



US 20150008687A1

(19) **United States**  
(12) **Patent Application Publication**  
**Lindsey**

(10) **Pub. No.: US 2015/0008687 A1**  
(43) **Pub. Date: Jan. 8, 2015**

(54) **PORTABLE ELECTRONIC DEVICE HANDLER**

(52) **U.S. Cl.**  
CPC ..... *A45F 5/10* (2013.01)  
USPC ..... **294/137**

(71) Applicant: **Mitchell E. Lindsey**, North Chicago, IL (US)

(57) **ABSTRACT**

(72) Inventor: **Mitchell E. Lindsey**, North Chicago, IL (US)

(21) Appl. No.: **14/325,726**

(22) Filed: **Jul. 8, 2014**

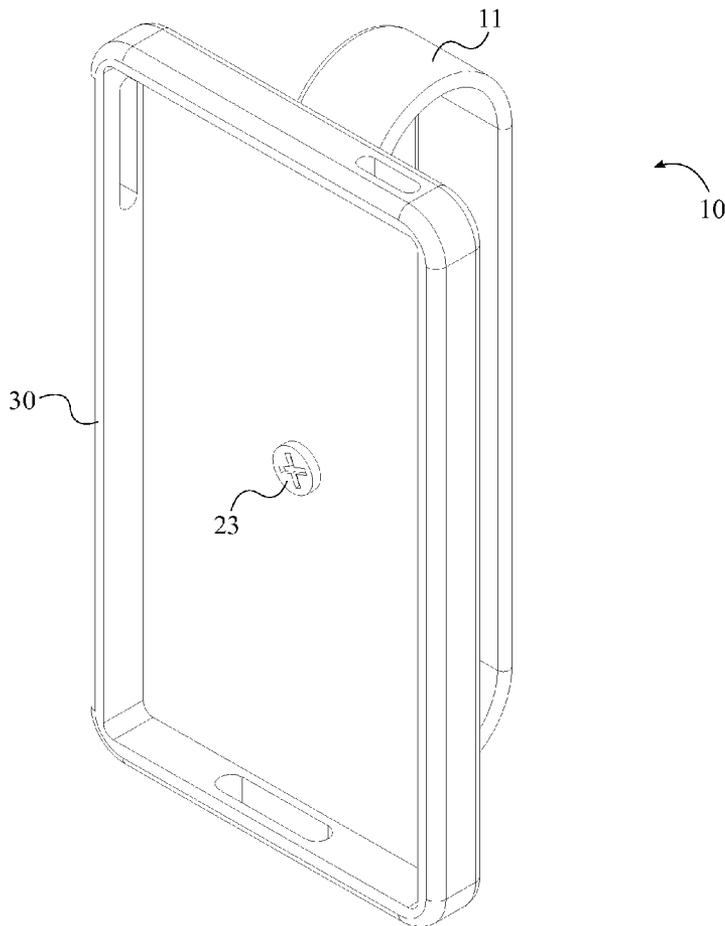
**Related U.S. Application Data**

(60) Provisional application No. 61/957,598, filed on Jul. 8, 2013.

A portable electronic device handler that is used to support a portable electronic device within a user's hand. The portable electronic device handler includes a device restraint that is connected to a device case or back casing of an electronic device by a swivel mount. The device restraint provides a means for securing the electronic device to a user's hand, while the swivel mount allows the device restraint to rotate three hundred sixty degrees. This allows the user to manipulate the portable electronic device at any angle within his or her hand without the concern of dropping the portable electronic device. The device restraint has a handle mount and a handle, preferably a nylon or leather strap, forming a loop through which the user can position their fingers. The handle mount supports and provides structure for the handle.

**Publication Classification**

(51) **Int. Cl.**  
*A45F 5/10* (2006.01)



