



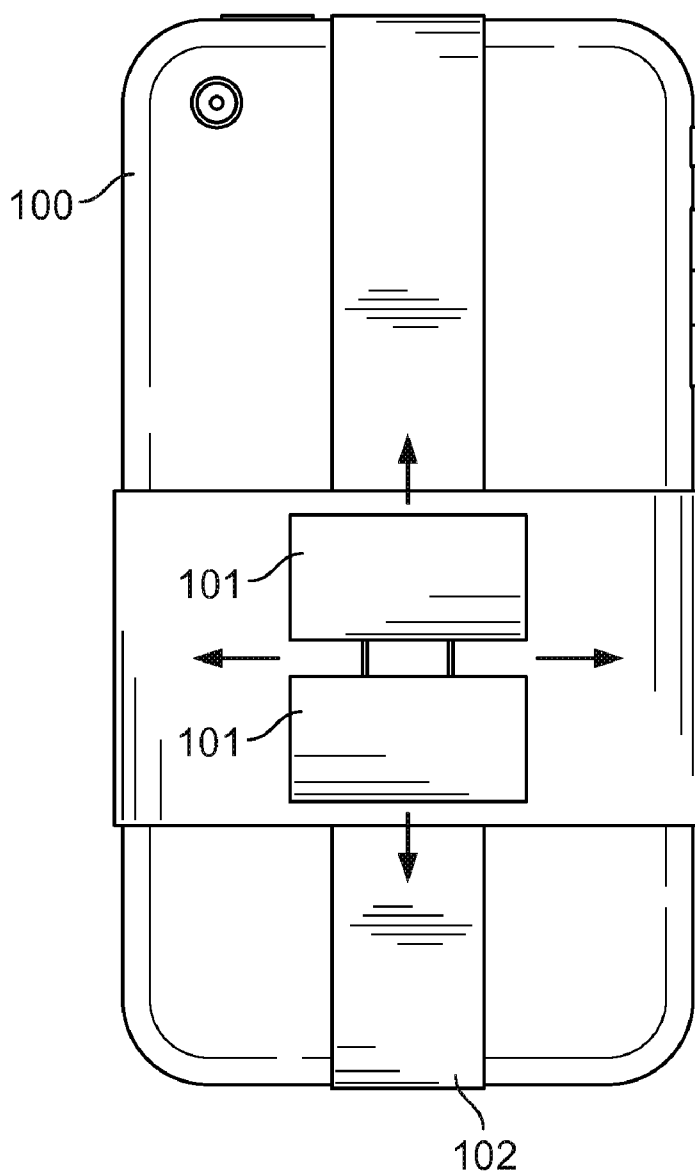
US 20120031937A1

(19) **United States**(12) **Patent Application Publication**
Baker(10) **Pub. No.: US 2012/0031937 A1**(43) **Pub. Date: Feb. 9, 2012**(54) **HOLDING A PERSONAL DIGITAL ASSISTANT****Publication Classification**(76) Inventor: **Scott T. Baker**, Hampton, NH (US)(21) Appl. No.: **12/876,720**(22) Filed: **Sep. 7, 2010**(51) **Int. Cl.**
A45F 5/00 (2006.01)(52) **U.S. Cl.** **224/217**(57) **ABSTRACT**

Among other things, a device that helps a user in holding a personal digital assistant (PDA) includes at least one sleeve sized to receive at least one of the user's fingers, and a mechanism to attach the sleeve to the PDA in an orientation to permit the user to hold the PDA by placing the finger in the sleeve while permitting the user to manipulate a function of the PDA with another finger of thumb.

Related U.S. Application Data

(60) Provisional application No. 61/371,213, filed on Aug. 6, 2010.



