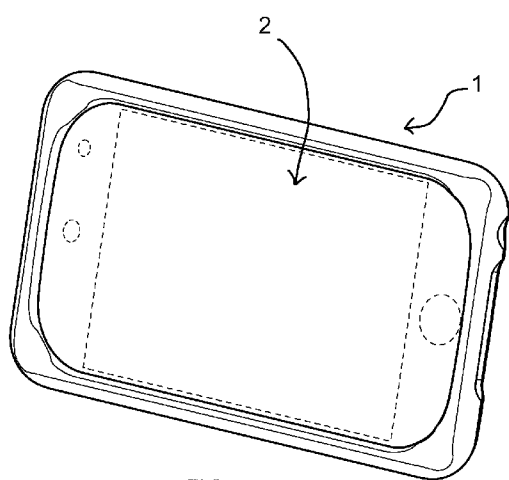


FIG. 7

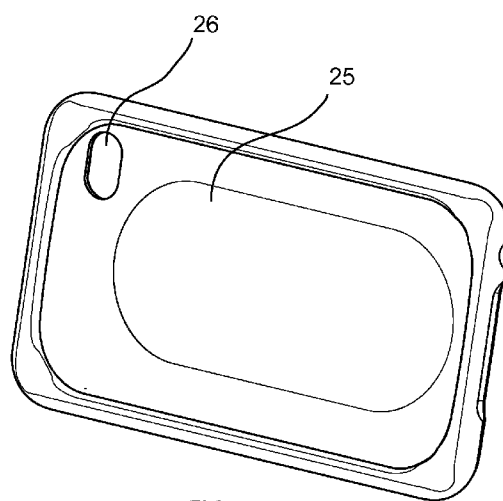


FIG. 8

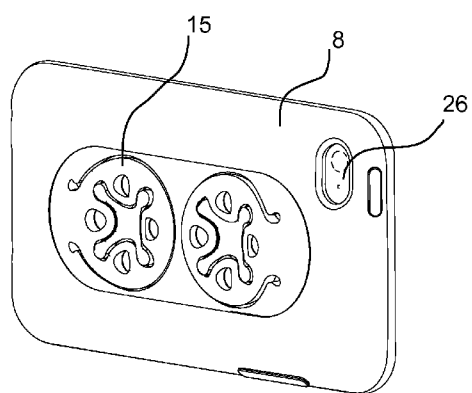
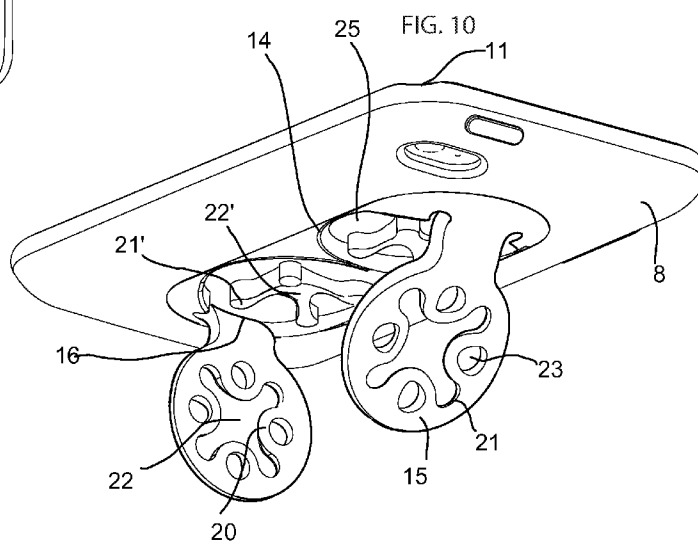


