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(54) **APPARATUS AND METHODS FOR
CARRYING ELECTRONIC DEVICES**

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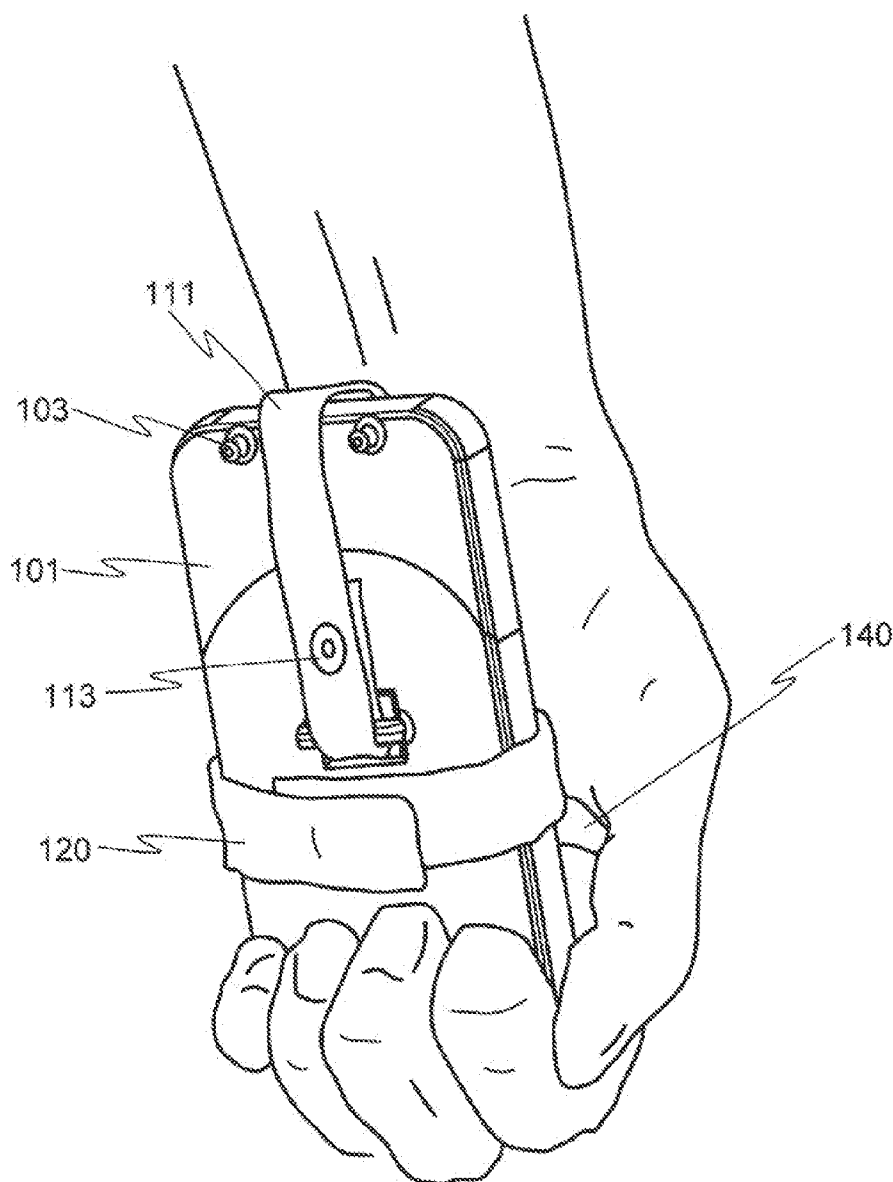
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(57) **ABSTRACT**

A system and method of carrying an electronic device that includes providing a swivel assembly comprising a swivel body and a swivel head rotatably mounted to the swivel body, the swivel assembly defining a strap passage; attaching the electronic device to the swivel assembly; providing a user attachment strap; inserting the user attachment strap to the strap passage; attaching the user attachment strap to a user; operating the electronic device while the swivel head is attached to the swivel body; and operating the electronic device while the swivel head is detached from the swivel body.