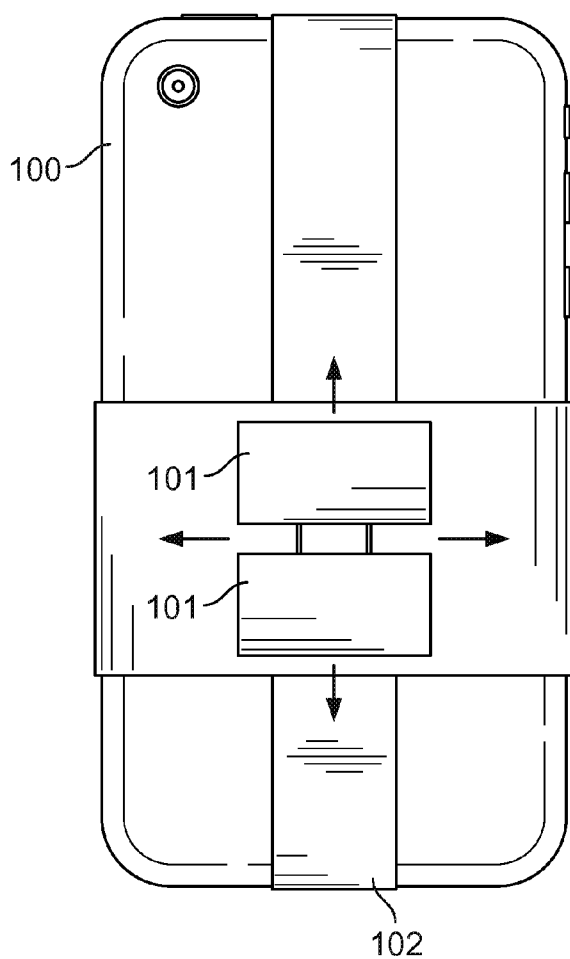


FIG. 1

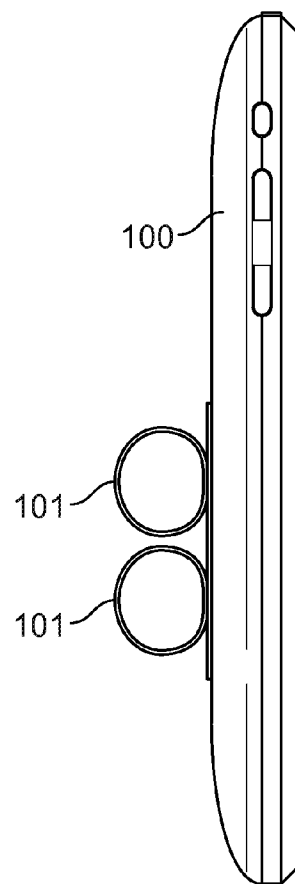


FIG. 2

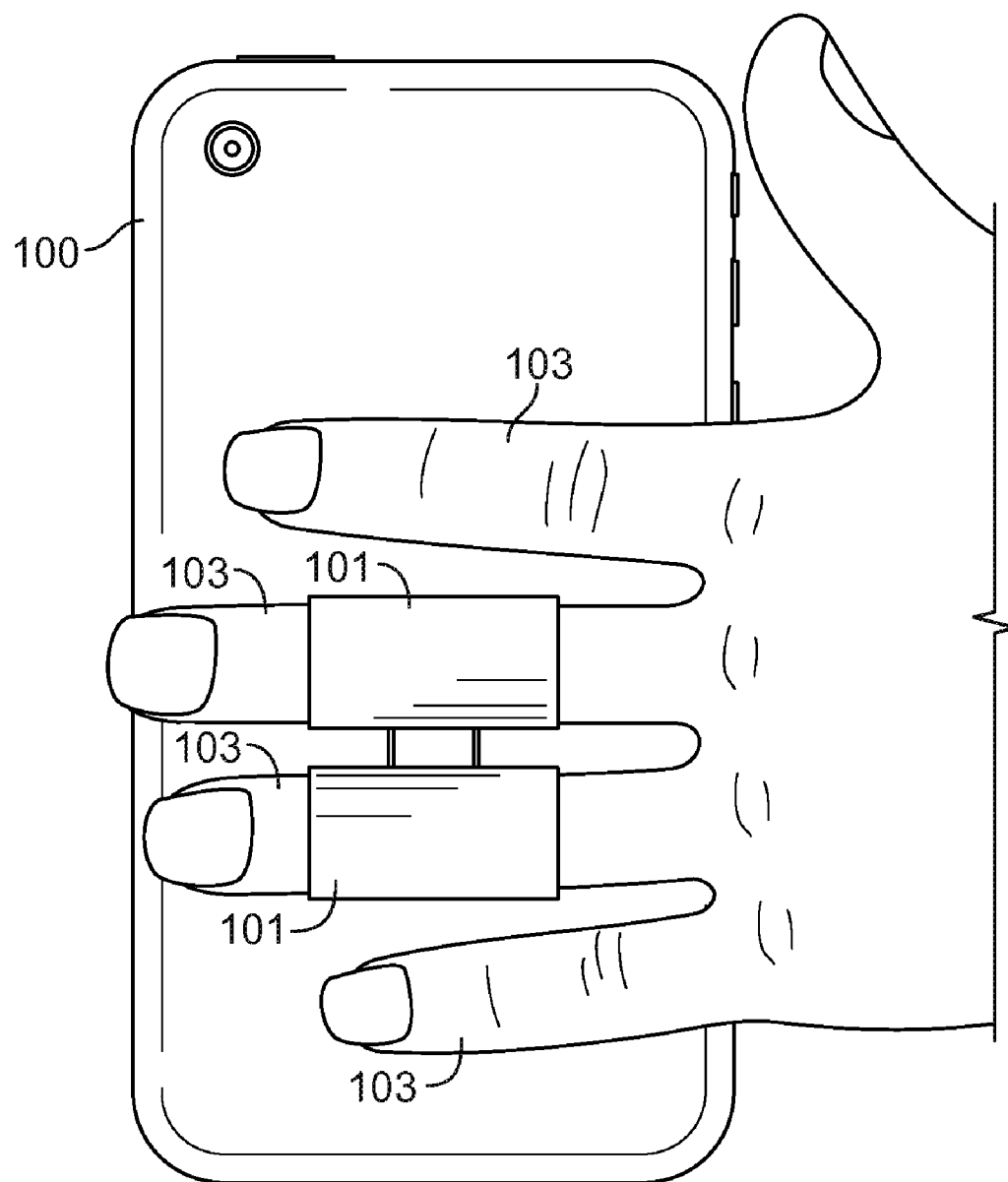


FIG. 3

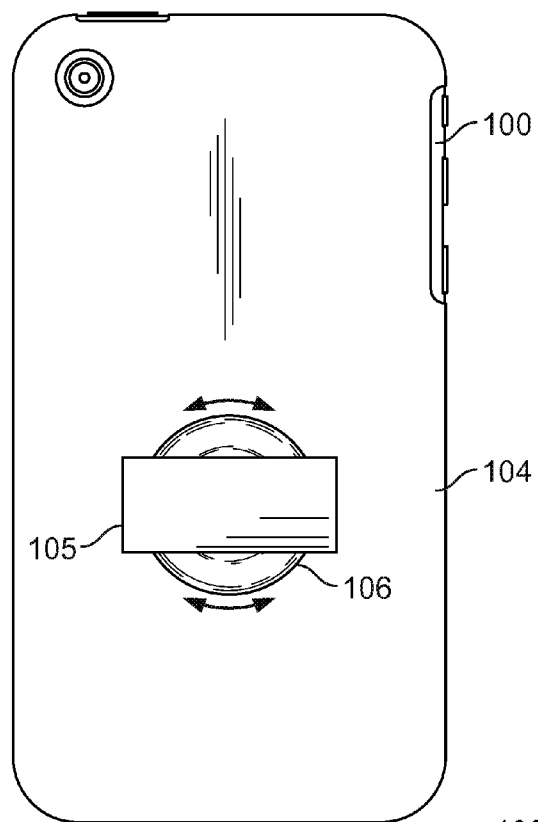


FIG. 4

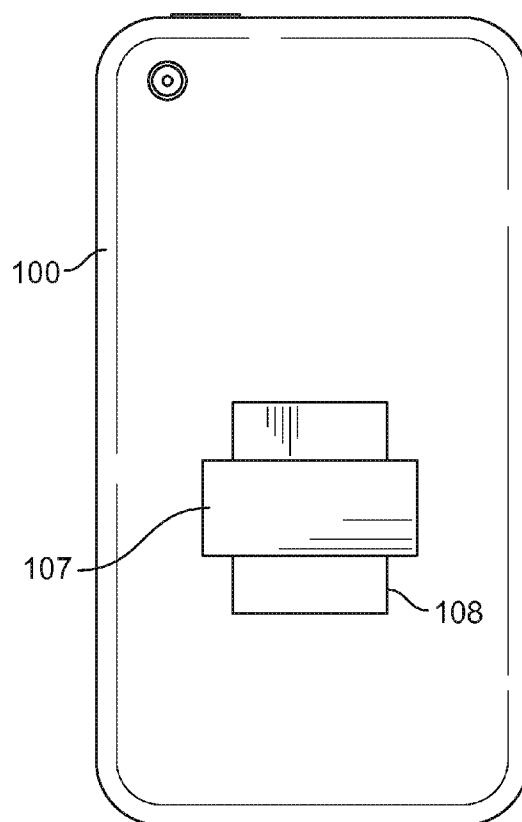


FIG. 5

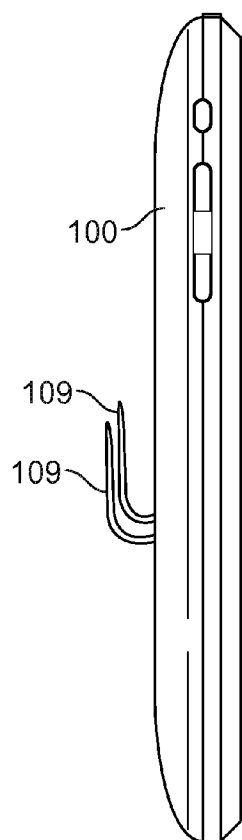


FIG. 6

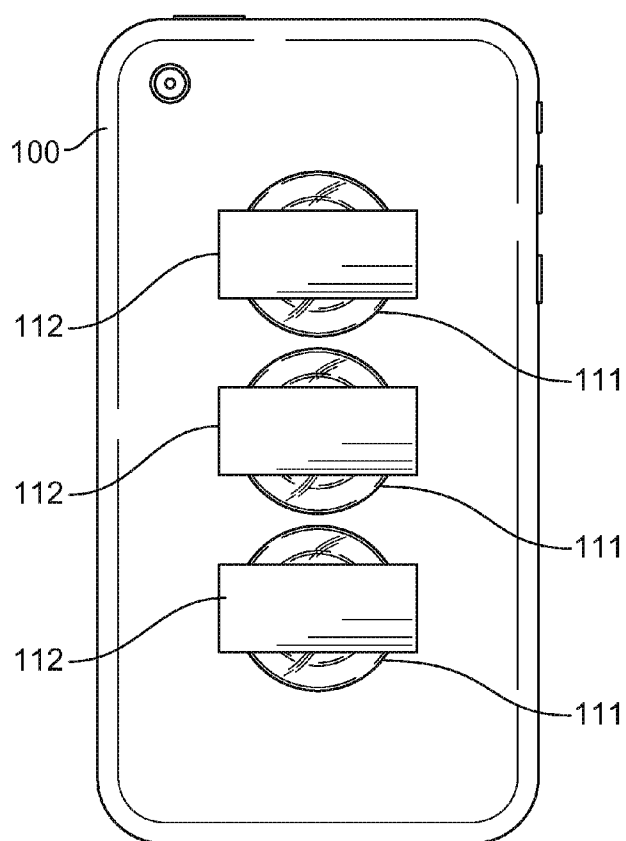


FIG. 7

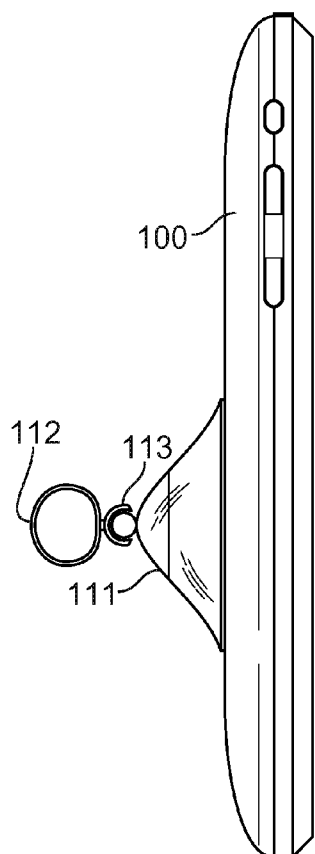


FIG. 8

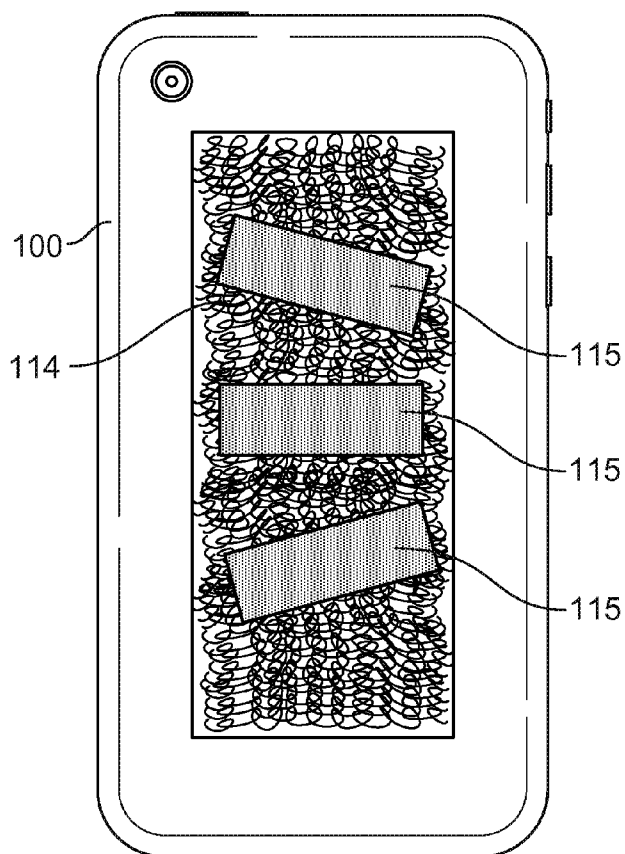


FIG. 9

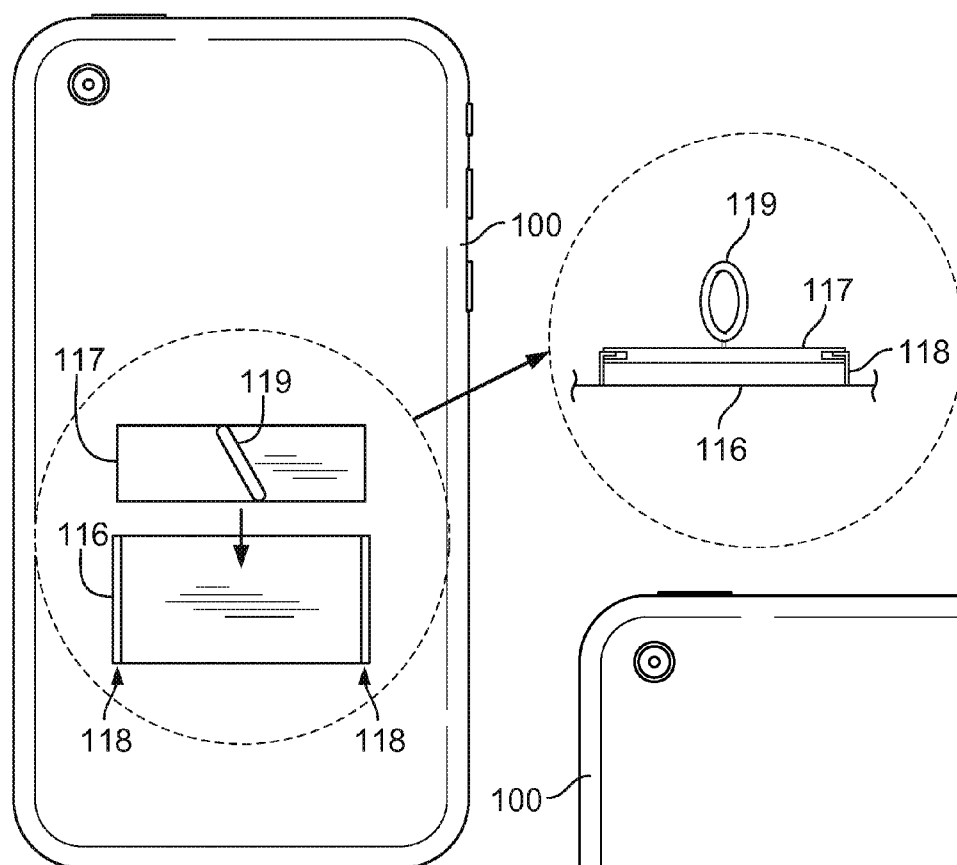


FIG. 10

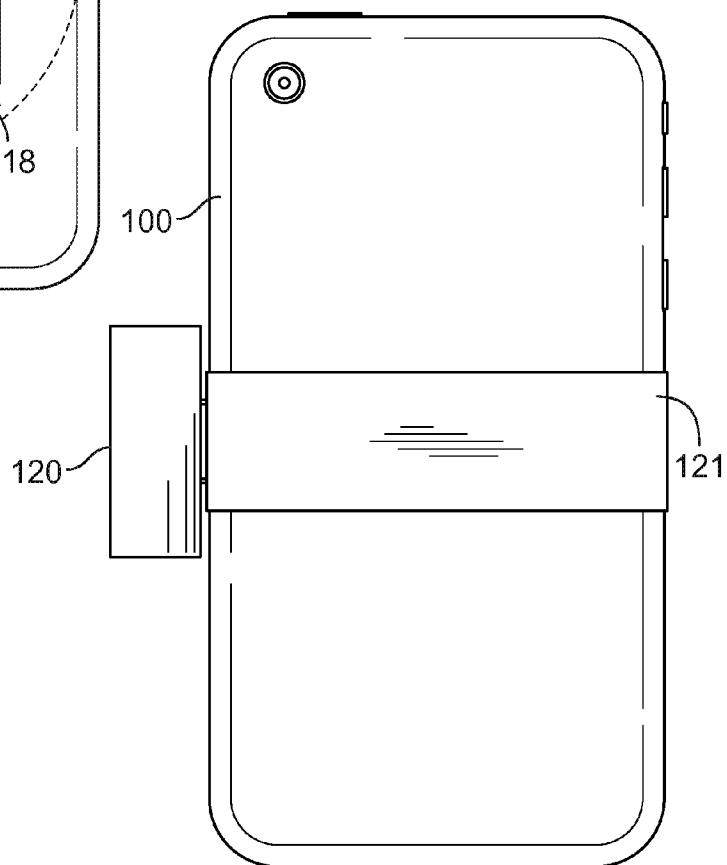


FIG. 11

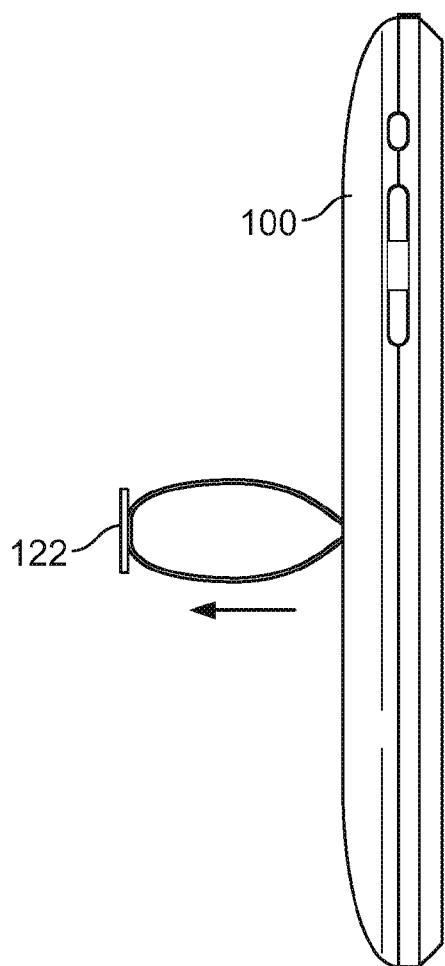


FIG. 12

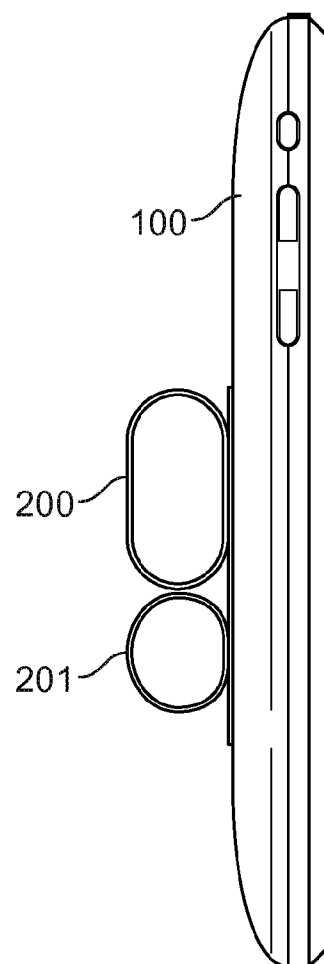


FIG. 12A

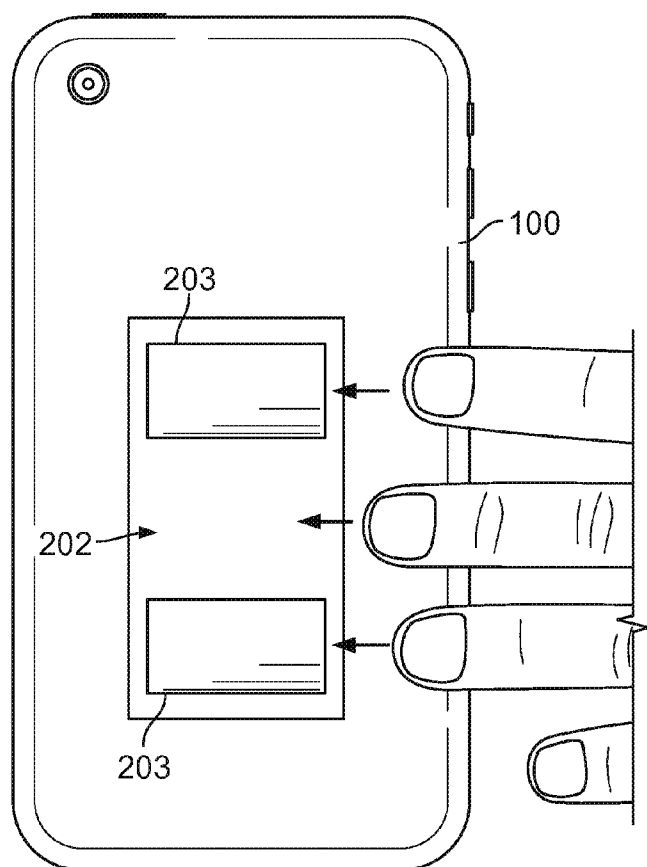


FIG. 12B

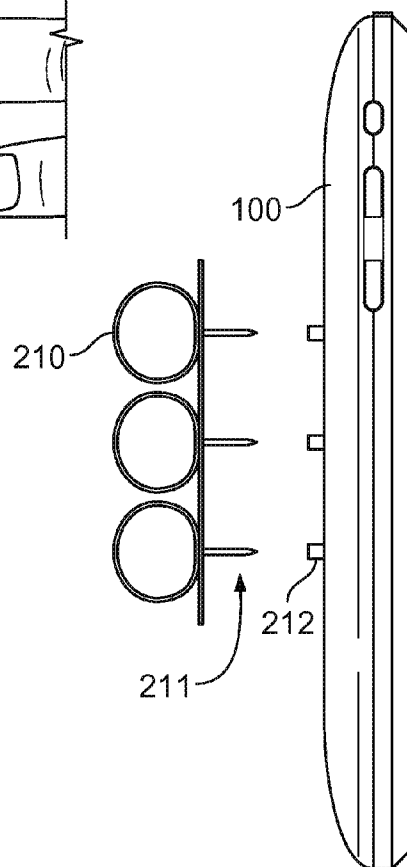


FIG. 12C

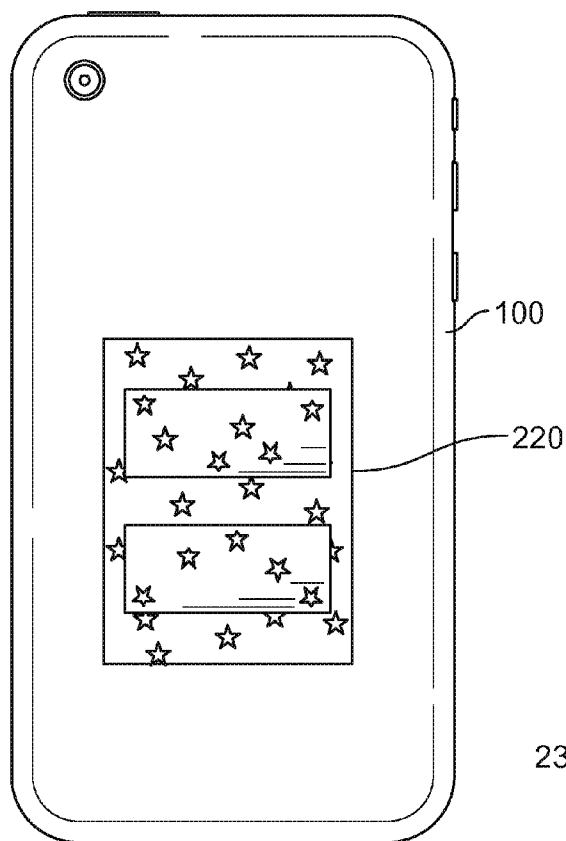


FIG. 12D

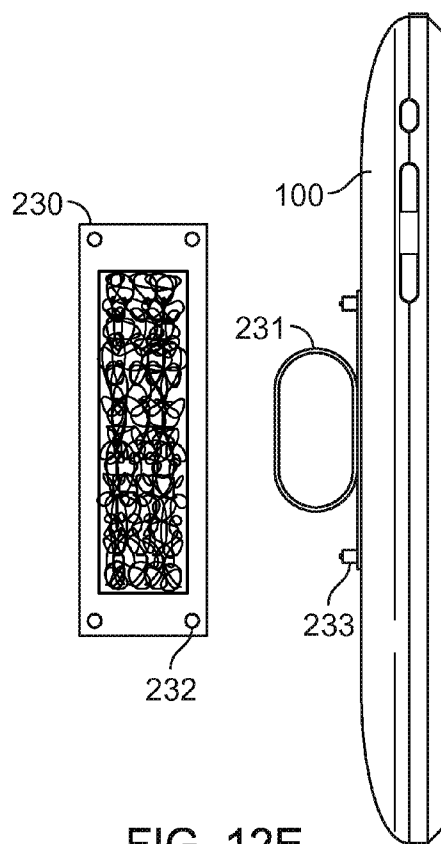


FIG. 12E

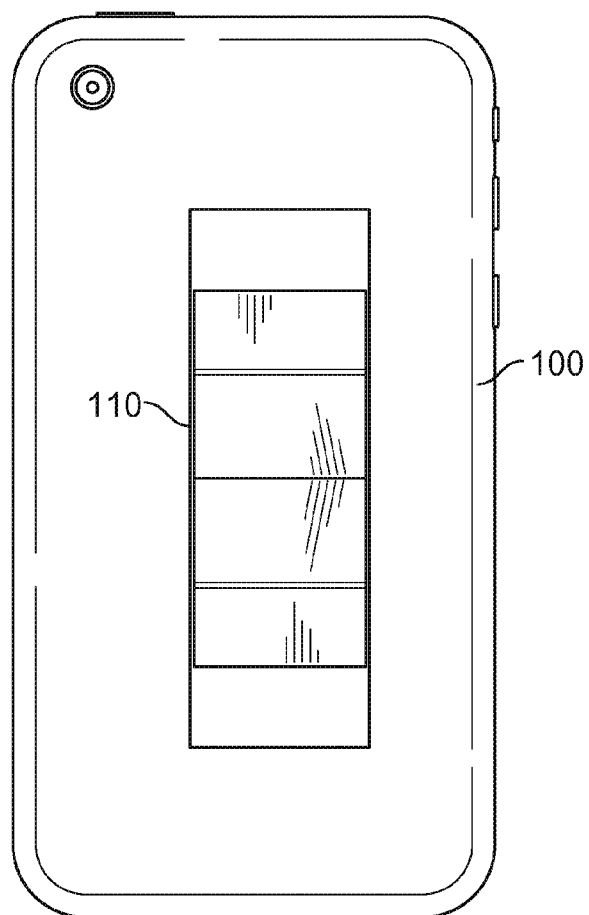


FIG. 13

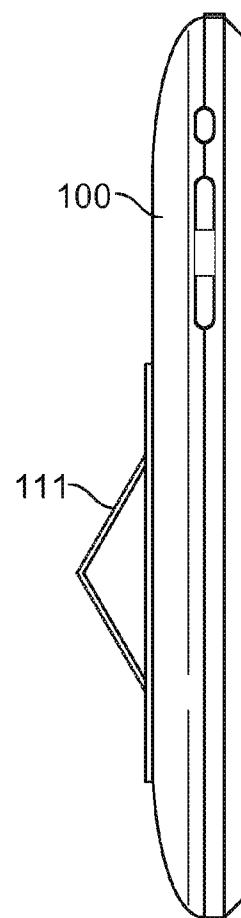


FIG. 14

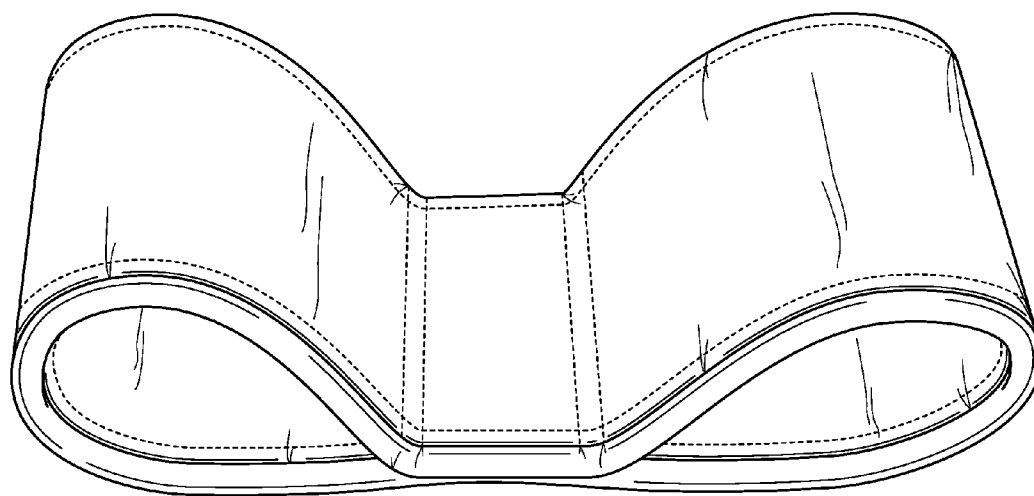


FIG. 15

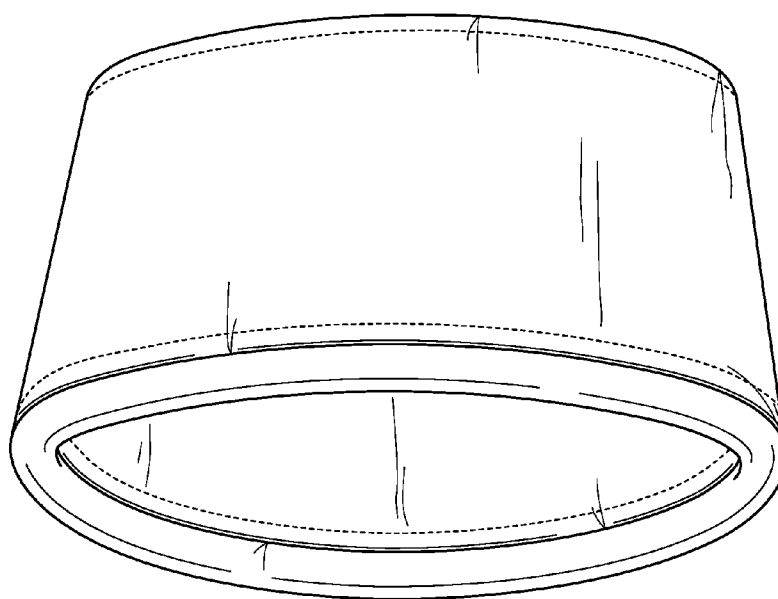


FIG. 16

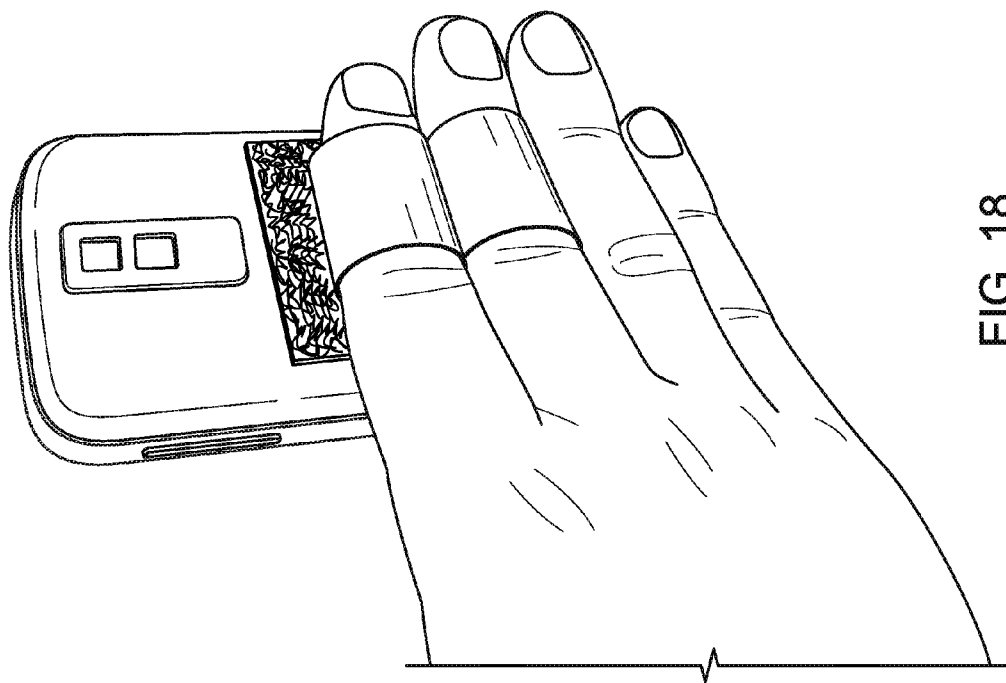


FIG. 18