FIG. 9



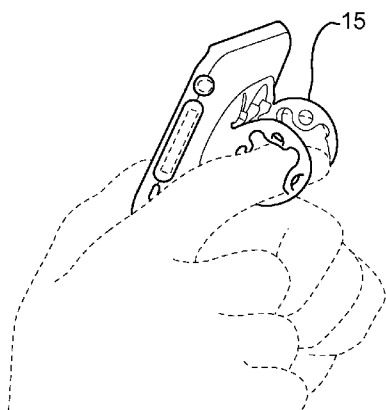


FIG. 11

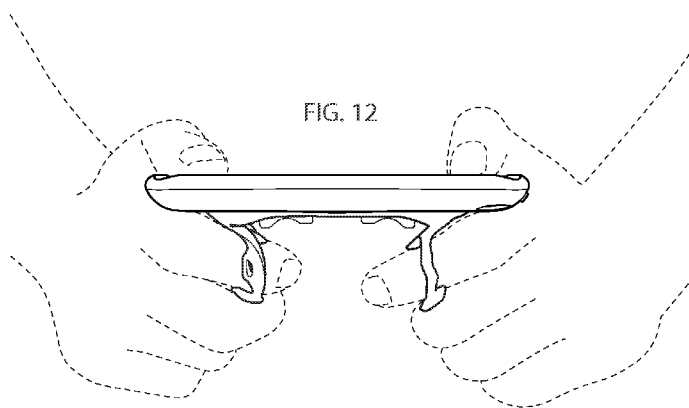


FIG. 12

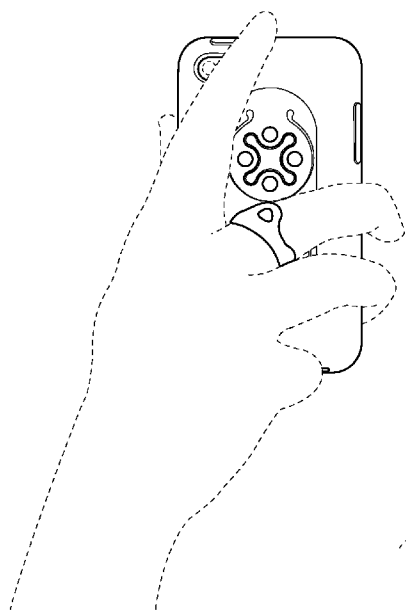


FIG. 13

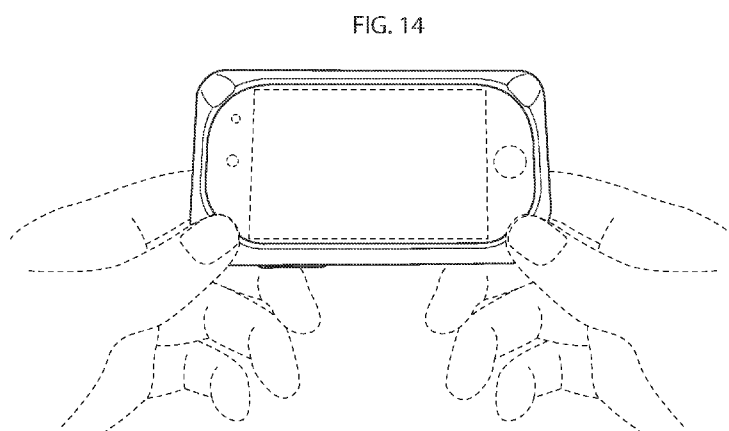


FIG. 14

CASE FOR PORTABLE MEDIA PLAYER WITH INTEGRAL HANDLES

CROSS-REFERENCE TO RELATED APPLICATION

[0001] This application claims the priority of copending U.S. Provisional Patent Application No. 61/248,746, filed Oct. 5, 2009 under 35 USC 119(e) and fully incorporates the contents thereof by reference herein.

BACKGROUND OF THE INVENTION

[0002] 1. Field of the Invention

[0003] The invention relates to a case for a portable media player, such as the I-pod Touch®. However, the case may be used for a game player, a video player, an audio player, a mobile telephone, a game controller or any other such device.

[0004] 2. Description of the Related Art

[0005] Portable media players must be held with the fingers of one or both hands, but also require the use of the fingers to operate the portable media player. It is therefore difficult to simultaneously hold and operate such a device, especially while playing a game.

[0006] Prior art cases, which are used to protect the portable media player from shock and soiling, require the use of the fingers to hold the device as well.