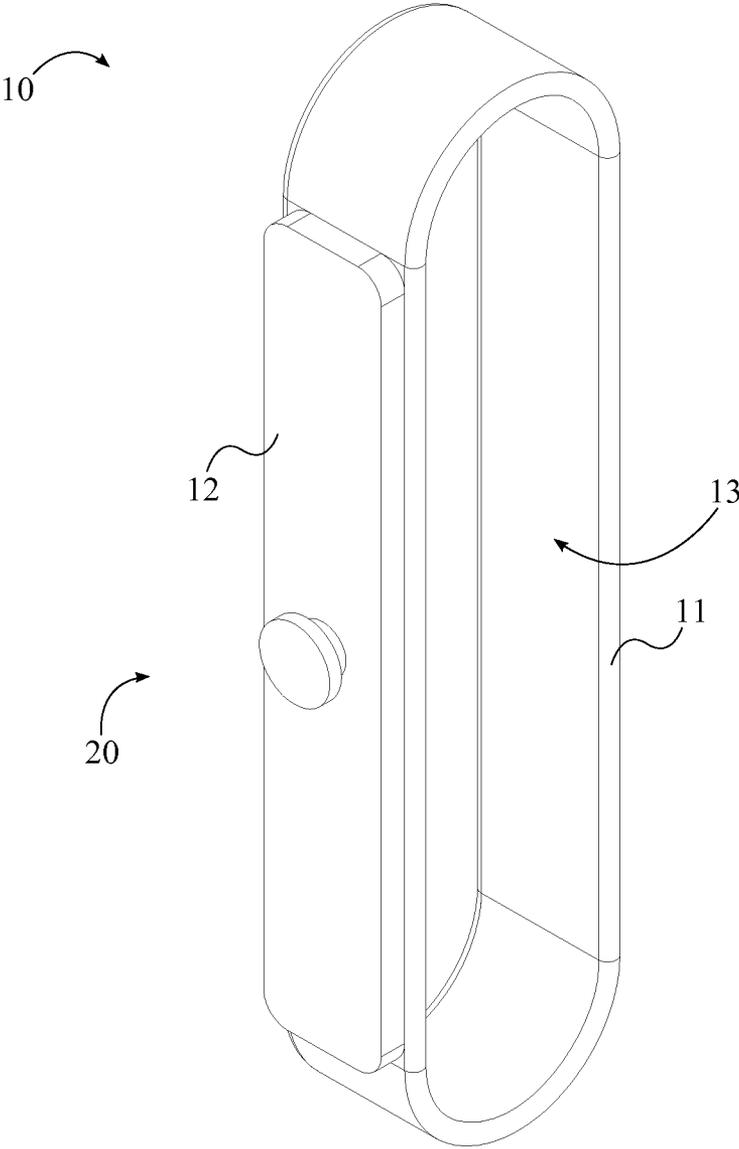


FIG. 1

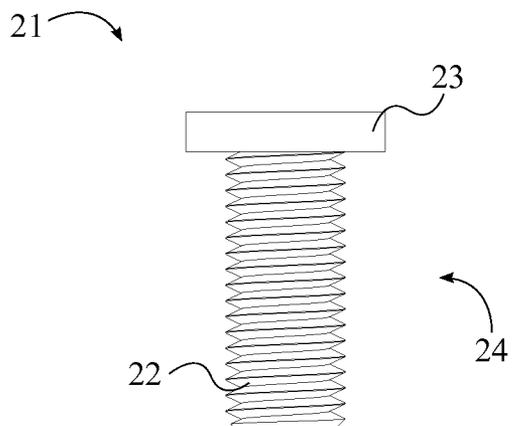


FIG. 2

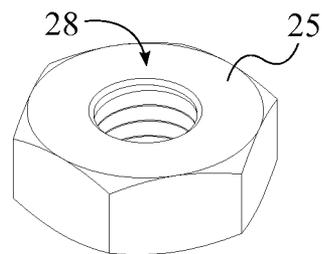


FIG. 3

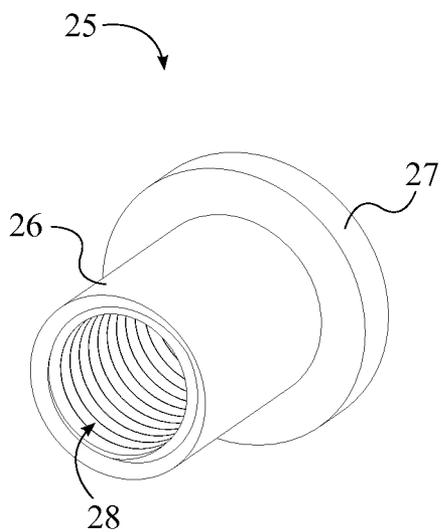


FIG. 4

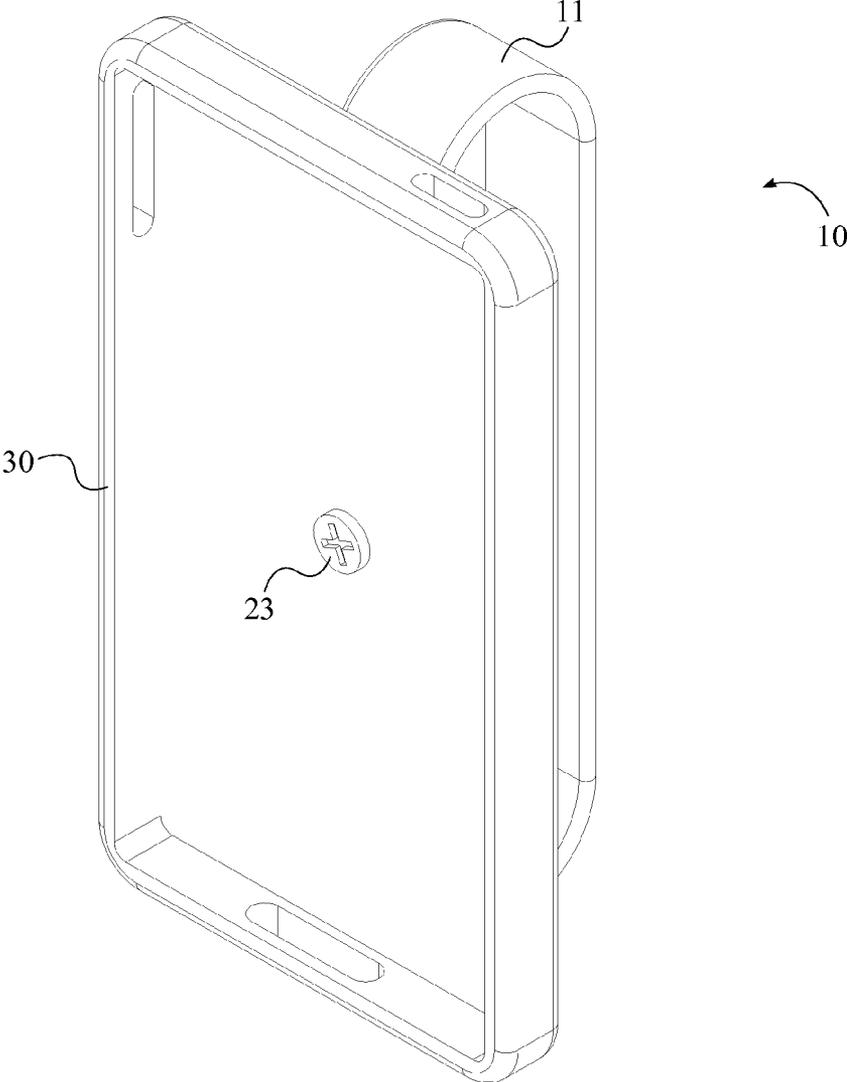


FIG. 5

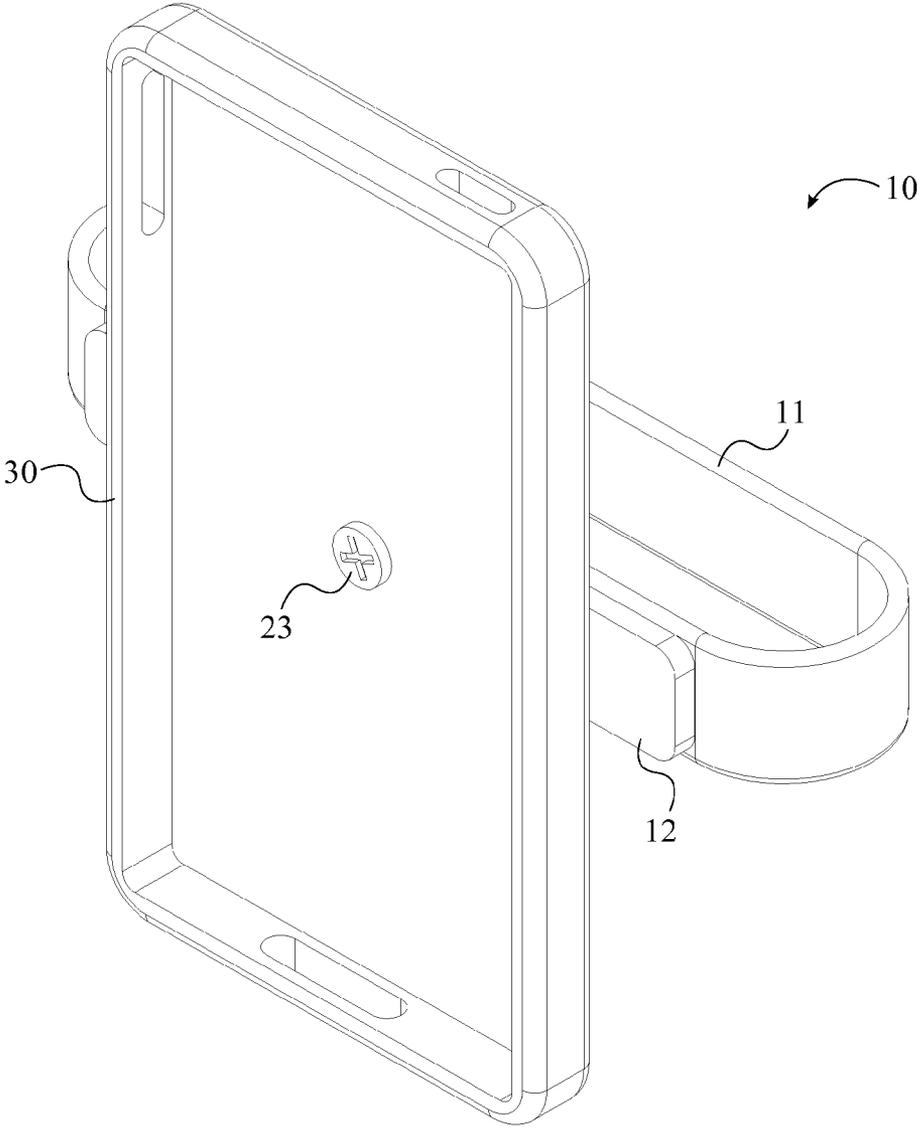


FIG. 6

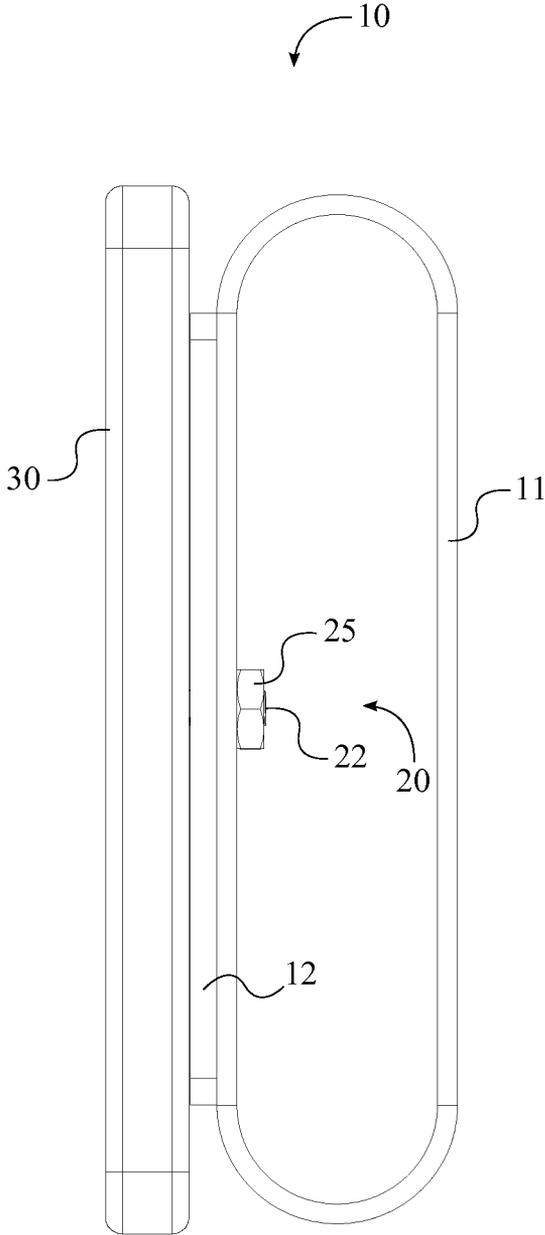


FIG. 7

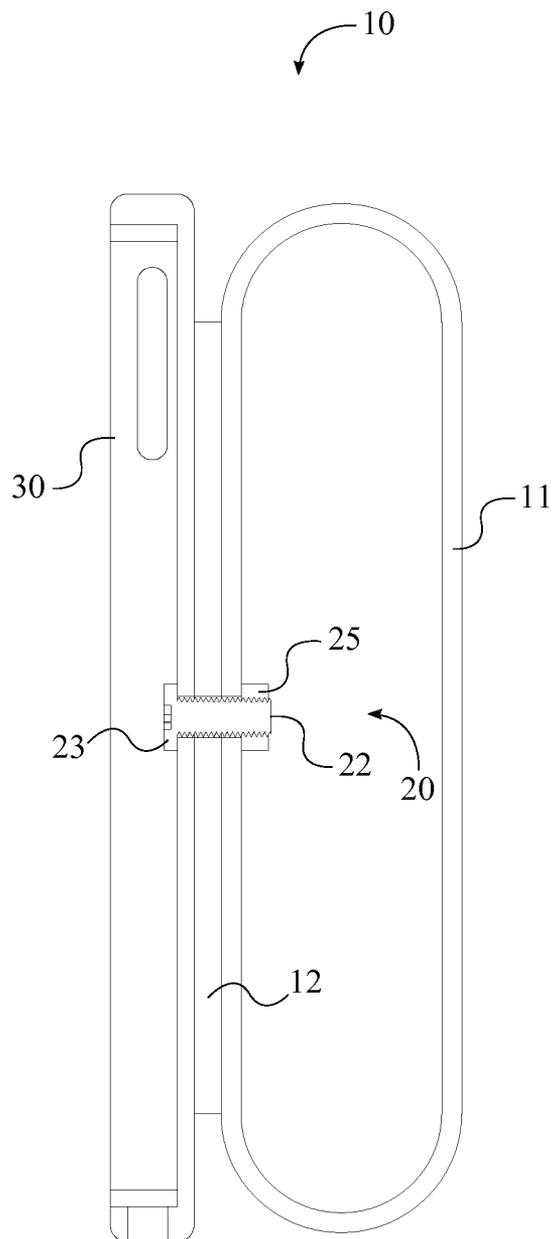


FIG. 8

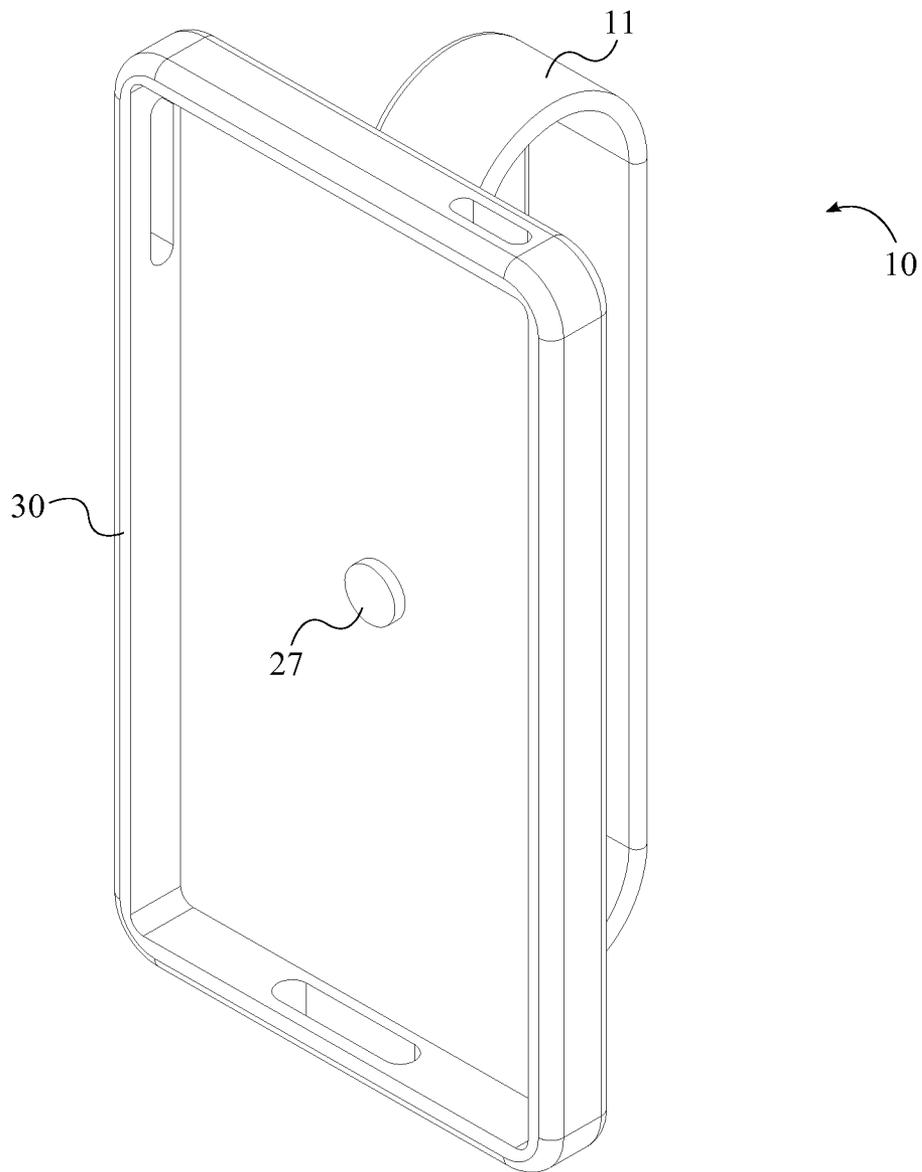


FIG. 9

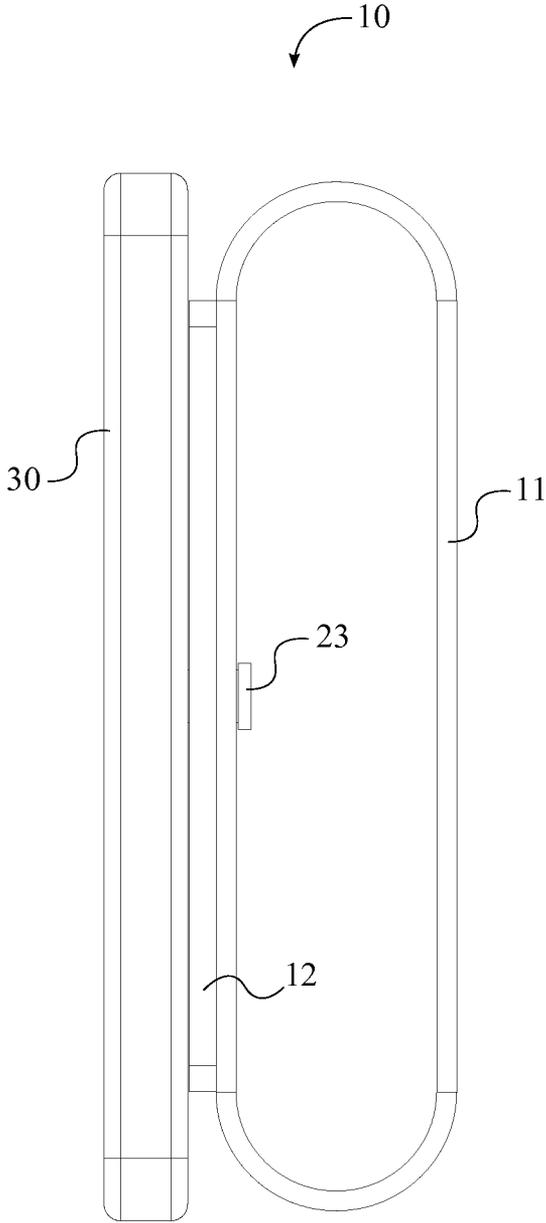


FIG. 10

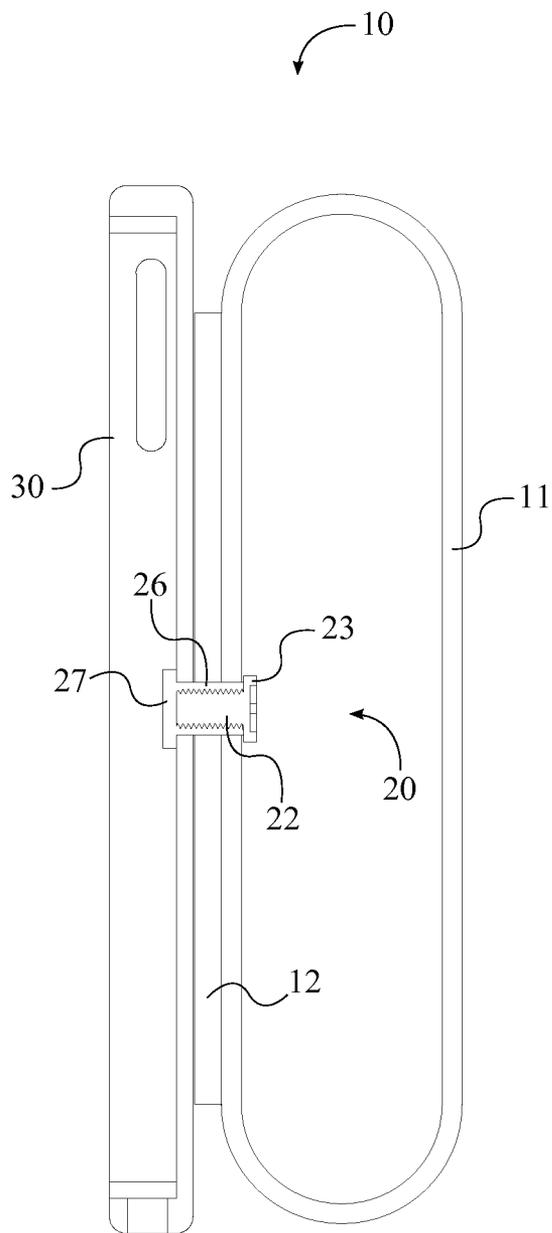


FIG. 11

**PORTABLE ELECTRONIC DEVICE HANDLER**

[0001] The current application claims a priority to the U.S. Provisional Patent application Ser. No. 61/957,598 filed on Jul. 8, 2013.

**FIELD OF THE INVENTION**

[0002] The present invention relates generally to electronic device accessories. More specifically, the present invention is an apparatus for securely holding and manipulating an electronic device.