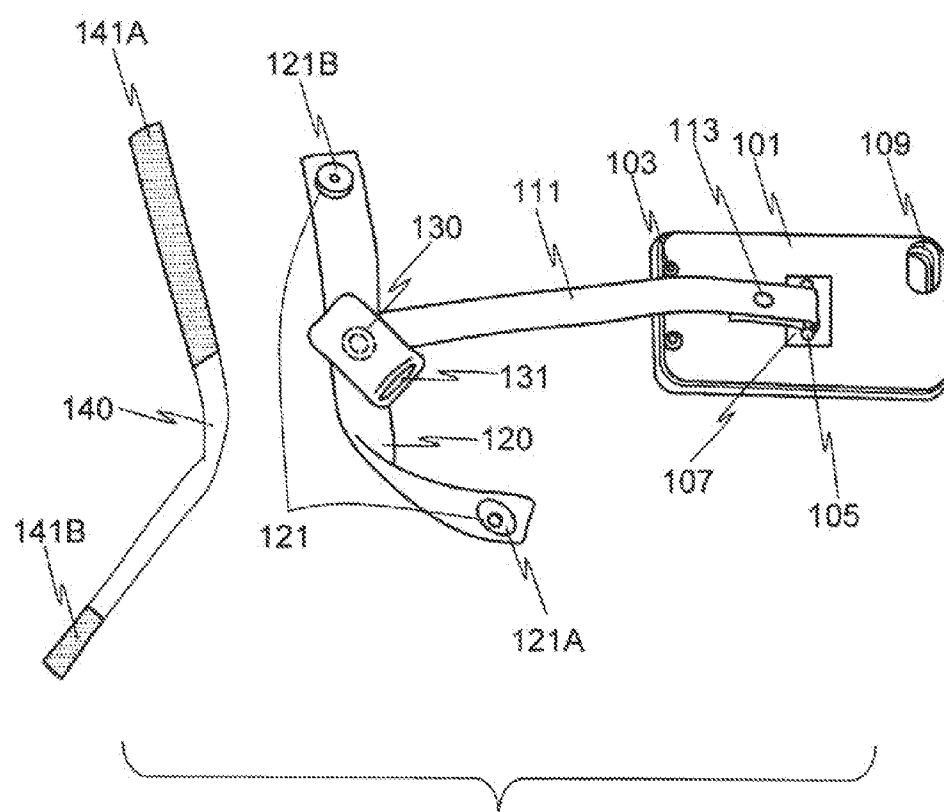


FIG. 1A

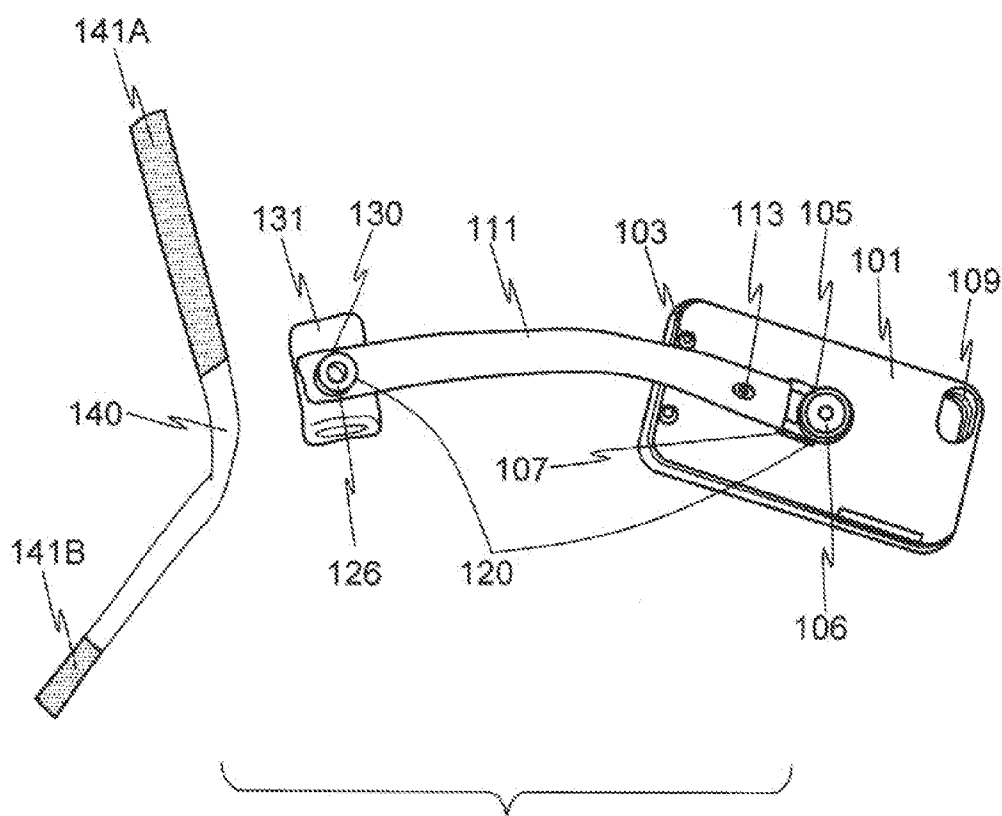
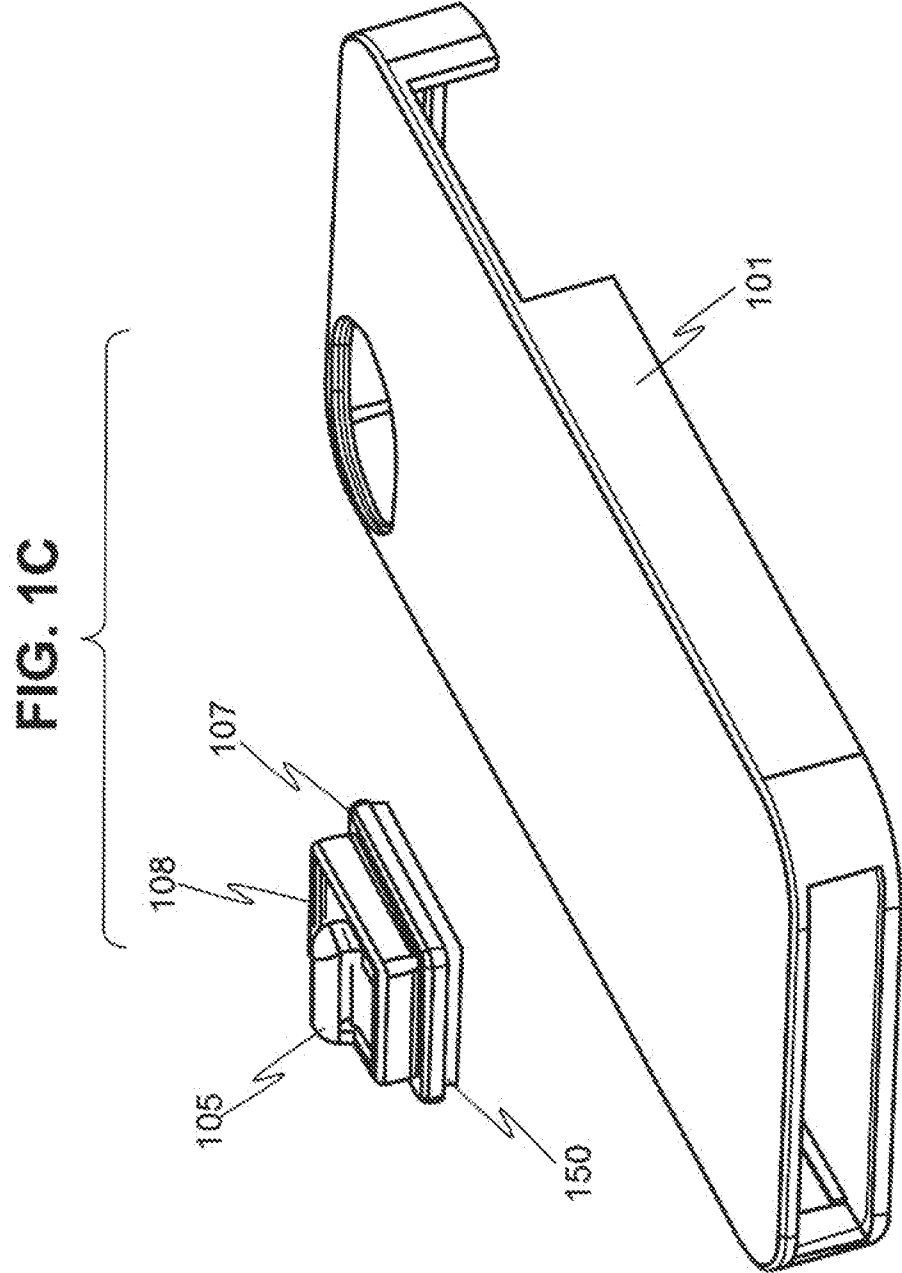
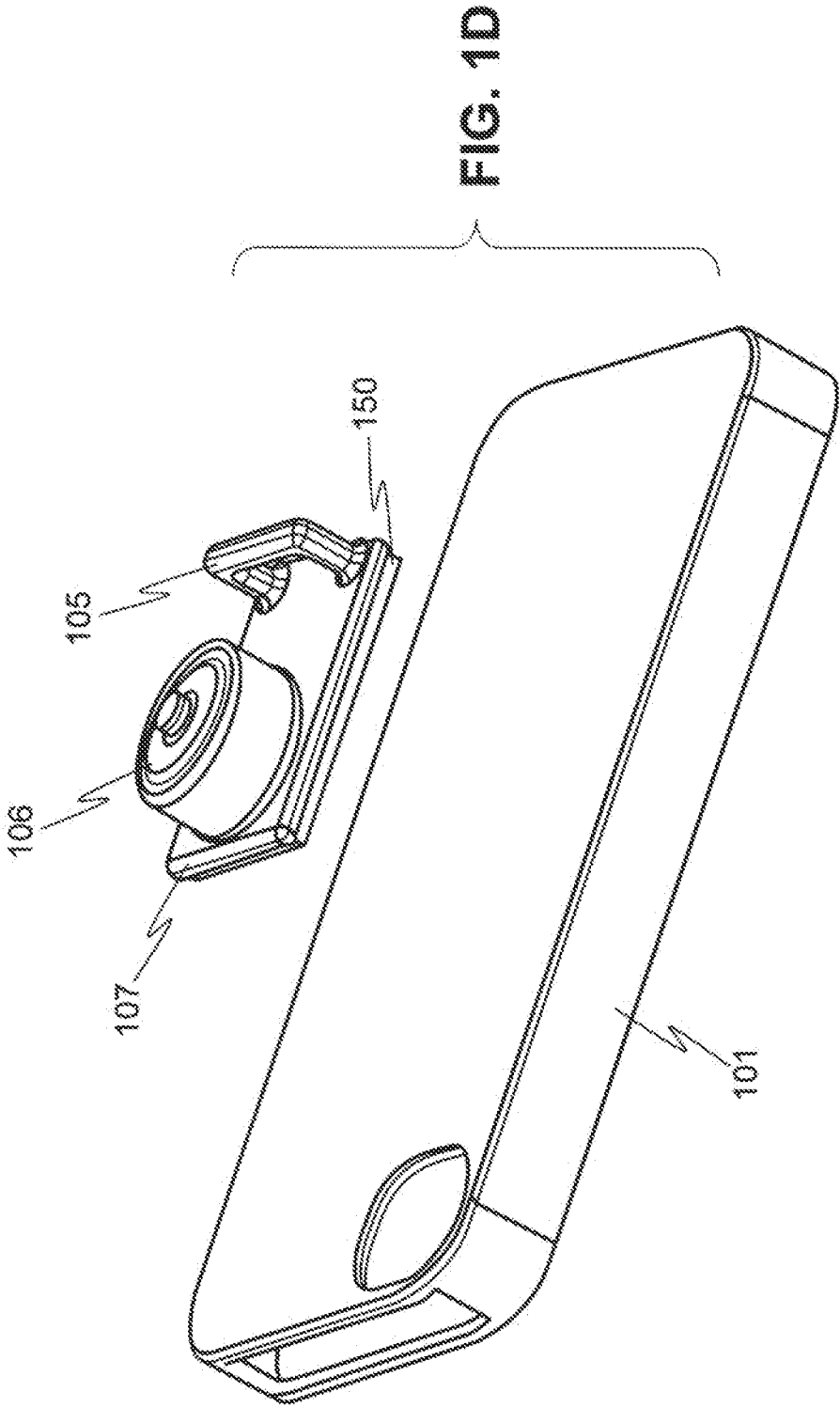


