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(54) **SAFETY ARM BAND FOR MOBILE DEVICES**

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(57)

ABSTRACT

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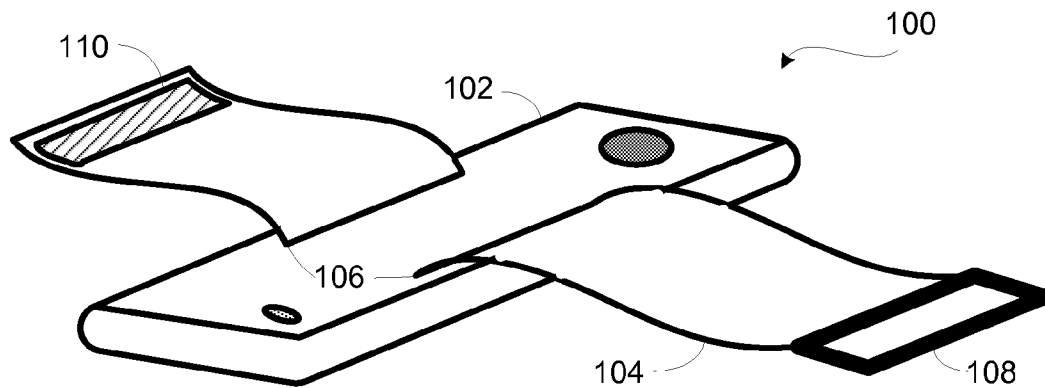
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A safety arm band for use with a mobile phone case is made from an elastic material and has a first end and a second end. The first end has a reflective device and the second end has a fastening device. The safety arm band attaches to a mobile phone case by passing through two slots on the mobile phone case. The first end engages the fastening device at the second end, thus securing the mobile phone case to a user's arm while the reflective device provides the safety function.