**BACKGROUND OF THE INVENTION**

[0003] The use of electronic devices has become a staple of many people's lives. Whether for business or pleasure, most individual's will use a portable electronic device, such as a smartphone or tablet, on a daily basis. The average portable electronic device can be quite costly and with the almost daily use most receive, the opportunity for accidental damage can be very high. Most commonly such accidental damage is incurred as a result of dropping the portable electronic device.

[0004] In order to protect against damages incurred from dropping a portable electronic device, it is common for individuals to utilize a device case to protect the portable electronic device. Such device cases are often specially designed to absorb impact forces, thus reducing the impact force directed on the portable electronic device. While these device cases can be effective, they cannot fully guarantee the protection of the portable electronic device. For instance, many smartphone or tablet cases do not offer a screen cover, leaving the front of the smartphone or tablet, and arguably most fragile part of the portable electronic device, susceptible to damage. Especially if the smartphone or tablet is dropped on an uneven surface.

[0005] Some device cases are constructed from rubberized materials in an attempt to increase the user's grip while holding the portable electronic device. However, due to sweaty palms or greasy fingers, the rubberized material is not always effective. Additionally, any event causing the user to open his or her grip will result in the portable electronic device being dropped.

[0006] Therefore it is the object of the present invention to provide a portable electronic device handler that is used to support a portable electronic device within a user's hand. The portable electronic device handler includes a device restraint that is connected to a device case or