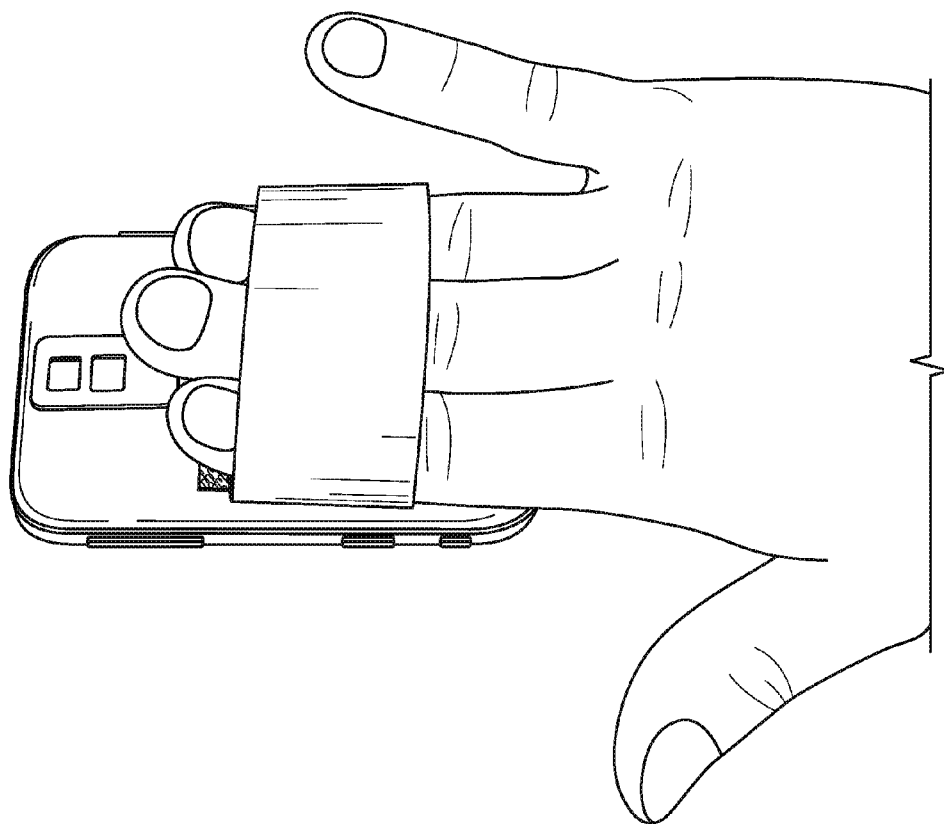


FIG. 17

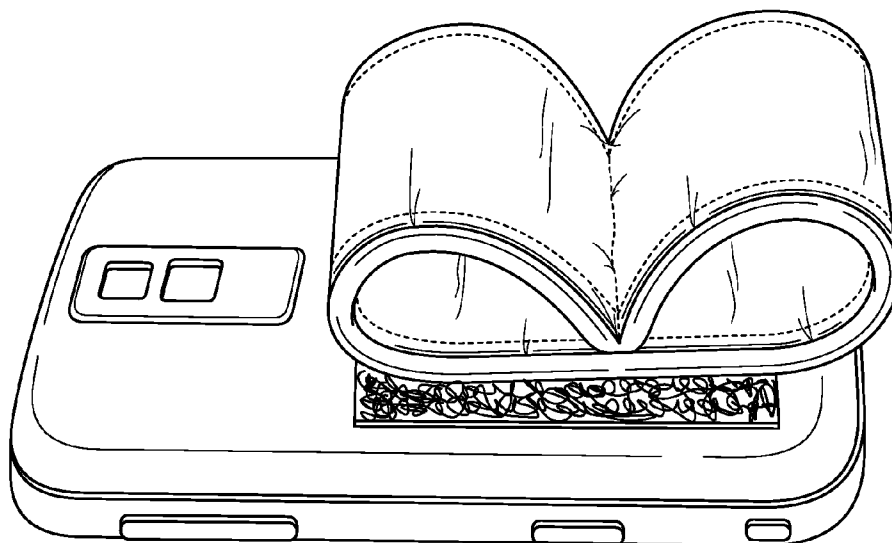


FIG. 19

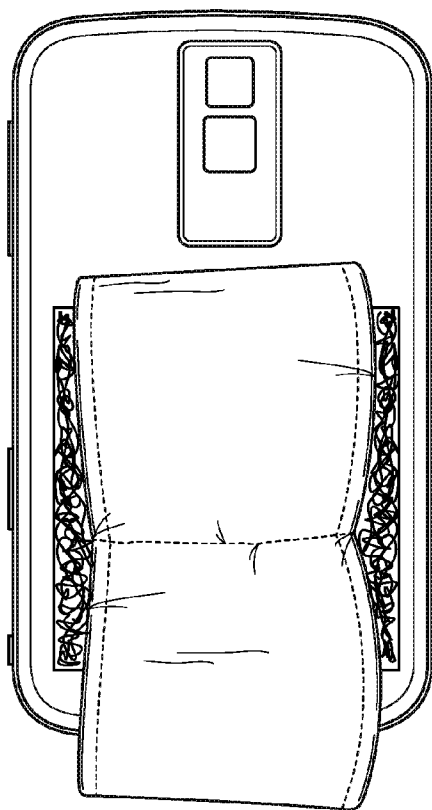


FIG. 20

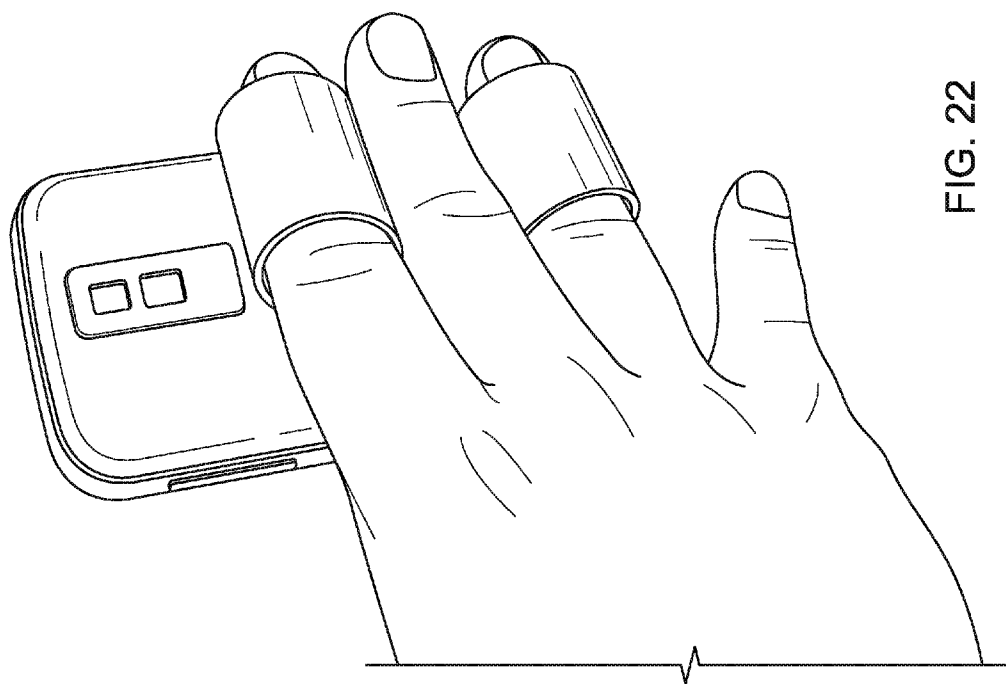


FIG. 22

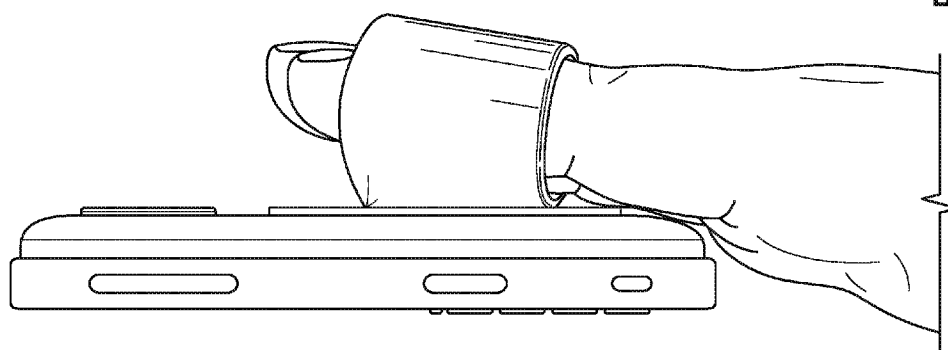


FIG. 21

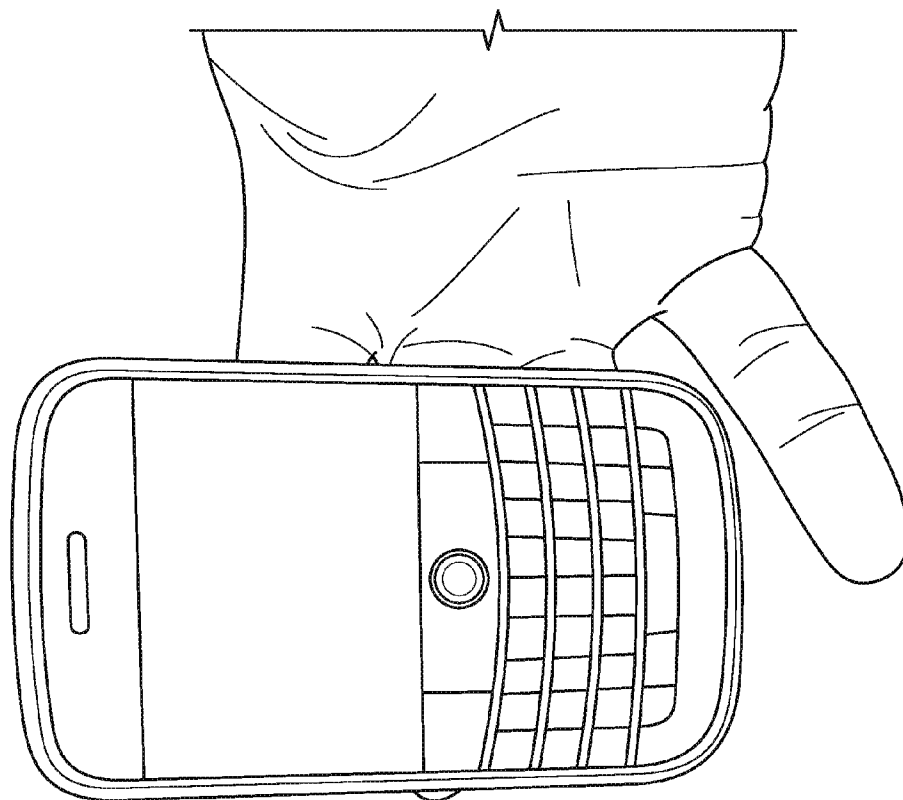


FIG. 24

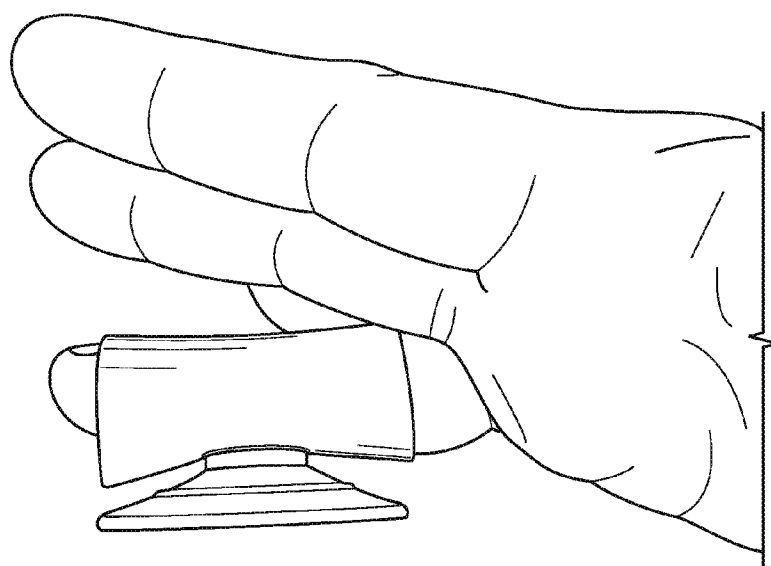


FIG. 23

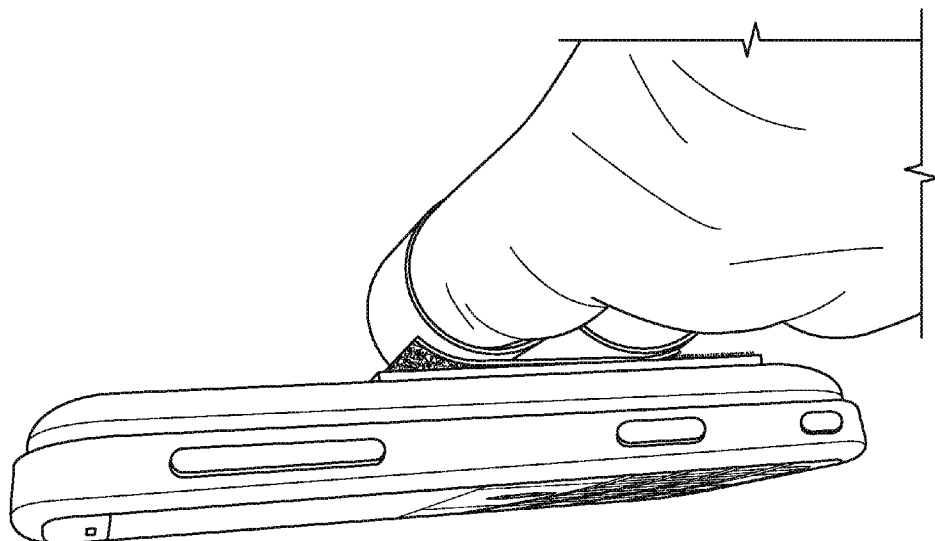


FIG. 26

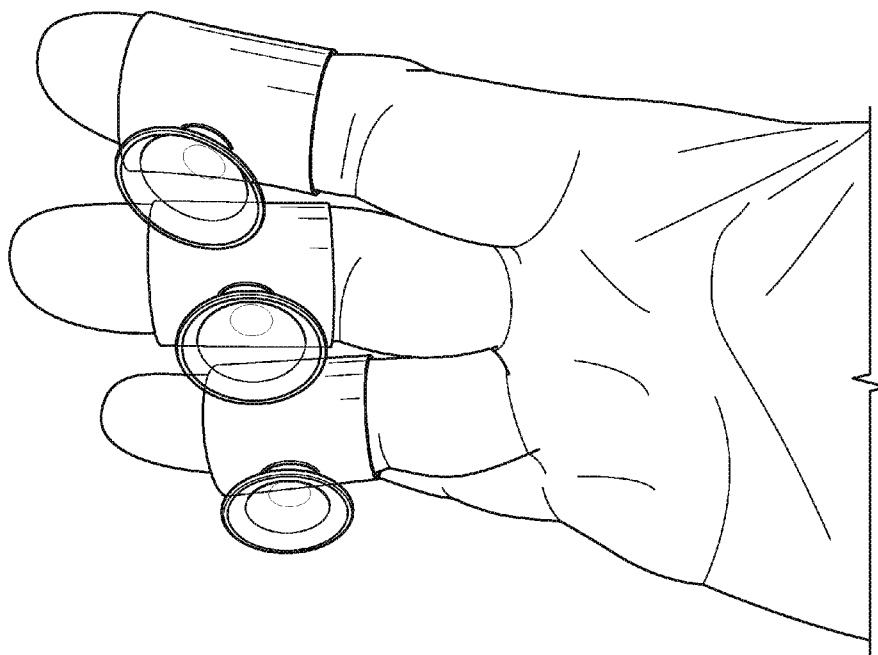


FIG. 25

HOLDING A PERSONAL DIGITAL ASSISTANT

[0001] This patent application is entitled to and claims the benefit of the priority of U.S. provisional application 61/371, 213, filed on Aug. 6, 2010, the entire contents of which are incorporated here by reference.

BACKGROUND

[0002] This description relates to holding a personal digital assistant.

[0003] As PDAs become smaller and sleeker they become more difficult to hold. At the same time, more dexterity is required to not only hold the PDA, but to use it as well. Typing on a keyboard, dragging one or more fingers across the screen, tapping an icon, and countless other functions require nimbleness to both firmly grip the device and execute functions at the same time.