FIG. 1B





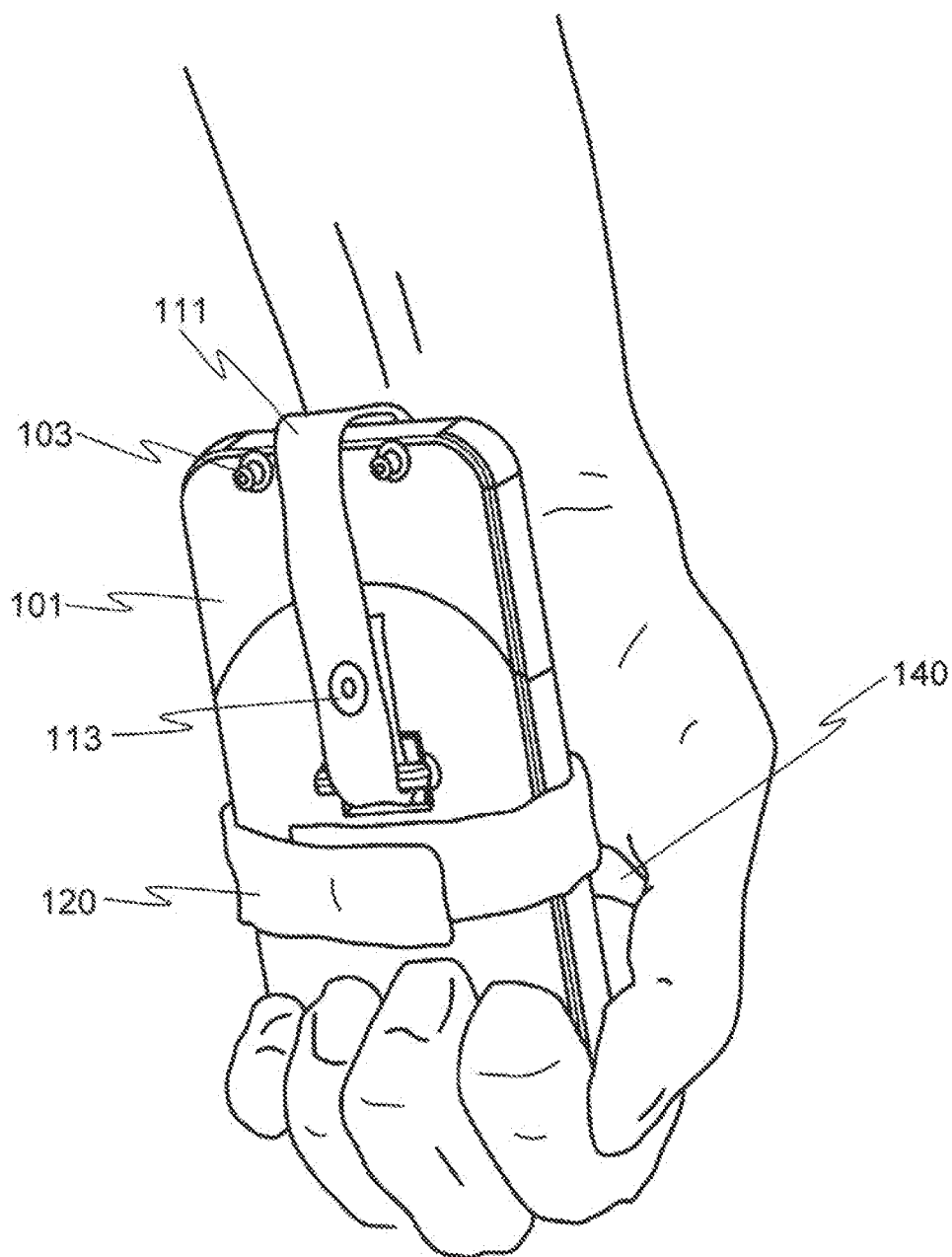


FIG. 2

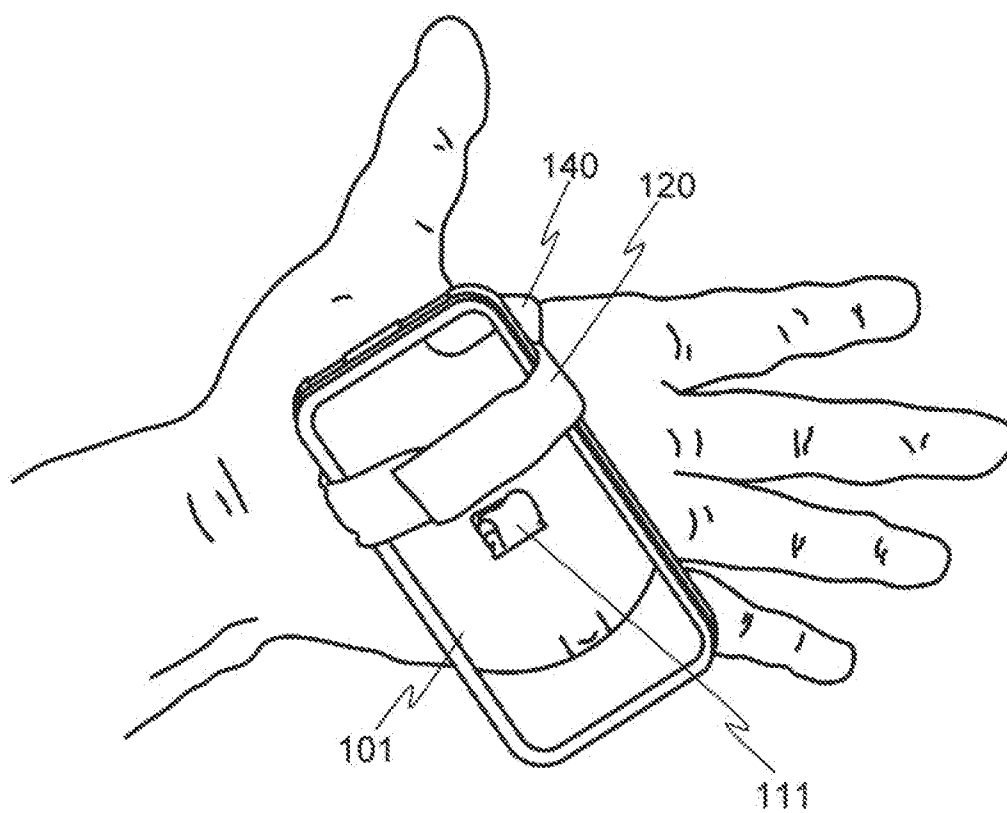


FIG. 3A

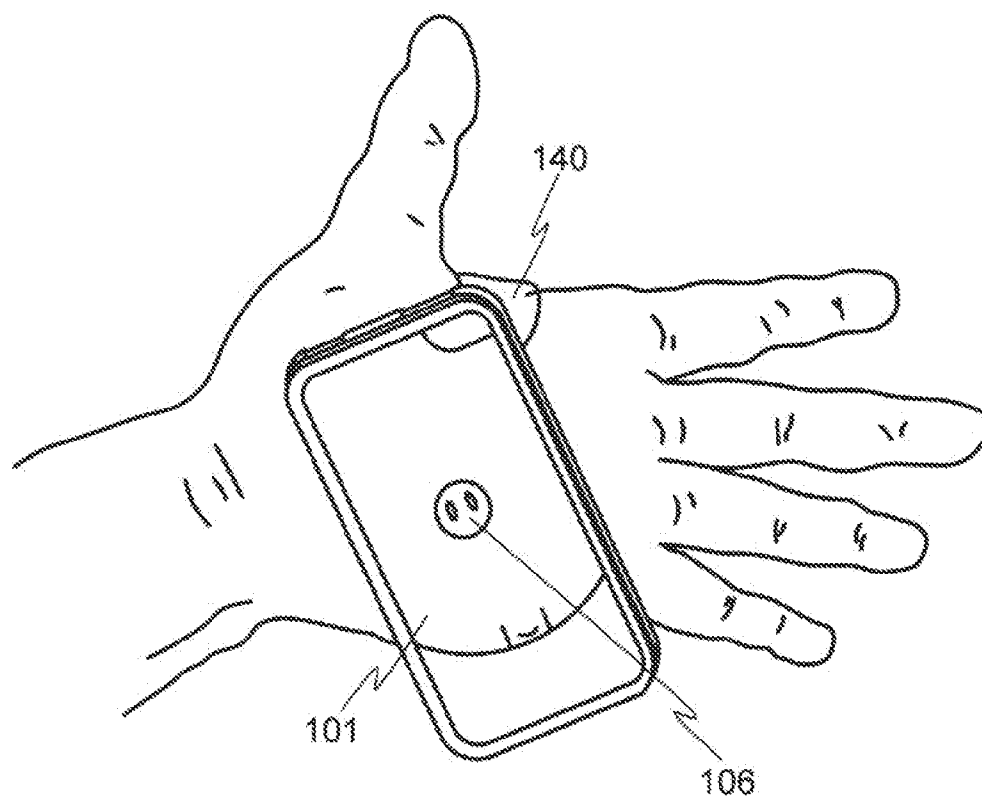


FIG. 3B

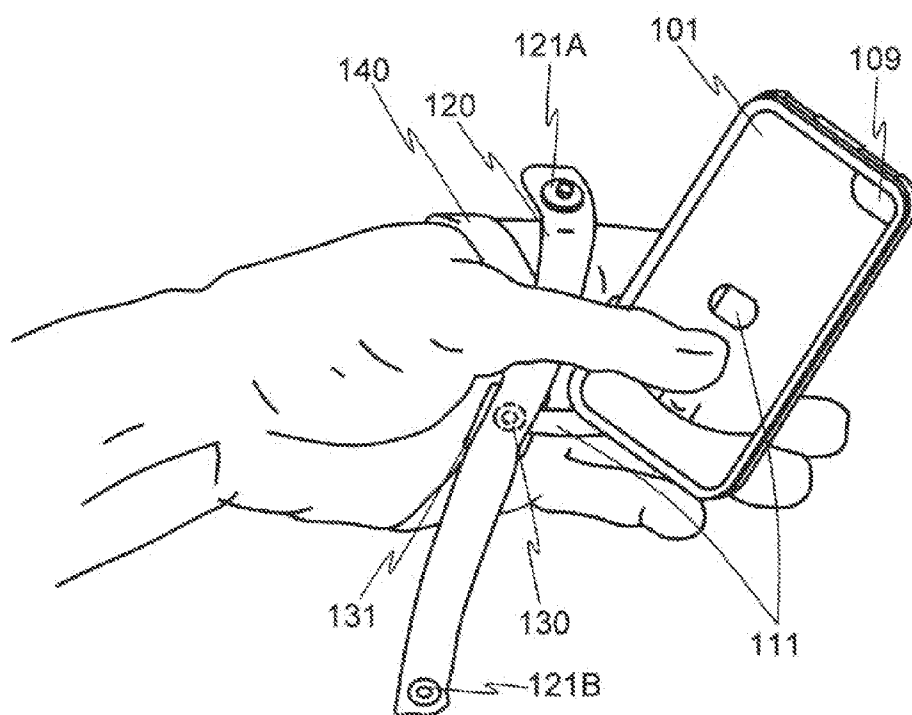


FIG. 4A

FIG. 4B

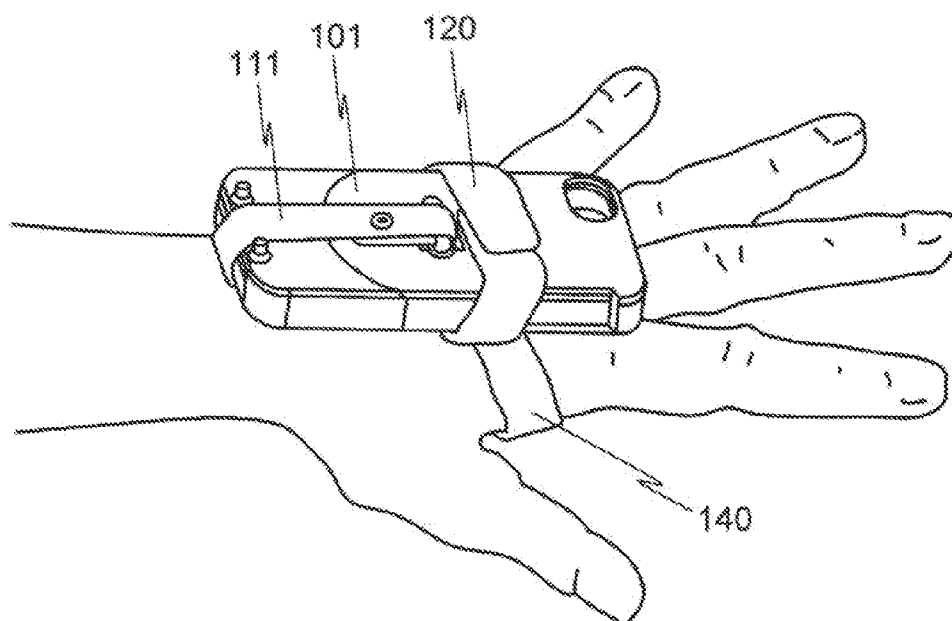


FIG. 5A

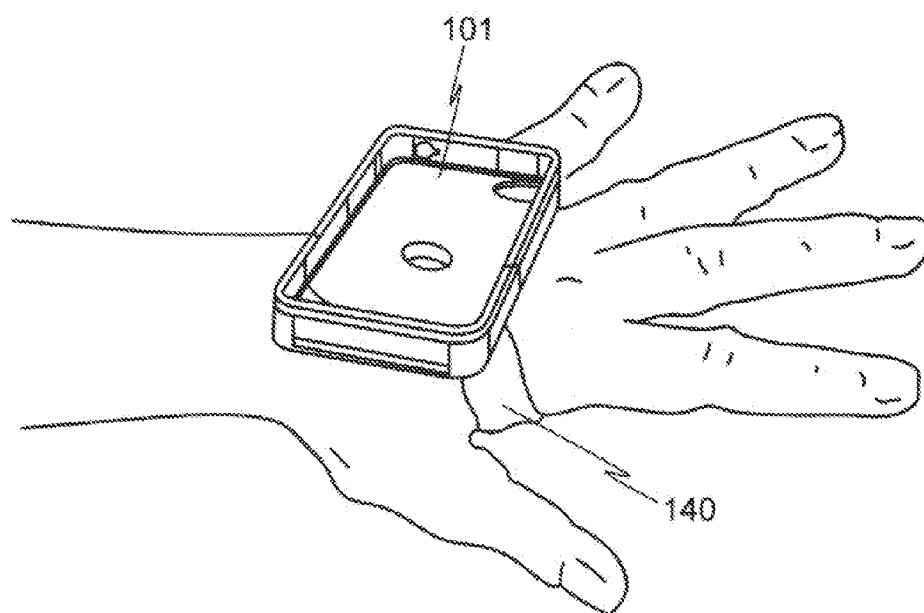


FIG. 5B

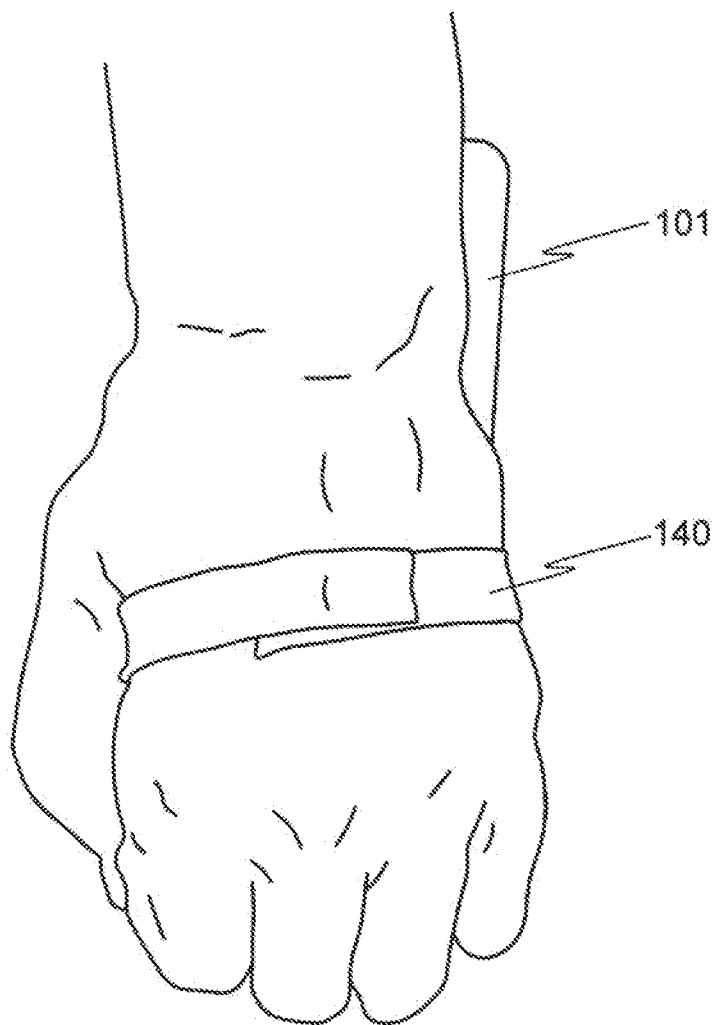


FIG. 6

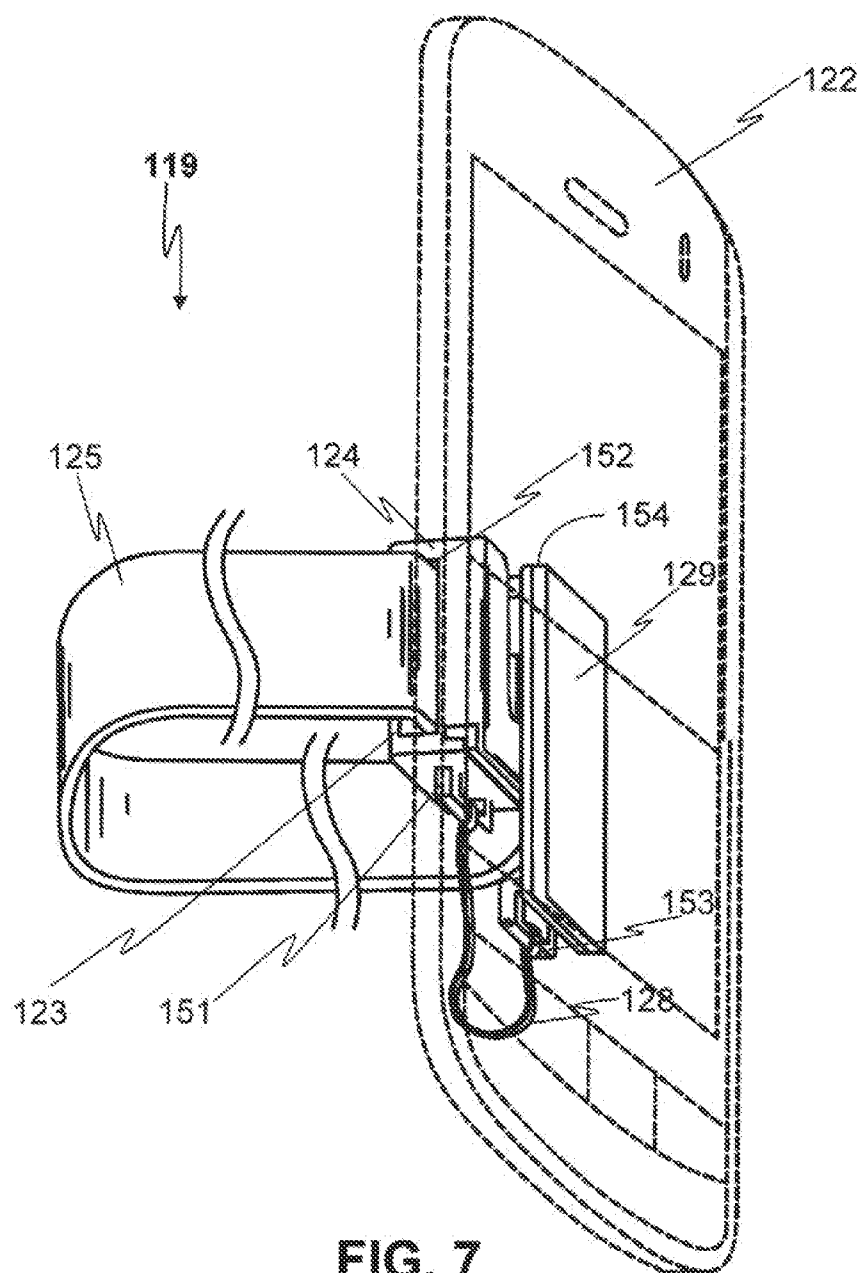


FIG. 7

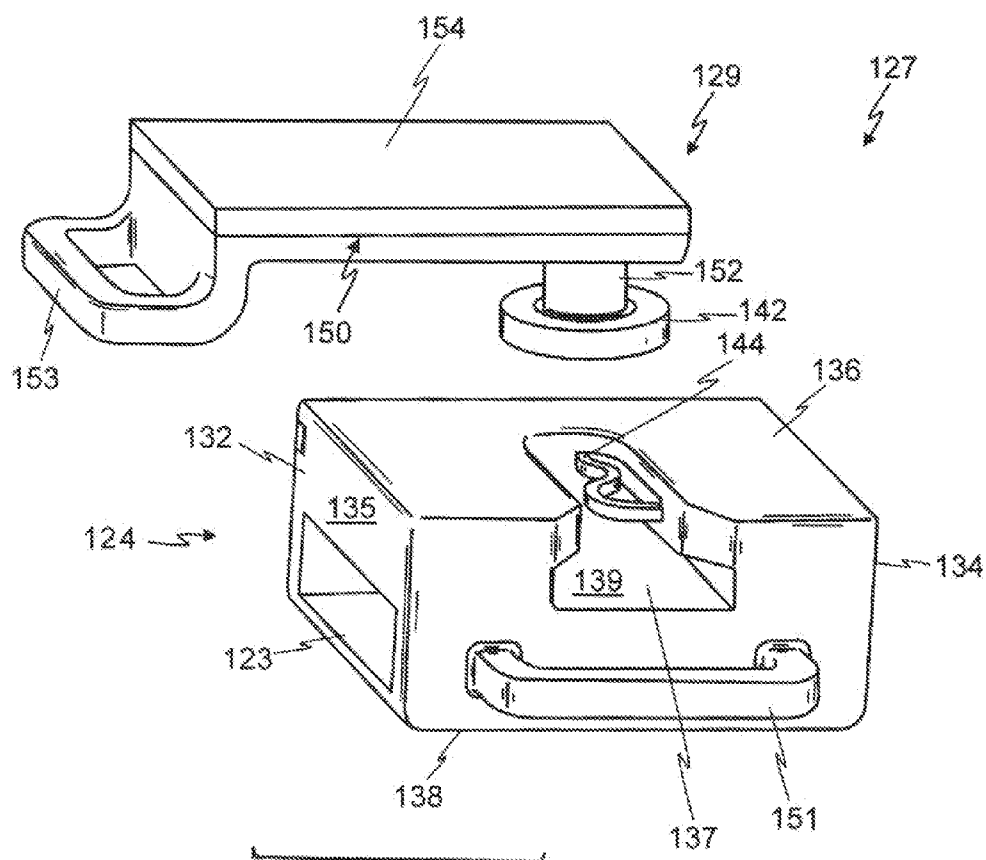


FIG. 8

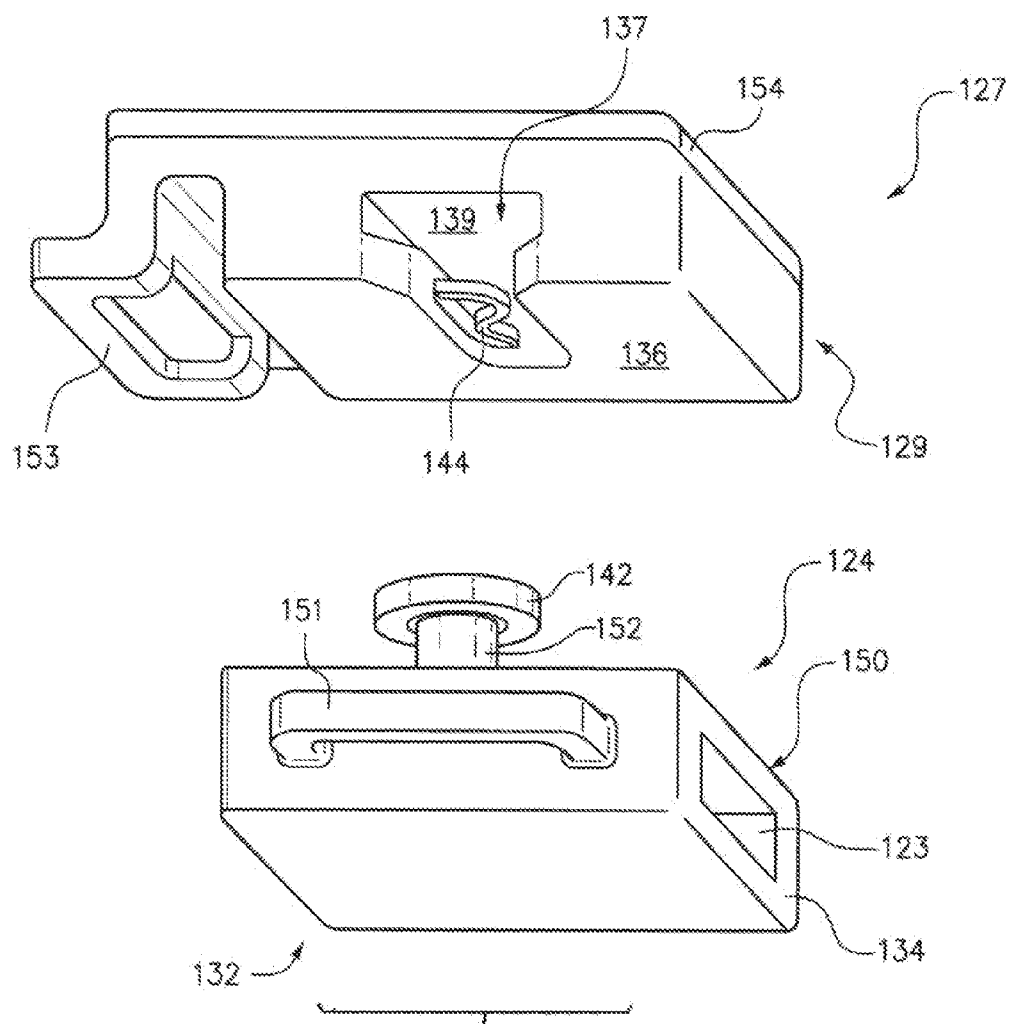


FIG. 8A

FIG. 9

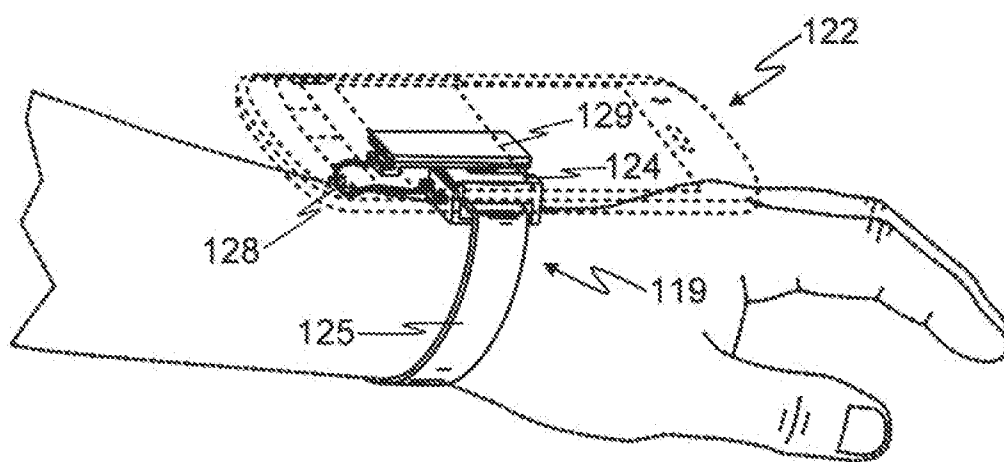


FIG. 10

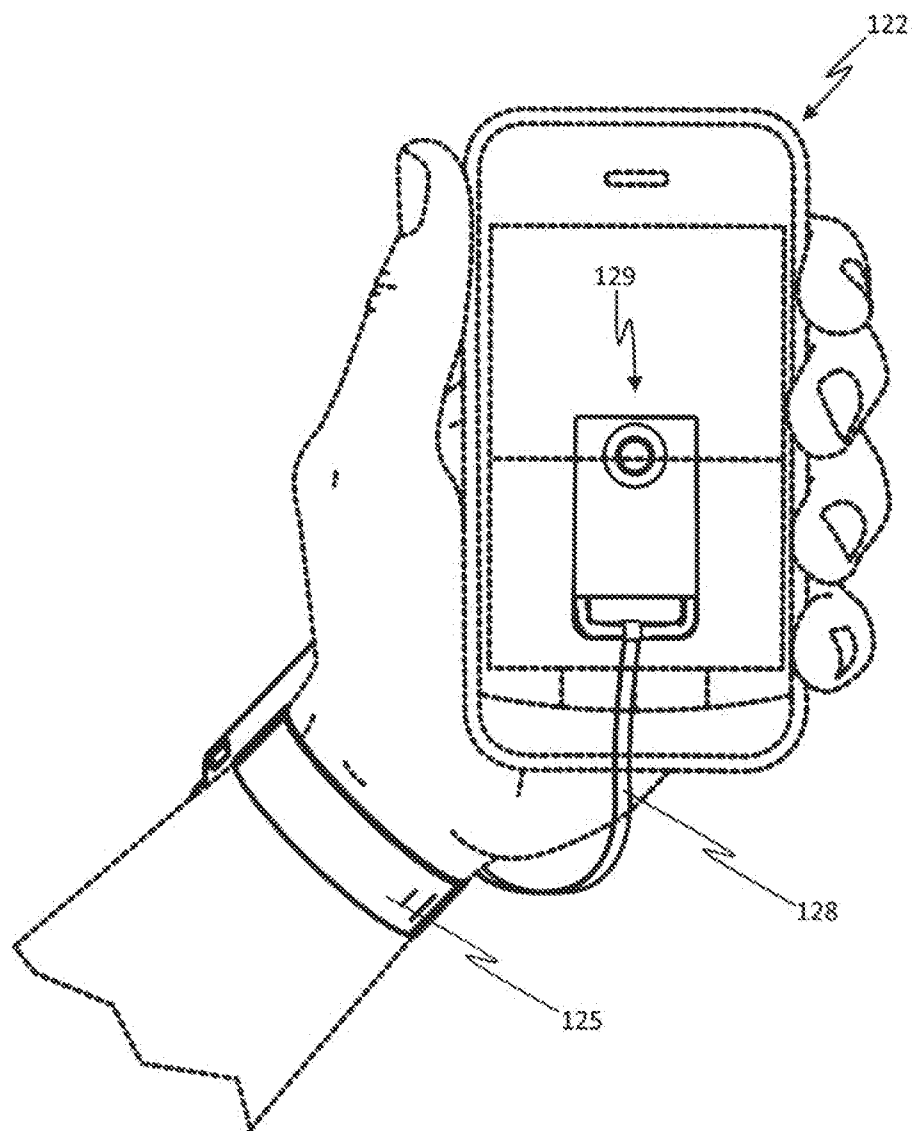


FIG. 11

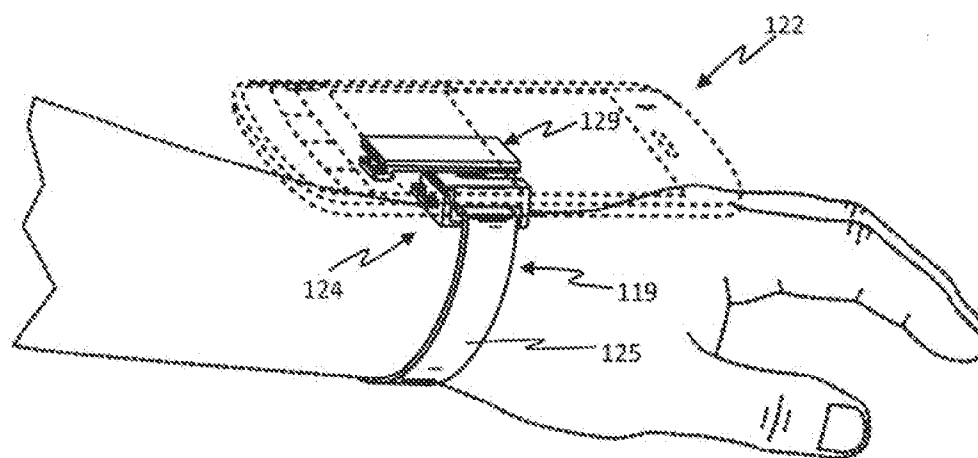


FIG. 12

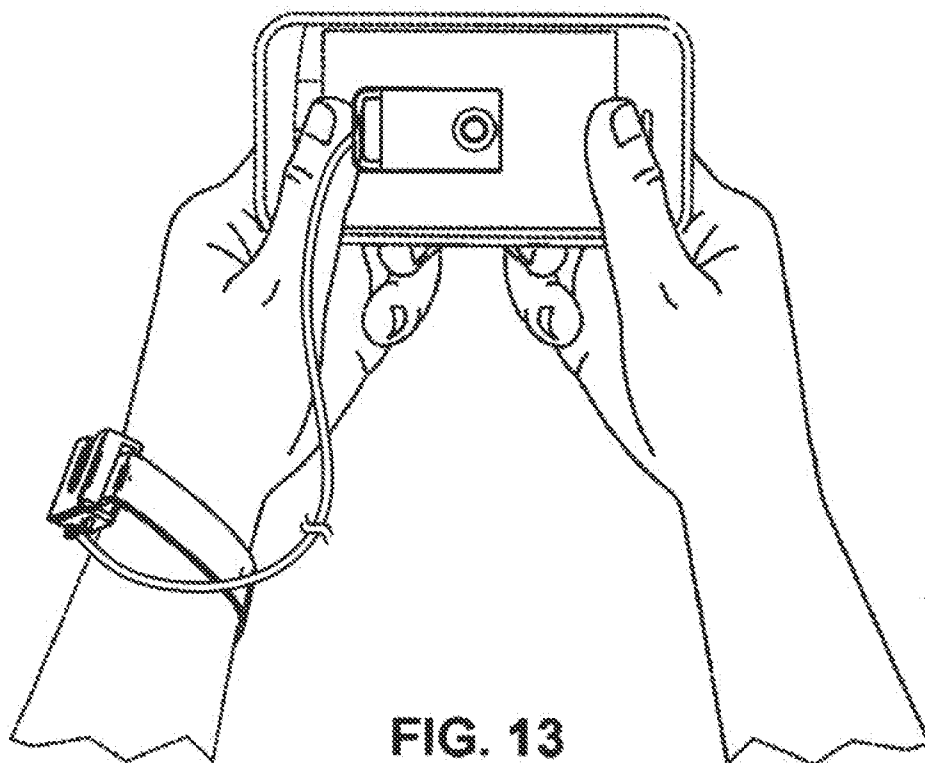


FIG. 13

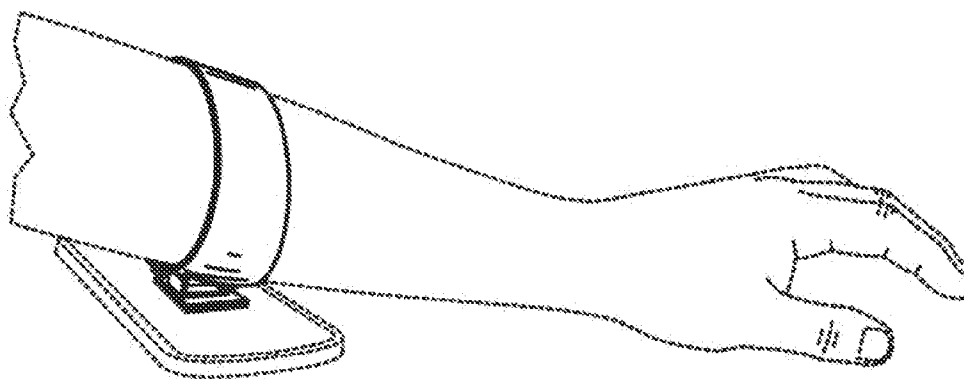


FIG. 14

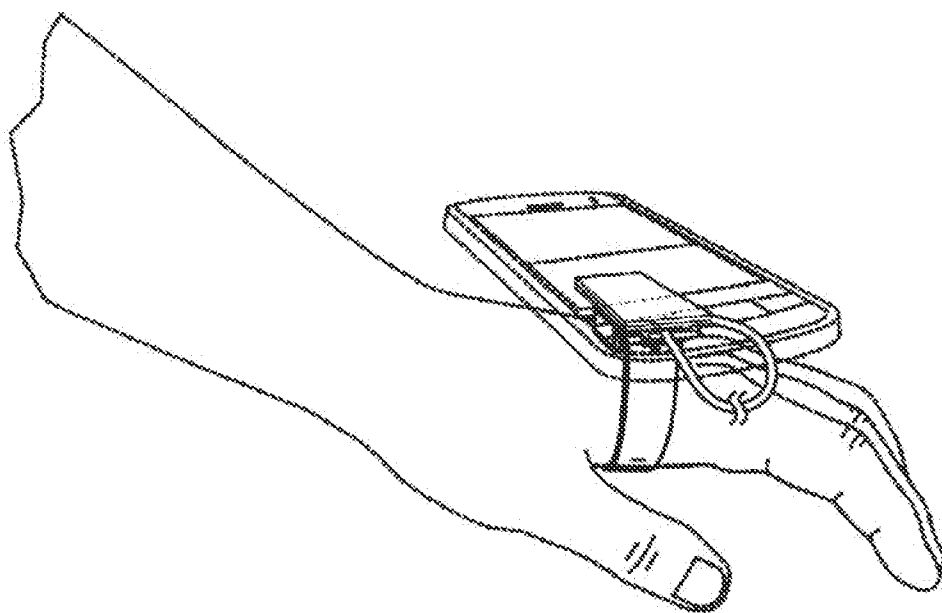


FIG. 15

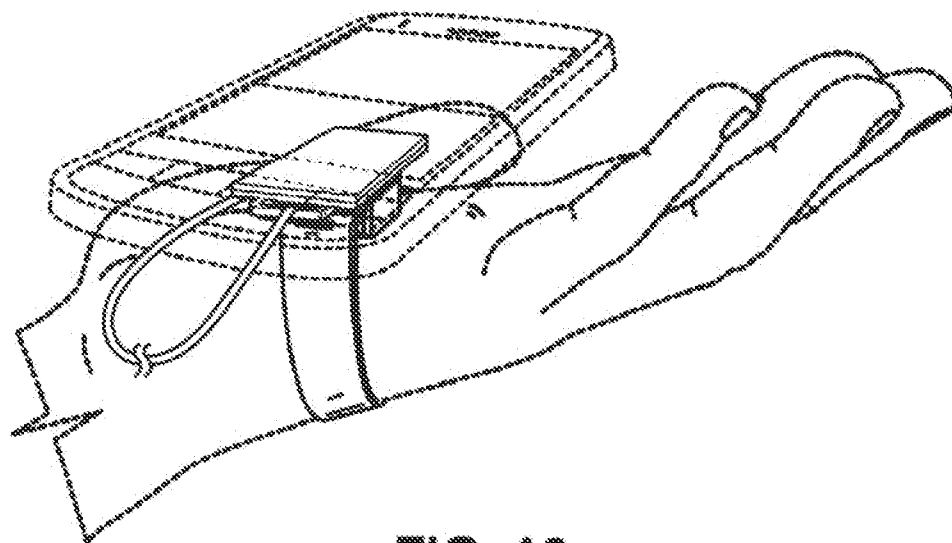


FIG. 16

APPARATUS AND METHODS FOR CARRYING ELECTRONIC DEVICES

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application is a continuation-in-part of U.S. application Ser. No. 13/630,313 filed Sep. 28, 2012, the disclosure of which is incorporated in its entirety by reference herein.

TECHNICAL FIELD

[0002] The present disclosure relates to apparatus and methods for carrying electronic devices.

BACKGROUND

[0003] Personal electronic mobile devices have become popular, as some of them provide on-the-go entertainment and data access as well as mobile phone service. Other personal electronic devices, such as music players and video players have also gained popularity. Personal electronic devices are often carried in a pocket or purse, or may be attached to a holster attached to a belt. They may also be placed in their respective protective cases to protect them from impact. The protective cases may also include