back casing of an electronic device by a swivel mount. The device restraint provides a means for securing the electronic device to a user's hand, while the swivel mount allows the device restraint to rotate three hundred sixty degrees. This allows the user to manipulate the portable electronic device at any angle within his or her hand without the concern of dropping the portable electronic device.

**BRIEF DESCRIPTION OF THE DRAWINGS**

- [0007] FIG. 1 is a perspective view of the present invention.
- [0008] FIG. 2 is a front elevational view of the first fastener.
- [0009] FIG. 3 is a perspective view of the second fastener.
- [0010] FIG. 4 is a perspective view of the first fastener having a second fastener shaft and a second fastener head.
- [0011] FIG. 5 is a perspective view of the present invention connected to a device case;

[0012] FIG. 6 is a perspective view thereof, displaying the rotational ability of the device restraint.

[0013] FIG. 7 is a right side elevational view of the present invention connected to the device case.

[0014] FIG. 8 is a right side sectional view of the present invention connected to the device case.

[0015] FIG. 9 is a perspective view of the present invention connected to a device case, wherein the second fastener has a second fastener shaft and a second fastener head.

[0016] FIG. 10 is a right side elevational view of the present invention connected to the device case, wherein the second fastener has a second fastener shaft and a second fastener head.

[0017] FIG. 11 is a right side sectional view of the present invention connected to the device case, wherein the second fastener has a second fastener shaft and a second fastener head.

**DETAIL DESCRIPTIONS OF THE INVENTION**

[0018] All illustrations of the drawings are for the purpose of describing selected versions of the present invention and are not intended to limit the scope of the present invention.