SUMMARY

[0004] In general, in an aspect, a device that helps a user in holding a personal digital assistant (PDA) includes at least one sleeve sized to receive at least one of the user's fingers, and a mechanism to attach the sleeve to the PDA in an orientation to permit the user to hold the PDA by placing the finger in the sleeve while permitting the user to manipulate a function of the PDA with another finger or thumb.

[0005] Implementations may include one or more of the following features. There are two or three sleeves. The two or three sleeves are oriented to permit the user to hold the PDA by placing a finger of one hand in one of the sleeves and either a finger of the other hand or same hand in another of the sleeves. The sleeve and the mechanism are configured so that the sleeve can be moved to various positions relative to the PDA when the sleeve is attached to the PDA. The mechanism is configured to attach the sleeve to the back of the PDA. The mechanism is configured to attach the sleeve to a case in which the PDA is to be held. The sleeve comprises a tube open at both ends. The mechanism enables the sleeve to be rotated about an axis to reposition the finger relative to the PDA. The sleeve is collapsible. The mechanism comprises at least one of a suction cup, hook-and-loop fastener, a ball and socket joint, e.g., rigid pins (as would be used with PDA head-phones) and a guide way to be attached to the PDA and a guided element that includes the sleeve. The mechanism is configured to cause the sleeve to lie along an edge of the PDA. The sleeve and the mechanism are incorporated into a housing of the PDA. Decorative elements are associated with the sleeve (e.g., adorned with patterns, designs, lettering or other graphics). The decorative elements can be attached to and removed from the sleeve repeatedly. There are a set of decorative elements in a kit associated with the sleeve.

[0006] Other aspects and features, and combinations of them, can be expressed as methods, apparatus, components, systems, means or steps for performing functions, or business methods, or in other ways.

[0007] Among the advantages of these and other features and aspects may be one or more of the following. Users need not grip the device by hand, but can instead be passively attached to it, which allows for greater mobility, easier use, and a reduced risk of damage from dropping it.

[0008] Other attributes and advantages will become apparent from the following description, and from the claims.

DESCRIPTION

[0009] FIGS. 1, 12A through 12E, and 13 through 26 show PDAs with finger sleeves.

[0010] In holding onto a PDA (such as a mobile phone, a mobile digital assistant, a content player, or other handheld device), a user is generally required to grip the device by hand, whether it is in a case or without a case. This typically requires the user to utilize his or her thumb or palm in addition to his or her forefingers to secure the device when holding onto it, which inhibits use of the user's thumb and (in some implementations) forefingers to operate features of the device, and making the device prone to slipping from one's hand and dropping. When holding the PDA in a vertical or inverted position (with the display facing down), one's hand must even more securely grip the PDA, as one cannot rely on one's palm to support the device.