protective screen covers to protect the screens from being scratched. While some cases may offer protection, the cases often fail to provide quick access, ease of use and may take up room in a pocket or handbag. The cases may also fail to prevent the devices from being dropped. Most cases further require at least one hand to hold and operate the device, which may sometimes be tiresome. In certain situations, users may need both hands free from the device while using the device.

SUMMARY

[0004] The present disclosure discloses an apparatus for carrying an electronic device that includes a user attachment strap; a swivel body defining a strap passage, the user attachment strap configured to be inserted through the strap passage; and a swivel head configured to be removably attached and pivotably mounted to the swivel body, wherein a user can wear the user attachment strap with the swivel body attached to the user attachment strap and the electronic device can be attached to the swivel head to allow the user to carry the electronic device.

[0005] The present disclosure also discloses a method of carrying an electronic device that includes providing a swivel assembly comprising a swivel body and a swivel head rotatably mounted to the swivel body; attaching the electronic device to the swivel head; providing a tether; attaching one end of the tether to the swivel body; and attaching another end of the tether to the swivel head.

[0006] The present disclosure further discloses a method of carrying an electronic device that includes providing a swivel assembly comprising a swivel body and a swivel head rotatably mounted to the swivel body, the swivel body defining a strap passage; attaching the electronic device to the swivel head; providing a user attachment strap; inserting the user attachment strap to the strap passage; attaching the user attachment strap to a user; operating the electronic device while the swivel head is attached to the swivel body; and operating the electronic device while the swivel head is detached from the swivel body.