BRIEF SUMMARY OF THE INVENTION

[0007] It is accordingly an object of the invention to provide a case for a device such as a portable media player, which overcomes the hereinafore-mentioned disadvantages of the heretofore-known cases of this general type and which permits such devices to be held by only one or two fingers so as to allow the greatest possible freedom of use for the other fingers.

[0008] With the foregoing and other objects in view there is provided, in accordance with the invention, a case for a device such as a portable media player. The case comprises a holder, such as walls and corners, for the portable media player and a rear wall having at least one handle movable between a closed position for storage and an open position for engagement by a finger of a user operating the portable media player. The handle is configured to be engaged by only one finger of one hand to permit operation of the portable media player. Alternatively, two handles may each be configured to be engaged by only one finger of a respective hand to permit operation of the portable media player. In this way, only one or two fingers are needed to hold the device while freeing the other fingers to operate the device or perform any other function not related to the device.

[0009] In accordance with another feature of the invention, the at least one handle is formed in one piece with the rear wall, moves freely back and forth between the open and closed positions at a living hinge between the at least one handle and the rear wall and is flush with the rear wall in the closed position. The handle may be cut out of the rear wall leaving the living hinge remaining therebetween. The handle or handles are therefore unobtrusive when closed.

[0010] In accordance with a further feature of the invention, the at least one handle has an insertion and engagement opening formed therein for the finger of the user, which may have a plurality of projections. This structure provides secure engagement and manipulation of the case and the device held therein with just one finger.

[0011] In accordance with a concomitant feature of the invention, an insert is configured to be contacted by the portable media player at a front side of the case and adjacent the at least one handle at a rear side of the case. In this way, the back of the portable media player cannot be touched, soiled or damaged through the cutout or cutouts when operating the handle or handles.

[0012] Other features which are considered as characteristic for the invention are set forth in the appended claims.

[0013] Although the invention is illustrated and described herein as embodied in a case for portable media player with integral handles, it is nevertheless not intended to be limited to the details shown, since various modifications and structural changes may be made therein without departing from the spirit of the invention and within the scope and range of equivalents of the claims.

[0014] The construction of the invention, however, together with additional objects and advantages thereof will be best understood from the following description of the specific embodiment when read in connection with the accompanying drawings.

BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING

[0015] FIG. 1 is a diagrammatic, front-elevational view of a case according to the invention, in which a portable media player is disposed;

[0016] FIGS. 2, 3 and 4 are respective right side-elevational, rear-elevational and left side-elevational views of the case showing integral handles thereof in a closed, storage position, flush with the back of the case;

[0017] FIGS. 5 and 6 are respective bottom-plan and top-plan views of the case;

[0018] FIGS. 7 and 8 are front-perspective views respectively showing the case with and without a portable media player disposed therein;

[0019] FIGS. 9 and 10 are rear-perspective views respectively showing the case with the handles in the closed or storage position and the open or operating position;

[0020] FIGS. 11 and 12 are perspective views showing the case with the handles in the open or operating position, being engaged by fingers of a user of the case and portable media player;

[0021] FIG. 13 is a perspective view of the case being engaged by one finger of a user of the case and portable media player; and

[0022] FIG. 14 is a front-perspective view of the case containing the portable media player with the fingers of the user engaging the handles in a non-illustrated manner.

DETAILED DESCRIPTION OF THE INVENTION

[0023] Referring now to the figures of the drawing in detail and first, particularly, to FIG. 1 thereof, there is seen a case 1 in which a portable media player 2, such as an I-pod Touch, is disposed to provide protection from shock and soiling. It is understood that the device 2 may be a mobile phone, game controller or any other device which is to be held by one or both hands during operation. The case 1 may be made of silicone, although other flexible, plastically-deformable materials are suitable as well. The case has side walls 4, 5, a bottom wall 6 and a top wall 7 in which openings are formed, as shown, for exposing and providing access to sockets for charging plugs and ear bud plugs, etc., as well as a rear wall 8.

The portable media player 2, which is generally rectangular, has a screen 9 and a portion 10 outside the screen. The corners of the portion 10 are engaged behind corners 12 of the case 1 for holding the portable media player 2 in place. The corners 12 have depressions 11 to aid in holding the player 2 and gripping the case.