[0019] The present invention is a portable electronic device handler that can be retrofitted onto any existing electronic device or device case 30. In reference to FIG. 1, the present invention comprises a device restraint 10 and a swivel mount 20. The device restraint 10 provides a means for a user to securely hold the electronic device and is rotatably connected to the electronic device or the device case 30 through the swivel mount 20, as depicted by FIG. 5-6. In this way, the device restraint 10 can be held in a fixed position in the user's hand, while the swivel mount 20 allows the electronic device or the device case 30 to rotate freely in the hand of the user. The electronic device can readily be pivoted within the hand of the user without the concern of dropping the electronic device.

[0020] In reference to FIG. 1, the device restraint 10 comprises a handle 11 and a handle mount 12. In the preferred embodiment of the present invention, the handle 11 is a flexible piece of material that is formed into a loop 13, such that a user may position his or her fingers through the loop 13. Ideally, the handle 11 is constructed from nylon or leather, however, it is possible for any other material to be used to construct the handle 11. The handle 11 is adjacently connected to the handle mount 12 and is positioned along the handle mount 12. The handle mount 12 provides rigidity and structure to the handle 11, such that the handle 11 remains adjusted in an elongated position, wherein the loop 13 is oval in shape as to receive multiple fingers.

[0021] In reference to FIG. 2-4, the swivel mount 20 comprises a first fastener 21 and a second fastener 25. The device restraint 10 is rotatably connected to the swivel mount 20, wherein the first fastener 21 traverses through the device restraint 10; more specifically the handle mount 12. Depending on the formation of the handle 11, the first fastener 21 may also traverse through the handle 11. The second fastener 25 engages the first fastener 21 in order to secure the swivel mount 20 to the device restraint 10. In the preferred embodiment of the present invention, the swivel mount 20 is centrally positioned about the handle mount 12, as shown in FIG. 1, in order to provide symmetrical rotation of the device restraint 10 to provide optimal maneuverability of the electronic device.

[0022] In reference to FIG. 2, the first fastener 21 comprises a first fastener shaft 22, a first fastener head 23, and a male threading 24. The first fastener shaft 22 is concentrically connected to the first fastener head 23, while the male threading 24 is positioned along the first fastener 21 strap. The male threading 24 may be positioned either partially or fully along the first fastener shaft 22. The first fastener shaft 22 traverses through the device restraint 10, more specifically the handle mount 12, and is cylindrical such that the device restraint 10 can rotate three hundred sixty degrees about the first fastener 21.

[0023] The second fastener 25 comprises a female threading 28, wherein the female threading 28 is designed to receive the male threading 24 of the first fastener 21. In reference to FIG. 7-8, the first fastener 21 is positioned through the device case 30, such that the first fastener shaft 22 traverses outwards, away from the back surface of the device case 30, while the first fastener head 23 prevents the first fastener 21 from fully traversing through the device case 30. The first fastener shaft 22 then traverses through the device restraint 10, wherein the handle mount 12 is positioned in between the device case 30 and the handle 11. The second fastener 25 is then threaded onto the first fastener 21, wherein the male threading 24 of the first fastener 21 engages the female threading 28 of the second fastener 25. It is also possible for the second fastener 25 to be connected to the first fastener 21 by means of a snap fit or similar connection.

[0024] In the preferred embodiment of the present invention, the second fastener 25 is a locknut, such that the second fastener 25 is only partially threaded along the first fastener shaft 22, wherein there is sufficient space between the second fastener 25 and the device case 30 for the device restraint 10 to freely rotate. The formation of the locknut may be provided in the design of the female threading 28 of the second fastener 25, such as in distorted thread nut, or provided through additional components, such as a nylon collar in a nyloc nut. It is also possible for the second fastener 25 to form any other type of locknut in addition to the embodiments previously described. The locknut design of the second fastener 25 prevents the second fastener 25 from being threaded too far onto the first fastener 21, such that the device restraint 10 becomes clamped between the second fastener 25 and the device case 30, wherein the device restraint 10 cannot freely rotate.

[0025] In an alternative embodiment of the present invention, the second fastener 25 further comprises a second fastener shaft 26 and a second fastener head 27, as shown in FIG. 4. Similar to the first fastener 21, the second fastener shaft 26 is concentrically connected to the second fastener head 27. The female threading 28 is positioned within the second fastener shaft 26 and positioned along the second fastener shaft 26. The female threading 28 may be positioned either partially or fully along second fastener shaft 26.

[0026] In reference to FIG. 9-11, the second fastener 25 is positioned through the device case 30, such that the second fastener shaft 26 traverses outwards, away from the back surface of the device case 30, while the second fastener head 27 prevents the second fastener 25 from fully traversing through the device case 30. The second fastener shaft 26 then traverses through the device restraint 10, more specifically the handle mount 12, wherein the handle mount 12 is positioned in between the device case 30 and the handle 11. The first fastener 21 is then positioned into the second fastener 25, wherein the first fastener shaft 22 is positioned into the second fastener shaft 26 and the male threading 24 engages the

female threading 28. It is also possible for the first fastener shaft 22 to be connected to the second fastener shaft 26 by means of a snap fit or similar connection.

[0027] As part of a retrofit kit, the present invention may further comprise a self tapping screw. The self tapping screw is used to create a hole through the device case 30 or the back casing of the electronic device, such that the swivel mount 20 can be connected to the device case 30 or electronic device respectively. The self tapping screw is first screwed through the device case 30 or back casing of the electronic device in one direction, and then screwed through the device case 30 or back casing of the electronic device in the opposite direction. In this way, a hole is bored through the device case 30 or the back casing of the electronic device through which the swivel mount 20 can be positioned and allowed to rotate.