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] FIG. 1A shows the components of an exemplary apparatus using a belt for the case lock.

[0008] FIG. 1B shows the components of an exemplary apparatus using a magnetic snap button system for the case lock.

[0009] FIG. 1C shows the components of an exemplary apparatus using a belt for the case lock with the tether-housing separated from the case.

[0010] FIG. 1D shows the components of an exemplary apparatus using a magnetic snap button system for the case lock with the tether-housing separated from the case.

[0011] FIG. 2 shows an exemplary apparatus using a belt for the case lock in a locked and stored position carried in a user's palm.

[0012] FIG. 3A shows an exemplary apparatus using a belt for the case lock in a locked position slung on a user palm with the top opening of the case facing away from the user's hand.

[0013] FIG. 3B shows an exemplary apparatus using a magnetic snap system for the case lock in a locked position slung on a user's palm with the top opening of the case facing away from the user's hand.

[0014] FIG. 4A shows an exemplary apparatus using a belt for the case lock in an unlocked position in use by a user.

[0015] FIG. 4B shows an exemplary apparatus using a magnetic snap system for the case lock in an unlocked position in use by a user.

[0016] FIG. 5A shows an exemplary apparatus using a belt for the case lock carried in the back of the hand by a user.

[0017] FIG. 5B shows an exemplary apparatus using a magnetic snap system for the case lock carried in the back of the hand by a user.