[0011] Utilizing finger sleeves, as discussed below, allows a user to hold a PDA securely, while retaining much greater use of the forefingers (in some implementations) and thumb to operate features of the device. By placing one or more of their fingers through sleeves on the rear or side of a device, the user's thumbs, forefingers (in some implementations), and palm are freed for use. Additionally, the sleeves better secure the device to allow for increased utility of the user's hand, and to avoid accidental dropping.

[0012] In general, a user utilizes the finger sleeves to secure their PDA by placing their fingers through rear- or side-mounted/attached sleeves that allow the user to hold their PDA using only these sleeves, and using only one to three fingers within the sleeves. These sleeves can be incorporated into a protective PDA case, or be a stand-alone item that is not part of a case and is attached to a PDA, or can be implemented as movable pieces that are part of or incorporated into the rear or side of the device, providing that the pieces secure the sleeves adequately to the device. A limitless number of forms of attachment between the sleeves and the PDA are possible, as long as the sleeves are ultimately securely fastened to the PDA, either directly or indirectly.

[0013] Finger sleeves have two primary benefits: First, a user doesn't have to grip the device (that is does not have to use a palm, thumb, and fingers to grasp the device securely) Because the fingers are held in the sleeves without requiring the user to apply any force or wrap his hand around the device, or otherwise grasp it, greater hand and thumb mobility is permitted to perform other functions. Second, there is a reduced risk that the device will be dropped due to a poor grip or inattention. Finger sleeves are especially useful when holding the PDA vertical, such as when taking a photograph, or alternatively when the PDA is inverted while the user is reclined or prone.

[0014] Among the attributes of such a system are the ability to place a single finger into the sleeve to be held by the sleeve, the ability to place two or more fingers through an expanded sleeve to be held by the sleeve, the ability to place fingers through the sleeve either individually or together with another finger(s), the ability to adjust the size of the sleeve(s) to accommodate varying finger sizes, the ability to move the sleeve(s) on the rear of the device to accommodate a user's hand size and location preference, and the ability to rotate the sleeve(s) in a clockwise or counter-clockwise manner for viewing in either portrait or landscaping mode, using a rotat-

ing mechanism. This rotating mechanism could either be securely set in one position, with the need to proactively adjust, or it could be free-moving, allowing the PDA to rotate freely about the axis of the rotating mechanism.

[0015] The sleeve(s) can be made of a flexible material, of a rigid material, or of a combination of the two, can come in varying sizes, can fold into the back or side of the PDA device, can be a standard attachment to the PDA, can uncoil and recoil within the PDA device, can be adjusted; either tightened or loosened, can have a suction cup to secure a PDA, or a magnet to secure a PDA, or Velcro or any other hook and loop system to secure the PDA, or 3M's Dual Lock or similar product, or locking pins or other mechanism to secure the PDA. The sleeves can be adorned with fabric or other decorative material for the purpose of creating a unique or personalized PDA holder.

[0016] In FIG. 1, we see a rear view of a PDA device **100** with a two-finger-sleeve apparatus **101** attached to the rear face of the PDA. This apparatus has two cylindrical channels, or sleeves (shown horizontally in the figure, one above the other), that can accommodate a user's fingers, when placed through the sleeves. These sleeves can be made of either flexible or rigid material, and can come in varying sizes to accommodate differing finger sizes. In implementations, the sleeves themselves can be attached directly to the rear face of PDA or to a larger device or case **102** that is secured to the PDA. In some examples, when incorporated with a larger device or case **102**, the finger sleeves **101** would have the ability to be moved higher or lower, or left or right on the rear face of the PDA to accommodate the user's location preferences. In the example of FIG. 1, the larger device includes a vertical strap and a horizontal strap and the two finger sleeves are attached at the place with the straps cross. Although not shown in FIG. 1, the strap arrangement would need to provide for a clear view of a display and access to a keyboard, if any on the front side of the PDA. This could be done by arranging the front sides of the straps so that they gripped the PDA at the corners (not shown).

[0017] In FIG. 2, we see the side view of a PDA **100** with the side view of a two-finger-sleeve apparatus **101**. For the user to attach himself to the apparatus, he would simply place his fingers through the open sleeves **101** until they are securely in place. The sleeves can come in many sizes, but it is expected that the length of the sleeve will be between $\frac{1}{2}$ and 2 inches, and the diameter of each finger sleeve (when fully expanded) will range between $\frac{1}{2}$ and $\frac{3}{4}$ of an inch, to accommodate typical fingers.

[0018] In FIG. 3, we see the result of how fingers **103** could be inserted into a finger-sleeve apparatus **101** to secure the user's hand to the PDA device **100**. In this instance, the apparatus has receptacles (e.g., sleeves) for two fingers, however, as many as four (or even five), or as few as one sleeve could also be utilized.

[0019] In FIG. 4, we see PDA device **100** with an enclosing case **104** wrapped around it. Attached or mounted to case **104** is a rotating device **106** that in this case allows a one-finger sleeve apparatus **105** to turn in a clockwise or counter-clockwise manner. The purpose of this rotating feature is that the user can turn their PDA **100** in either a landscape or portrait position (or any useful orientation in between those) without the need to rotate their hand (or their finger relative to their hand) accordingly.

[0020] In FIG. 5, we see a one-finger sleeve **107** attached to a mount **108** that is directly attached to the PDA **100**. In this

instance, the method of attachment can either be by mechanical or adhesive means, in particular, an attachment that can be undone and redone repeatedly without damaging the PDA, the sleeve or the mount. Sleeve **107** can be removed from mount **108** so that PDA can be easily placed into a PDA holder or charger without any obstruction from the sleeve.

[0021] As an alternative to removing a sleeve apparatus, if the sleeves **109** are made of flexible material, they will have the ability to collapse, as seen in FIG. 6, thus allowing the PDA **100** to lie relatively flat against the back of the PDA, when placed on a hard surface.

[0022] An alternative method of attaching a finger sleeve(s) **112** to a PDA **100** is through the use of suction cups. As shown in FIG. 7, a sleeve can be mounted to a suction cup **111**, with the suction cup then attached, by suction, to the rear of the PDA **100**. The suction cup is a convenient method of attachment as it can be easily removed when not in use, or when the PDA is placed in a holder or charger.

[0023] As shown in FIG. 8, the finger sleeve **112** could rotate through a broad range of orientations using a ball and socket attachment mechanism **113** that could be attached and removed from the suction cup **111** or other mounting element. With this rotating attribute, the user could alter the direction of the sleeve **112** with respect to the profile of the PDA **100**. In this case, the sleeve **112** lies perpendicular to the PDA **100**.

[0024] The method of attachment for the sleeve(s) can come in many forms. In addition to the suction cup mentioned above, the sleeve can also attach either directly or to a carrying case via Velcro or other two-piece hook and loop system, an adhesive tape or strip, 3M's Dual Lock product or similar product, locking pins, snaps, grooves, magnets, or other mechanism. Any mechanism that holds the sleeve securely to the PDA, or to a case that holds it, can be used effectively. In FIG. 9, PDA **100** has been affixed with a strip of Velcro **114**, and the sleeves **115** have Velcro on their exterior as well to secure the sleeves **115** to the PDA **100**.

[0025] In FIG. 10, a rigid (e.g., plastic) apparatus **116** is secured to (or formed as part of) the rear of a PDA **100**. This apparatus has a channel at the far ends of the unit **118** which can receive another rigid (e.g., plastic) apparatus **117** by sliding one onto the other. In this case, mounted to apparatus **117** is a shortened version of a finger sleeve **119** which resembles a ring. This shortened sleeve **119** is made of a rigid material, such as plastic, and can support a single finger. A larger version of the same configuration can also be utilized with two or more sleeves, one for each finger.

[0026] Shown in FIG. 11 is a side-mounted finger sleeve **120**, which is attached to PDA **100** by a rear-mounted bracket **121**. The side-mounted sleeve can accommodate a user's forefinger to support the PDA. The side-mounted sleeve can also be incorporated into a PDA carrying case, providing the same support, or could be formed as an integral part of the PDA housing.

[0027] In FIG. 12, displayed is an example where a finger sleeve **122** is made usable by pulling a small, removable section from the back of the PDA **100**. The sleeve is made of a thin, lightweight, flexible material, and is attached within the PDA to spring-loaded pulleys that keep constant resistance on the sleeve to keep it snug on the user's finger. When the user removes his finger, the tension within the springs pulls the movable section of the PDA back into its original position within the PDA.

[0028] The material used for the sleeves can vary from natural products such as leather, cotton, wool or other natural

fibers, to synthetics and polymers. Finger sleeves can also be made of woven materials, such as belt-like webbing. In instances where the length of the sleeve is very short, i.e. less than $\frac{1}{2}$ inch, the sleeve would more commonly be made of a rigid material. For sleeves greater than say $\frac{1}{2}$ inch, a flexible, more breathable material would be more common.

[0029] Finger sleeve configurations can be in one-, two- and three-finger varieties, with the sleeves either holding each finger individually, or holding two or three or four fingers together in one sleeve, or with one finger in one sleeve and two fingers in the other, or other combinations. In FIG. 12A, shown is a PDA 100, where two fingers can fit into a larger sleeve 200, and one finger would fit in the smaller sleeve 201. In the case of multiple finger sleeves, the sleeves can be connected to one another, or they can be attached individually to the PDA or carrying case. When multiple sleeves are connected to one another, the sleeves can be directly adjacent and parallel to one another, or there can be space between the sleeves to accommodate a finger located between the sleeves, but not housed within a sleeve. FIG. 12B shows a PDA 100, where there is an area 202 to place a finger between two separate sleeves 203. In this configuration, the user enjoys the benefit of having a wider, more secure base in which to secure their PDA, without the need to enclose more than two fingers within the sleeves. FIG. 12C shows a PDA 100, where a three-sleeve apparatus 210 would attach to a PDA using rigid pins 211 that would fit into female openings 212 in the PDA device. In lieu of pins, snaps, grooves, channels, and other forms of attachments could also be used to secure the sleeve apparatus to the PDA directly. FIG. 12D shows a two-sleeve apparatus 220 that is adorned with stars.