[0028] Although the invention has been explained in relation to its preferred embodiment, it is to be understood that many other possible modifications and variations can be made without departing from the spirit and scope of the invention as hereinafter claimed.

What is claimed is:

1. A portable electronic device handler comprises:
  - a device restraint;
  - a swivel mount;
  - the swivel mount comprises a first fastener and a second fastener;
  - the device restraint being rotatably connected to the swivel mount;
  - the first fastener traversing through the device restraint; and
  - the second fastener engaging the first fastener.
2. The portable electronic device handler as claimed in claim 1 comprises:
  - the device restraint comprises an handle and a handle mount;
  - the handle being adjacently connected to the handle mount;
  - the handle being positioned along the handle mount;
  - the handle being formed into a loop; and
  - the first fastener traversing through the handle mount.
3. The portable electronic device handler as claimed in claim 2 comprises:
  - the swivel mount being centrally positioned about the handle mount.
4. The portable electronic device handler as claimed in claim 2 comprises:
  - the second fastener traversing through the handle mount; and
  - the first fastener being positioned into the second fastener.
5. The portable electronic device handler as claimed in claim 1 comprises:
  - the first fastener comprises a first fastener shaft and a first fastener head;
  - the first fastener shaft being concentrically connected to the first fastener head; and
  - the first fastener shaft traversing through the device restraint.
6. The portable electronic device handler as claimed in claim 5 comprises:
  - the first fastener further comprises a male threading; and
  - the male threading being positioned along the first fastener shaft.
7. The portable electronic device handler as claimed in claim 1 comprises:

the first fastener comprises a first fastener shaft;  
 the second fastener comprises a second fastener shaft and a second fastener head;  
 the second fastener shaft being concentrically connected to the second fastener head;  
 the second fastener shaft traversing through the device restraint; and  
 the first fastener shaft being positioned into the second fastener shaft.

**8.** The portable electronic device handler as claimed in claim 7 comprises:  
 the second fastener further comprises a female threading; the female threading being positioned within the second fastener shaft; and  
 the female threading being positioned along the second fastener shaft.

**9.** The portable electronic device handler as claimed in claim 1 comprises:  
 a device case;  
 the device restraint being rotatably connected to the device case through the swivel mount; and  
 the first fastener traversing through the device case.

**10.** The portable electronic device handler as claimed in claim 9 comprises:  
 the device restraint comprises an handle and a handle mount; and  
 the handle mount being positioned in between the handle and the device case.

**11.** The portable electronic device handler as claimed in claim 9 comprises:  
 the second fastener traversing through the device case; and  
 the first fastener being positioned into the second fastener.

**12.** The portable electronic device handler as claimed in claim 1 comprises:  
 the first fastener comprises a male threading;  
 the second fastener comprises a female threading; and  
 the male threading engaging the female threading.

**13.** A portable electronic device handler comprises:  
 a device restraint;  
 a swivel mount;  
 the device restraint comprises an handle and a handle mount;  
 the swivel mount comprises a first fastener and a second fastener;  
 the first fastener comprises a first fastener shaft and a first fastener head;  
 the handle being adjacently connected to the handle mount;  
 the handle being positioned along the handle mount;  
 the handle being formed into a loop;  
 the device restraint being rotatably connected to the swivel mount;  
 the swivel mount being centrally positioned about the handle mount;

the first fastener shaft being concentrically connected to the first fastener head;  
 the first fastener shaft traversing through the handle mount; and  
 the second fastener engaging the first fastener.

**14.** The portable electronic device handler as claimed in claim 13 comprises:  
 the second fastener traversing through the handle mount; and  
 the first fastener being positioned into the second fastener.

**15.** The portable electronic device handler as claimed in claim 13 comprises:  
 the first fastener further comprises a male threading; and  
 the male threading being positioned along the first fastener shaft.

**16.** The portable electronic device handler as claimed in claim 13 comprises:  
 the second fastener comprises a second fastener shaft and a second fastener head;  
 the second fastener shaft being concentrically connected to the second fastener head;  
 the second fastener shaft traversing through the handle mount; and  
 the first fastener shaft being positioned into the second fastener shaft.

**17.** The portable electronic device handler as claimed in claim 16 comprises:  
 the second fastener further comprises a female threading; the female threading being positioned within the second fastener shaft; and  
 the female threading being positioned along the second fastener shaft.

**18.** The portable electronic device handler as claimed in claim 13 comprises:  
 a device case;  
 the device restraint being rotatably connected to the device case through the swivel mount;  
 the first fastener shaft traversing through the device case; and  
 the handle mount being positioned in between the handle and the device case.

**19.** The portable electronic device handler as claimed in claim 18 comprises:  
 the second fastener traversing through the device case; and  
 the first fastener shaft being positioned into the second fastener.

**20.** The portable electronic device handler as claimed in claim 13 comprises:  
 the first fastener comprises a male threading;  
 the second fastener comprises a female threading; and  
 the male threading engaging the female threading.

\* \* \* \* \*