[0018] FIG. 6 shows the exemplary hand brace locked in the back of the hand while the mobile device is carried in the palm of the user's hand.

[0019] FIG. 7 is a perspective view of yet another exemplary apparatus for carrying an electronic device.

[0020] FIG. 8 is another perspective view of the apparatus of FIG. 7 without the electronic device.

[0021] FIG. 8A is another perspective view of the apparatus with the Shaft Head attached to the Swivel Body and the U-shaped Slot is housed within the Swivel Head.

[0022] FIG. 9 is a skeletal view of a swivel assembly of the apparatus of FIG. 7.

[0023] FIG. 10 is a schematic view of the apparatus of FIG. 7 attached below a user's wrist.

[0024] FIG. 11 is similar to FIG. 10 but with a swivel head and electronic device detached from a swivel body.

[0025] FIG. 12 is similar to FIG. 10 but without the tether.

[0026] FIG. 13 is similar to FIG. 11 but without the tether.

[0027] FIG. 14 is a schematic view of the apparatus of FIG. 7 attached above a user's wrist.

[0028] FIG. 15 is a schematic view of the apparatus of FIG. 7 attached above a user's hand.

[0029] FIG. 16 is a schematic view of the apparatus of FIG. 7 attached below a user's palm.

DETAILED DESCRIPTION

[0030] As required, detailed embodiments of the present invention are disclosed herein; however, it is to be understood that the disclosed embodiments are merely exemplary of the invention that may be embodied in various and alternative forms. The figures are not necessarily to scale; some features

may be exaggerated or minimized to show details of particular components. Therefore, specific structural and functional details disclosed herein are not to be interpreted as limiting, but merely as a representative basis for teaching one skilled in the art to variously employ the present invention.