[0030] The size, e.g., the diameter of finger sleeves can be either fixed or adjustable. If fixed, finger sleeves can be sold in multiple sizes to accommodate fingers of varying sizes. If adjustable, the mechanism for adjustment can come from various mechanisms. Alternatives for size adjustment can come from flexible fabric that stretches. Adjustment can come from Velcro or a similar product, where the sleeve is looped back upon itself after passing through a loop that is secured to either the PDA, a PDA case or a part of the finger sleeve apparatus. These arrangements are commonly found with wrist watches and sports footwear. Adjustment can also come by pulling on one end of an unsecured sleeve until the sleeve fits securely around the finger(s); the unsecured end is then affixed to the PDA, case or sleeve apparatus to ensure a secure fit around the user's fingers.

[0031] While a number of examples have been given which describe an apparatus being attached directly to a PDA to support a finger sleeve, in all instances, the same apparatus can be affixed, or be a part of a PDA carrying case, or the PDA housing itself. The sleeve apparatus can be attached to the surface of the PDA or case, or be incorporated into the design of the PDA or case. Sleeves could be attached to PDA cases using snaps, buttons, grooves, sewing, gluing, double-stick adhesives, or any of a multitude of forms of securely fastening one item to another.

[0032] As opposed to having finger sleeves attached to a PDA case or mounted directly to a PDA, a finger-sleeve-like apparatus can be incorporated into the rear face of a PDA. FIG. 13 shows a PDA 100 with a movable portion 110 of its rear face that will allow a user to place one or more fingers through the back of the PDA 100 to secure it. In this instance, the movable sections 110 are moved towards one another to create an archway in which fingers may be placed. This arch-

way would mechanically lock into place, allowing the user to secure the PDA by placing his fingers through the archway.

[0033] While in FIG. 14 we show a rigid two-piece archway 111, the archway could also be made of a greater number of pieces, or of a flexible material to allow the archway to better contour to the user's finger(s). The archway can also be made larger or smaller by moving the movable portions of the PDA's 100 rear face closer or further from one another. By doing so, the user can custom fit the size of the archway to their particular needs. There are numerous alternative ways where finger sleeves could protrude temporarily from a PDA device, and where the finger sleeves are incorporated into the design of the PDA.

[0034] By allowing users to passively hold their PDA through a finger sleeve-like apparatus, they can feel comfortable that their PDA is secured to their hand, giving them increased hand mobility and reducing the risk that their PDA will be dropped and damaged.

[0035] In typical implementations, the finger sleeves that we have discussed here will have sizes, shapes, configurations, materials, and mountings that can (in various combinations and among other things) (1) allow fingers to be inserted and removed easily and quickly, (b) will hold fingers securely after they are inserted, (c) are comfortable to the user, (d) are connected to (or can be connected to) the PDA in a manner and orientation that will support the PDA on the user's fingers in a stable enough position and in a useful enough orientation to permit the user to use thumbs, free fingers, and other parts of the hand to operate functions of the PDA easily and freely, without requiring the user to otherwise grip the PDA, and (e) in some cases can permit reorientation of the fingers relative to the PDA to improve the effectiveness, comfort, and ease of operation of functions of the PDA.

[0036] Thus, each finger sleeve can be configured to hold one, two, three, or four fingers, and can be as long as the fingers or as short as a ring. Any number of finger sleeves can be provided. The finger sleeves can be arranged for the fingers of one hand or the fingers of both hands of the user. In the latter case, the fingers of the left hand can be inserted from one direction and the fingers of the right hand from the opposite direction. A given sleeve could be long enough or otherwise configured to accept one or more fingers from one hand and one or more fingers from the other hand at the same time.

[0037] Finger sleeves can come in a plain, monochromatic style, or they can be decorative in nature. The sleeves can be decorative themselves, with designs or images incorporated into the actual sleeve material. Additionally, sleeves can be decorated with trim pieces that are temporarily or permanently affixed to the sleeve. Permanent decorative trim can be sewn, glued or otherwise permanently affixed to the sleeve and are, or can be considered to be integral to the sleeve. Temporary decorative trim can be attached using buttons, snaps, Velcro, Dual Lock, or similar products. These temporary decorative trim pieces can be purchased with the sleeves, or they can be purchased separately. When purchased separately, multiple decorative pieces can be purchased in a single package to allow the owner to change the decorative look of the sleeve product.

[0038] These decorative trim pieces, whether temporary or permanent, can either display a simple pattern or color, or they can be adorned with letters, pictures or images. The adornment can display the owner's name, initials, address, phone number, or other personalized information. The adornment can also display other images that represent logos, such

as from corporations, schools, sports teams, or other generic images. The adornment can also display popular clothing brand designs such as Vineyard Vines, Gucci, Burberry, Louie Vuitton, Tommy Hilfiger, L.L. Bean, Coach, Nike, and others. The adornment can also display national colors, cartoon characters, animal images, generic stripes, polka dots, and other decorative patterns. FIG. 12E shows a decorative trim piece of fabric 230 that can be snapped onto finger sleeve 231 using snaps 232 and snap receptacles 233. These decorative trim pieces could be attached and removed from finger sleeve 231 for replacement by another decorative trim piece. In addition to snaps, these trim pieces could also be attached using other means, such as pins (as watches to watch bands), buttons, and other forms of attaching fabrics or other decorative trim pieces.

[0039] For temporary decorative trim pieces, these pieces can be affixed to the sleeve through a number of different manners, such as snaps, buttons, slide-in channels, Velcro, Dual Lock, or other manner. These temporary decorative pieces can be interchanged based upon the user's preferences. It will be possible for users to purchase one or more of these decorative pieces, either with their finger sleeve product, individual on their own, or in a single- or multi-pack either with or separate from their finger sleeve purchase.

[0040] The decorated finger sleeve could also match the color, pattern or design of a carrying case, whether incorporated into that case or not. Or, the decorative finger sleeve could have a look unique from the carrying case. Finger sleeves could also be color-coded or decorated to match the appearance of the actual PDA device. The finger sleeve trim piece could also incorporate a clear plastic exterior where if open on one end, could house information place between the trim piece and the sleeve. In this case, personal information, similar to what would find on a business card, could be placed within this plastic-enclosed strip to allow others to identify the owner, should the device be lost or misplaced.

[0041] The purpose of this decorative aspect of the finger sleeves is to allow users to individualize and personalize their PDA devices or PDA cases. This personalization can be used to display an affinity group, an entity of interest, personal information or simply a stylish look. PDA users could have multiple decorative trim pieces that are interchanged often to match an outfit, or simply just to vary its appearance.

[0042] It is anticipated that finger sleeves could be licensed to corporations or other entities, having their corporate/entity image(s) and design(s) adorning the sleeves. Possible licensees could include clothing manufacturers such as those listed previously, sports teams, schools, product manufacturers, or other entity wanting to display their image. These entities could choose to sell finger sleeves themselves through their own sales channels, or they could be sold by merchants that sell branded products, PDAs and/or PDA accessories. PDA manufacturers and PDA case manufacturers may also either to choose to sell finger sleeves themselves, or via other merchants. Alternatively, finger sleeves could be given away by entities, e.g. corporations, schools, sports teams, etc. as promotional items.

[0043] Finger sleeves serve a practical purpose, but they can also serve a personalize decorative purpose. PDA users like to be able to take a generic looking product such as a

PDA, and personalize it to their tastes or wishes. Additionally, entities such as corporations, schools, sports teams, clothing manufacturers and other brand providers, could utilize finger sleeves as a form of marketing for their entity by having their brand or logo or design affixed to the finger sleeve apparatus. Trim pieces that incorporate the user's personal information can also be used to show ownership or contact information analogous to the use of luggage tags, and also provide a security instrument for the PDA owner, whether the owner is an individual or entity.

[0044] Examples of PDAs with sleeves are shown in FIGS. 15 through 26.

[0045] Other implementations are also within the scope of the following claims.

1. A device to help a user in holding a personal digital assistant (PDA), the device comprising

at least one sleeve sized to receive at least one of the user's fingers, and

a mechanism to attach the sleeve to the PDA in an orientation to permit the user to hold the PDA by placing the finger in the sleeve while permitting the user to manipulate a function of the PDA with another finger or thumb.

2. The device of claim 1 in which there are two sleeves.

3. The device of claim 2 in which the two sleeves are oriented to permit the user to hold the PDA by placing a finger of one hand in one of the sleeves and a finger of the other hand in the other of the sleeves.

4. The device of claim 2 in which the sleeve and the mechanism are configured so that the sleeve can be moved to various positions relative to the PDA when the sleeve is attached to the PDA.

5. The device of claim 1 in which the mechanism is configured to attach the sleeve to a back of the PDA.

6. The device of claim 1 in which the mechanism is configured to attach the sleeve to a case in which the PDA is to be held.

7. The device of claim 1 in which the sleeve comprises a tube open at both ends.

8. The device of claim 1 in which the mechanism enables the sleeve to be rotated about an axis to reposition the finger relative to the PDA.

9. The device of claim 1 in which the sleeve is collapsible.

10. The device in claim 1 in which the mechanism comprises at least one of a suction cup, hook-and-loop fastener, a ball and socket joint, a guide way to be attached to the PDA and a guided element that includes the sleeve.

11. The device of claim 1 in which the mechanism is configured to cause the sleeve to lie along an edge of the PDA.

12. The device of claim 1 in which the sleeve and the mechanism are incorporated into a housing of the PDA.

13. The device of claim 1 also including the PDA.

14. The device of claim 1 including decorative elements associated with the sleeve.

15. The device of claim 14 in which the decorative elements can be attached to and removed from the sleeve repeatedly.

16. The device of claim 15 in which there are set of decorative elements in a kit associated with the sleeve.

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