[0024] FIGS. 2-5 and especially FIG. 3 show that handles 15 are partially cut out of the rear wall 8 at a dividing line or cutout 14, leaving a live or living hinge 16 between the handles 15 and the rear wall 8. The handles 15 are disposed within a racetrack-shaped portion 18 of the rear wall 8 and are shown in their closed or storage position in FIGS. 2-5. The handles 15 themselves have finger grips or projections 20 formed by star-shaped recesses 21. Holes 23 may be formed within the finger grips or projections 20. Although four finger grips or projections 20 are shown for each handle 15, any larger or smaller number may be used. The finger grips or projections 20 define an insertion and engagement opening 22 for insertion, engagement and gripping a finger of a user. When the handles 15 are in the closed position, as shown in FIG. 3, a plug 22' is inserted into the opening 22 to keep the handles in the closed position. The plug 22' includes knobs 21' inserted into the recesses 21.

[0025] FIG. 7 shows the portable media player 2 disposed within the case 1, whereas FIG. 8 shows the same perspective view without the portable media player 2. It may therefore be seen that an insert 25 is disposed within the walls 4-7 and has an opening 26 formed therein. The opening 26 may be used for pushing the portable media player 2 out of the case 1 with the finger tip and/or for accessing a port in the player 2. The walls 4-7, the corners 12 and the insert 25 may be collectively referred to as a holder for the portable media player.

[0026] FIGS. 9 and 10 show the case 1 from the rear, with the handles 15 in the closed or storage position in FIG. 9 and in the open or operating position in FIG. 10. The back of the insert 25 is seen through the cutout 14 for the handles. The plug 22' for mating with the opening 22 and having the knobs 21' for mating with the recesses 21 to keep the handles in the closed position, can be clearly seen in FIG. 10. Elements 21, 22, 21', 22' constitute means for keeping the handles in the closed or storage position.

[0027] FIGS. 11 and 12 show hands of a user, in which each index finger is inserted into and gripped by the insertion and engagement opening 22 of a respective handle 15. FIG. 13 shows the case 1 being engaged by only one index finger in one insertion and engagement opening 22 of one handle 15. It thus becomes clear that the case may be provided with only one handle, since that is sufficient to hold the case and operate the player. Finally, FIG. 14 shows how a portable media player 2 is used in the case 1. One or both index fingers may engage a respective handle at the back of the case, allowing

the other fingers, especially the thumbs, to be free for operating the portable media player 2. The handles can also each be grasped between the thumb and index finger or middle finger of one hand, instead of inserting the finger into the opening 22. The thumb and finger touch through the opening 22 for a secure grip.

1. A case for a portable media player, the case comprising:
a holder for the portable media player; and
a rear wall having at least one handle movable between a closed position for storage and an open position for engagement by a finger of a user operating the portable media player.

2. The case according to claim 1, wherein said at least one handle is formed in one piece with said rear wall, moves freely back and forth between said open and closed positions at a living hinge between said at least one handle and said rear wall and is flush with said rear wall in said closed position.

3. The case according to claim 1, wherein said at least one handle has an insertion and engagement opening formed therein for the finger of the user.

4. The case according to claim 3, wherein said insertion and engagement opening is formed by a plurality of projections of said at least one handle.

5. The case according to claim 1, wherein said at least one handle is configured to be engaged by only one finger of one hand to permit operation of the portable media player.

6. The case according to claim 1, wherein said at least one handle is two handles each being configured to be engaged by only one finger of a respective hand to permit operation of the portable media player.

7. The case according to claim 1, wherein said holder includes walls partially surrounding the portable media player.

8. The case according to claim 1, wherein said holder includes corners covering portions of the portable media player.

9. The case according to claim 1, which further comprises an insert configured to be contacted by the portable media player at a front side of said case and adjacent said at least one handle at a rear side of said case.

10. The case according to claim 1, wherein said at least one handle is cut out of said rear wall leaving a living hinge remaining therebetween.

11. The case according to claim 1, wherein the portable media player is selected from the group consisting of a game player, a video player, an audio player, a mobile telephone and a game controller.

12. The case according to claim 1, which further comprises means for keeping said handles in said closed or storage position.

* * * * *