[0031] The apparatus **100** comprises mainly a case **101**, a case tether **111**, a case lock **120**, a hand brace shaft **131**, and a hand brace **140**. FIG. 1A shows the components of an exemplary apparatus **100** using a belt for the case lock **120**. Case **101**, designed to protect a personal electronic mobile device including a phone, preferably includes a bottom wall and four side walls and is preferably open on the top (not shown) for receiving a mobile device. FIG. 1A shows the rear view of the case **101** where the exterior surface of the bottom of the case **101** is visible. The case **101** may define a hole **109** to accommodate a built-in camera in the mobile device. The case **101** preferably includes a hook **105** in the center of a tether-housing **107**, which is designed to securely couple to the case tether **111** so that the case **101** is securely attached to the tether **111** via the hook **105**. The tether-housing **107** may be surrounded by a retaining wall **108** (FIG. 1C). The tether housing **107** may also include a male snap **106** and a hook/ring **105** combination as illustrated in FIG. 1B and FIG. 1D. The hook **105** can be a hook with an opening for the quick release of the tether **111** or a bar across with no opening. If the hook **105** implemented has an opening, the purpose of the retaining wall **108** is preferably to prevent the case tether **111** from being unhooked accidentally. In this depiction, the space beneath the hook is hollowed out (e.g. a gap or recess) to reduce the height of the tether-housing **107**. This gap or recess is optional. The hook **105** can also be a ring or bar capable of accepting the case tether. Tether strap guides **103** are preferably two raised poles located at the exterior surface of the bottom of the case **101**. These guides **103** may restrain the case tether strap **111** in its proper path when the device is in its stowed position.

[0032] The case tether **111** may be a strap or an elastic ring with an opening large enough to slide into the hook **105** (FIG. 1A). The free end of the case tether **111** is preferably looped around the hook **105** and secured by a locked fastener **113** on the exterior surface of the bottom of the case **101**. The other end of the case tether **111** is preferably securely attached to the case lock **120** and the hand brace shaft **131**. Case tether **111** can be bent and twisted into any desired positions by a user.

[0033] The fastener **113** as depicted is preferably a small snap fastener made for clothing but other suitable fasteners that allow the case tether **111** to be unsnapped or unbuttoned and be released from the hook **105** can be appropriate. The case lock **120** can be any closure configurations capable of locking and securing the case **101** to the tether **111**, i.e. flexible elastic ring or a belt with a locking mechanism **121A**, **121B** as is illustrated in FIG. 1A. A rivet grommet combination **130** preferably pivotally joins the case lock **120** to the hand brace shaft **131**.

[0034] The belt of the case lock **120** is preferably substantially perpendicular to the case tether **111** (FIG. 1A). In a locked and stored mode, the belt of the case lock **120** may wrap around the case **101** and the enclosed mobile device (not shown) and then secured by the locking mechanism **121A** and **121B**, so it provides additional mechanism to secure the mobile device to the case **101** and case tether **111**. This locked and stored mode of the apparatus using a belt for the case lock **120** is shown in FIG. 2 and will be further discussed later.

[0035] Alternatively, the case lock **120** can be a fastener system such as a button and a buttonhole or a snap button system, a magnetic snap button system **106**, **126** as is illustrated in FIG. 1B. FIG. 1B shows the components of an exemplary apparatus using a magnetic snap button system for the case lock **120** wherein the case **101** is presented in its rear view. In this depiction, the case lock **120** preferably comprises of a magnetic snap system, a male snap **106** that is made of metal and a female magnetic snap **126** that contains a magnet within. The male snap **106** is preferably securely located on the bottom of the case **101**. A hook **105** is preferably located at the base of the male snap **106**. In this depiction, the tether-housing **107** includes the combination of the male snap **106** and the hook **105**. A case tether **111** may be looped around the hook **105** and may be fastened by a fastener **113**. The female magnetic snap **126** is preferably located on the other end of the case tether **111**. In another embodiment, the male snap and female snap may switch their locations. A rivet grommet combination **130** preferably pivotally joints the case tether **111** to the hand brace shaft **131**.

[0036] In a locked mode, the male snap **106** is preferably snapped with the female magnetic snap **126** exposing the screen side of the case **101** away from the hand. The locked mode may be used when the device is stored in the back of or in the inside of the palm. While in this mode, a user can still use the device for viewing and entering data. This mode is shown in FIGS. 3B and 5B and will be further discussed later.

[0037] Referring now to both FIGS. 1A and 1B, hand brace **140** is shown to be separated from a hand brace shaft **131**. The hand brace **140** may be a strap with two strips of Velcro: one with microscopic loops **141A** and another strip with microscopic hooks **141B** as illustrated in both figures. During use, the hand brace **140** may be inserted into the hand brace shaft **131**. Then, the hand brace **140** may be strapped around a user's hand between the knuckle and the thumb and may be secured by the two strips of Velcro as illustrated in FIG. 6.

[0038] Referring back to FIGS. 1A and 1B, the hand brace shaft **131** may form a loop for receiving the hand brace **140**, and the loop can slide along the hand brace. A rivet grommet combination **130** located at the base of the hand brace shaft **131** preferably allows the case lock **120** and the case tether **111** to rotate around it. The hand brace shaft **131** is, therefore, pivotably and rotatably coupled to the case lock **120** and the case tether **111**. As a result, the hand brace **140** is pivotably and rotatably coupled to the case lock **120** and the case tether **111** via the rivet grommet combination **130** and the hand brace shaft **131**. This in turn allows the case **101** secured to the case lock **120** and the case tether **111** to be rotated at the convenience of the user.

[0039] The rivet grommet combination **130** can be any combination of button, snap, rivet, stub, grommet and/or eyelet that allows the apparatus to rotate on it. The hand brace **140** may be wrapped around a user's hand in FIG. 6. The hand brace shaft **131** and the hand brace **140** are preferably working together to secure the case **101** to a user's hand. The hand brace **140** may include a handband and a strap slidably coupled to the handband.

[0040] In FIG. 1C, the case **101** is shown to be separated from the tether housing **107**. A tether housing **107** preferably comprises of a hook **105** in the center of the retaining wall **108**. One side of a 2-sided adhesive tape **150** is shown to be attached to the bottom of the tether housing **107**. During use, the other side of the 2-sided adhesive tape **150** may be attached to the bottom of the case **101**. In FIG. 1D, the case

101 is shown to be separated from the tether housing **107** that may include the male snap **106** and the hook/ring **105** combination. One side of a 2-sided adhesive tape **150** is shown to be attached to the bottom of the tether housing **107**. During use, the other side of the 2-sided adhesive tape **150** may be attached to the bottom of the case **101**.

[0041] FIG. 2 shows an exemplary apparatus that uses a belt for the case lock **120** in a locked and stored position. The case **101** is carried in a user's hand, and the case **101** is presented in its rear view with the bottom facing away from the user's hand and the open top (which is the same side of the mobile device's screen side) facing towards the user's hand. To secure the case **101** in its locked position, the belt of the case lock **120** is preferably looped around the body of the case **101**, and the two ends of the belt are preferably attached to each other by the locking mechanism **121** (e.g. a button and buttonhole or buckle). During use, the case tether **111** is preferably looped around the hook **105** and securely attaches the mobile device to the hand brace **140**. Case tether **111** can be detached from hooks **105** as desired by the user. To unhook from the hook **105**, user can simply slide the case tether **111** out from the hook **105**. While unhooked, the case **101** can be carried and used separately by a user.

[0042] FIG. 3A shows an exemplary apparatus using a belt for the case lock **120** in a locked position slung on a user palm wherein the bottom of the case faces toward the user's hand and the open top of the case faces away from the user's hand. The device is pivotally hanging on the palm of the hand. In this depiction, the case **101** is shown to be wrapped around and locked by the case lock **120**, and the case tether **111** is shown through the cavity created by the tether-housing **107**. The device is shown hanging in an angle to the hand. FIG. 3B shows an exemplary apparatus using a magnetic snap system for the case lock **120** in a locked position slung on a user palm wherein the bottom of the case faces toward the user's hand and the open top of the case faces away from the user's hand. This depiction is using a magnetic snap system as case lock **120**. No strap (belt) is used to lock the case in place. The magnet in the magnetic snap system provides a locking mechanism and due to its male and female configuration, it also allows rotational movements. The case **101** is shown hanging at an angle to the hand. The case can hang from the palm using the hand brace **140** without closing the fingers around it (FIGS. 3A, 3B, 5A and 5B). In these carrying modes, the fingers are free of the case and are available to carry or perform other tasks.

[0043] Both of FIGS. 4A and 4B show an exemplary apparatus in an unlocked position and in use by a user wherein the bottom of the case **101** faces toward the user's hand and the open top of the case (that is also the screen side of the mobile device) faces away from the user's hand. To unlock the case **101** into its opened position, a user may simply unbutton or unbuckle the locking mechanism **121A** and **121B** and release the case **101** in the first embodiment (FIG. 4A) or unsnap the snaps **106** and **126** and release the case **101** in the second embodiment (FIG. 4B.)

[0044] In FIG. 4A, the user is typing on the mobile device including a phone (not shown) with the user's thumb. The case **101** is allowed to move unrestrained because the case tether **111** is flexible. The unlocked case lock **120** releases the case **101** into the opened position and allows for the free movement of the case **101** and the mobile device. The hand brace **140** is adaptably and slidably secured to the hand brace shaft **131**. As the figures demonstrate, the apparatus allows for

a great range of movement of the mobile device. Although the case lock **120** is not surrounding the case **101**, the case **101** is still secured by the case tether **111** to prevent the case enclosed mobile device from dropping by accident.

[0045] In FIG. 4B, the apparatus is in an unlocked mode, the two snaps of the magnetic snap system **106**, **126** of the case lock **120** are not attached to each other. In this mode, the case **101** is free from the confined positions along the hand brace **140** where the hand brace shaft **131** travels but can be extended to the full length of the case tether **111**. In this mode, a user can move the device freely from the back of or the inside of the palm to a location convenient for use, such as a location where the finger tips can be used. With the case tether **111** still connected to the case **101**, the case tether **111** protects the mobile device from damages incurred by accidental droppings.

[0046] FIG. 5A shows an exemplary apparatus using a belt as the case lock **120** carried in the back of the hand by a user. In this depiction, the mobile device is carried on the back of the hand, in a dorsal position opposite to the palm. Case lock **120** and case tether **111** are shown securing the case **101** to the hand brace **140**. Hand brace **140** is shown wrapping around a hand. In this position, the fingers and the palm are free to perform other tasks unimpeded while the device is conveniently carried.

[0047] FIG. 5B shows an exemplary apparatus using a magnetic snap system as the case lock **120** carried in the back of the palm by a user. In this depiction, the device is carried on the back of the hand, in a dorsal position opposite to the palm, case lock **120** and case tether **111** are being hidden on the underside of the case **101** and are securing the case **101** to the hand brace **140**. Hand brace **140** is shown wrapping around a hand. In this position, the top-side of the case **101** is facing away from the hand and exposes the screen of the device (not shown) towards the user. The device is, therefore, available for use and the fingers and the palm are free to perform other tasks unimpeded while the device is conveniently carried with the screen facing to the user and ready for use. FIG. 6 shows the exemplary hand brace **140** locked in the back of the hand while the device is carried in the palm of the user's hand. During use, the mobile device is inserted into the case housing. Next, a user then wears the hand brace **140** and secures it to the user's hand.

[0048] Tether **111**, case lock **120** and hand brace **140** may be fabricated from any suitable material including leather, fabric, plastic, webbing, cloth or rubber band, metal or synthetic materials or any combination thereof. The mechanism of the closures **113** and **140** may be made of a strap loop, a band with Velcro type of loops on one side and hooks on another, a belt and buckle, a button and buttonhole, or a snap button and receptacle type of configurations. In another embodiment, the coupling may include a threaded loop, stitching/gluing, or and clips. Other embodiments may be by a variety of means to accomplish the task of coupling. In order to provide the best viewing and typing angles, the system flexibly allows the case **101** to face and pivot in omni-directions. To offer further mobility and with the use of the tether-housing **107**, the case **101** can be detached from the case tether **111**. The case **101** can then be carried around on its own without attaching to the hand. The above embodiment supports the mobile device while allowing the hand that is wearing the case **101** to perform other tasks (FIGS. 3A, 3B, 4A, 4B, 5A and 5B). The apparatus described above provides for an efficient and a convenient apparatus for carrying, using,

and protecting a personal mobile device, such as a cell phone or a camera attached to a user's hand. These features allow the user to type, take pictures, and complete other activities with ease.

[0049] Referring now to FIG. 7, another exemplary apparatus 119 for carrying an electronic device 122 is shown. The electronic device 122 is preferably attached to one end of the apparatus 119 via an attachment system 154, and a user attachment strap 125 is preferably attached to an opposite end of the apparatus 119. A user preferably attaches the user attachment strap 125 to a desired body part of the user, such as an arm which comprising an upper arm, an elbow, a forearm, a wrist or a hand, thereby carrying the electronic device 122. The user attachment strap 125 is preferably attached to the apparatus 119 by inserting through the strap passage 123 defined by a swivel body 124 of a swivel assembly 127. The swivel body 124 may serve as a fixed base and allow a swivel head 129 to attach to the swivel body 124 and rotate or pivot around the swivel body 124. The electronic device 122 is preferably attached to a swivel head 129 of the swivel assembly 127, which may be allowed by the swivel head 129 to be moved around the body part of the user to adjust a viewing angle or to provide ease or comfort in using the electronic device. Preferably, the back of the electronic device 122 is attached to the swivel head 129 by methods known in the art, such as an adhesive.

[0050] For optional and supplemental protection against damaging the electronic device 122, the electronic device 122 may be secured by a tether 128 attached to the swivel body 124 on one tether end and to the swivel head 129 on the opposite tether end. A first tether mount 151 may be formed on the swivel body 124 to serve as an attachment point for the tether 128, and a second tether mount 153 may be formed on the swivel head 129 to serve as another attachment point for the tether 128. It is noted that the electronic device 122 may be in a protective case or plainly by itself. The electronic device may be a phone, a mobile phone, a smartphone, a walkie talkie or two-way radio transceiver, a tablet computer, an audio player, a video player, or any other electronic devices known in the art.

[0051] Referring now to FIGS. 8 and 9, the swivel assembly 127 preferably includes a swivel body 124 that includes opposing sidewalls 132 and 134. Opposing sidewalls 132 and 134 define a strap passage 123 extending through the swivel body 124. The strap passage 123 preferably divides the swivel body into a hollow portion, which is the strap passage, and a non-hollow portion 135. The swivel body 124 preferably also includes: a top surface 136; a middle surface 139; and, a bottom surface 138. A substantially U-shaped slot 137 is preferably defined at the top surface 136 and extends to the middle surface 139. The shape of the slot 137 may vary. The swivel assembly 127 further includes the swivel head 129, which includes a top surface 150, a swivel shaft 152 attached below the top surface 150 of the swivel head, and a shaft end 142 attached to the opposite end of the swivel shaft 152. The swivel shaft 152 and the shaft end 142 are preferably configured to be inserted into the slot 137 to attach the swivel head 129 to the swivel body 124. Thus, the slot 137 may be referred to as a shaft receiver. The shaft end 142 preferably has a larger circumference than the swivel shaft 152 and is preferably configured to lay on the middle surface 139, and the swivel shaft 152 is preferably configured to be pressed by a biasing device 144 against a wall that defines the slot 137 to secure the swivel head 129 to the swivel body 124. The swivel head 129

may be configured to rotate a full 360 degrees, or only a partial turn, as desired. It is noted that, if desired, the strap passage may be formed on the swivel head as opposed to the swivel body.

[0052] Referring now to FIG. 8A, the swivel assembly 127 preferably includes the swivel head 129. A substantially U-shaped slot 137 is preferably defined at the top surface 136 and extends to the middle surface 139. The shape of the slot 137 may vary. The swivel assembly 127 further includes a swivel body 124 that includes opposing sidewalls 132 and 134. Opposing sidewalls 132 and 134 define a strap passage 123 extending through the swivel body 124. The swivel body 124 further includes a top surface 150, a swivel shaft 152 attached above the top surface 150 of the swivel body, and a shaft end 142 attached to the opposite end of the swivel shaft 152. The swivel shaft 152 and the shaft end 142 are preferably configured to be inserted into the slot 137 to attach the swivel head 129 to the swivel body 124. Thus, the slot 137 may be referred to as a shaft receiver. The shaft end 142 preferably has a larger circumference than the swivel shaft 152 and is preferably configured to lay on the middle surface 139, and the swivel shaft 152 is preferably configured to be pressed by a biasing device 144 against a wall that defines the slot 137 to secure the swivel head 129 to the swivel body 124. The swivel head 129 may be configured to rotate a full 360 degrees, or only a partial turn, as desired.

[0053] The apparatus 119 may be used with (FIG. 10) or without a tether (FIG. 12). The user may partially or fully rotate the electronic device 122 to adjust the viewing angle or to adjust the position of the electronic device 122 as desired. It can be appreciated that the apparatus 119 may provide an alternative to storing an electronic device in a pocket or in a purse, which may sometimes be inconvenient. Next, on FIG. 11, the user may grasp the electronic device 122 using a free hand that does not have the attached apparatus and separate the swivel head 129 from the swivel body 124 by pulling out the shaft end and the shaft from the slot. The electronic device 122 may still be protected from being dropped by the tether 128. It can be appreciated that with the position shown in FIG. 11, the user may have more freedom and may use the electronic device with more ease than the position of FIG. 10. The user may now have much flexibility in using the electronic device, as it is not attached to anything, except for the swivel head 129 that is in a non-interfering position at the back of the electronic device 122. The tether can be detached from the swivel assembly. While not using the tether, the user may place the electronic device elsewhere, such as in the user's pocket, and need not place it back to the swivel assembly until when the user desired. The user may use both hands to operate the electronic device (FIG. 13). The user may be able to type, take pictures, use applications, or operate the electronic device with one or more hands with the peace of mind that if the electronic device is dropped, the tether will likely save the electronic device from being damaged.

[0054] The apparatus 119 may be attached to various parts of the user's body, as desired, such as the user's upper arm and elbow (not shown), below the user's forearm and wrist (FIGS. 10, 11 and 14), above the user's hand (FIG. 15), or in a user's palm (FIG. 16).

[0055] While exemplary embodiments are described above, it is not intended that these embodiments describe all possible forms of the invention. Rather, the words used in the specification are words of description rather than limitation, and it is understood that various changes may be made with-

out departing from the spirit and scope of the invention. Additionally, the features of various implementing embodiments may be combined to form further embodiments of the invention.

What is claimed is:

1. An apparatus for carrying an electronic device comprising:

a swivel assembly configured to support the electronic device, the swivel assembly including a swivel body and a swivel head configured to be removably attached and pivotably mounted to the swivel body; and
a user attachment strap attached to the swivel assembly and configured to be worn by a user to carry the electronic device.

2. The apparatus of claim 1, further comprising a swivel assembly comprising:

a shaft attached to the swivel head on one end and a shaft end attached to the shaft on an opposite end;
a shaft receiver opening defined by the swivel body; and
a biasing device within the shaft receiver opening configured to secure the swivel head.

3. The apparatus of claim 1, wherein the swivel head comprising a top surface, a swivel shaft attached to the top surface on one end and a shaft end attached to the swivel shaft on an opposite end; and the swivel body comprising a shaft receiver opening for receiving the swivel shaft and shaft end and a biasing device within the shaft receiver opening configured to secure the swivel shaft and shaft end of the swivel head.

4. The apparatus of claim 1, further comprising a first tether mount attached to the swivel body; a second tether mount attached to the swivel head; and a tether mounted to the first tether mount and the second tether mount.

5. The apparatus of claim 4, wherein the swivel assembly defines a strap passage, the user attachment strap configured to be inserted through the strap passage which can be located on the swivel head or swivel body.

6. The apparatus of claim 1, further comprising an attachment system between the swivel assembly and the electronic device or a case configured to house the electronic device.

7. A method of carrying an electronic device comprising: providing a swivel assembly comprising a swivel body and a swivel head rotatably mounted to the swivel body; attaching the electronic device or the electronic device case to the swivel assembly;

operating the electronic device while the swivel head is attached to the swivel body; and
operating the electronic device while the swivel head is detached from the swivel body.

8. The method of claim 7, further comprising: providing a strap passage defined by swivel assembly; providing a user attachment strap; inserting the user attachment strap to the strap passage; and attaching the user attachment strap to the user.

9. The method of claim 7, further comprising: attaching a tether to the swivel head; and attaching the tether to the swivel body.

10. The method of claim 7, wherein the user attachment strap is attached to a user's arm comprising of the upper arm, elbow, forearm, wrist, and hand.

11. The method of claim 7, wherein the electronic device is attached to a user's arm comprising of the upper arm, elbow, forearm, wrist, and hand.

12. The method of claim 7, wherein the electronic device is positioned adjacent to a user's palm.

13. The method of claim 7, wherein the electronic device is positioned on a dorsal side of a user's arm comprising of the upper arm, elbow, forearm, wrist, and hand.

14. The method of claim 7, wherein the electronic device is positioned on the inside of a user's arm comprising of the upper arm, elbow, forearm, wrist, and hand.

15. The method of claim 7 further comprising pivoting the swivel head around the swivel body to change a viewing angle of the electronic device.

16. The method of claim 7 further comprising attaching the strap to a user's arm comprising of the upper arm, elbow, forearm, wrist, and hand, detaching the swivel head from the swivel body and operating the electronic device.

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