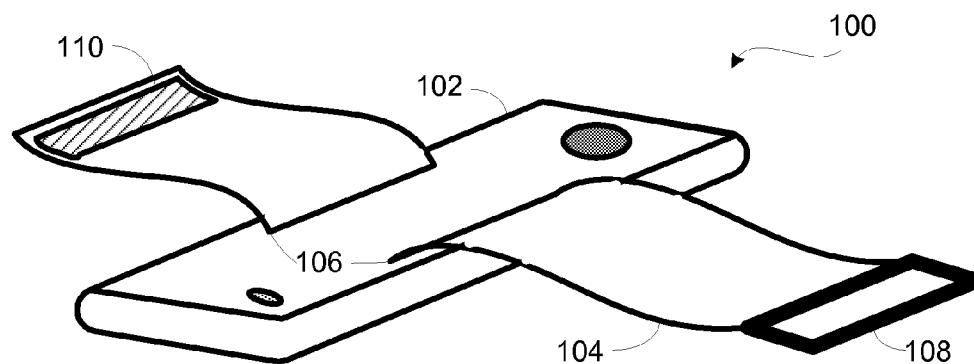


FIG. 1

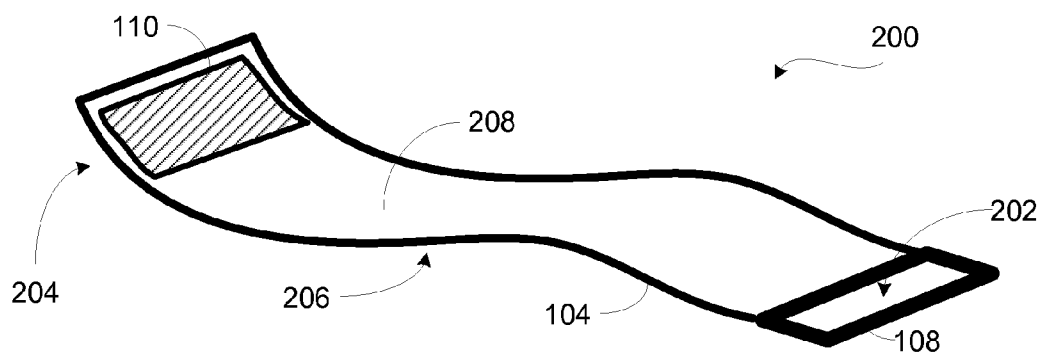


FIG. 2

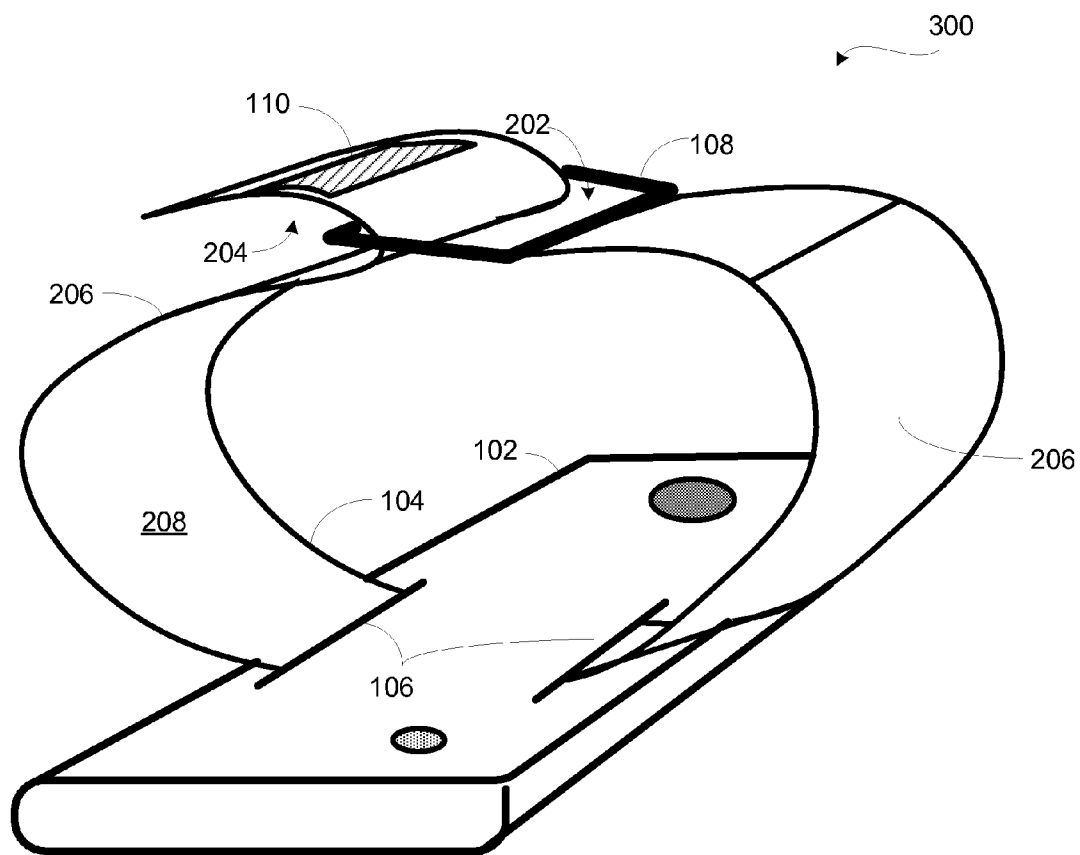


FIG. 3

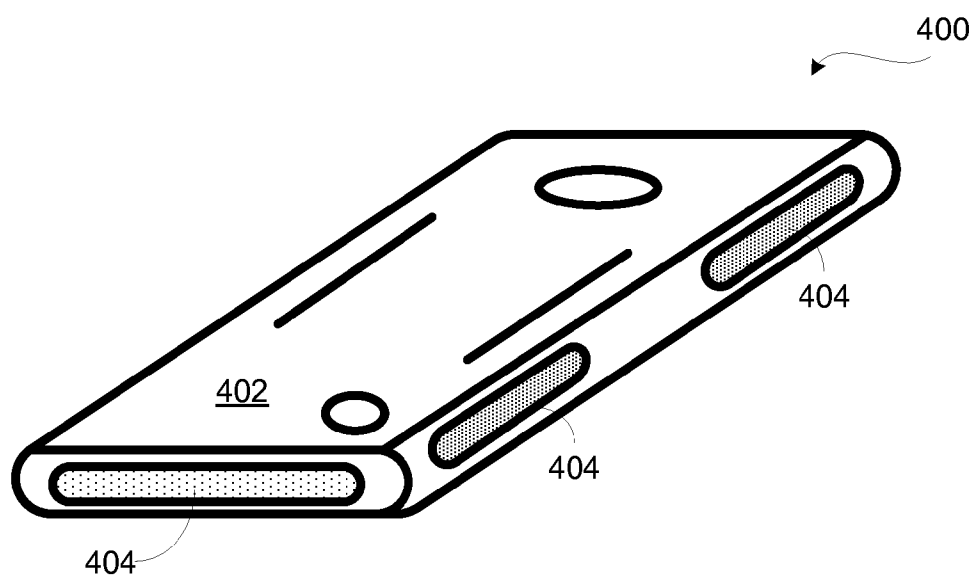


FIG. 4

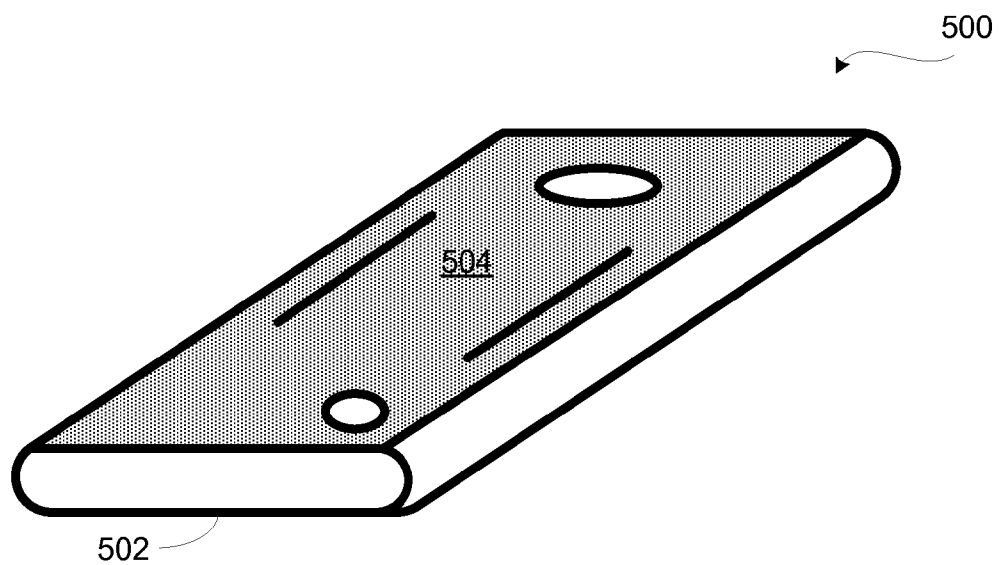


FIG. 5

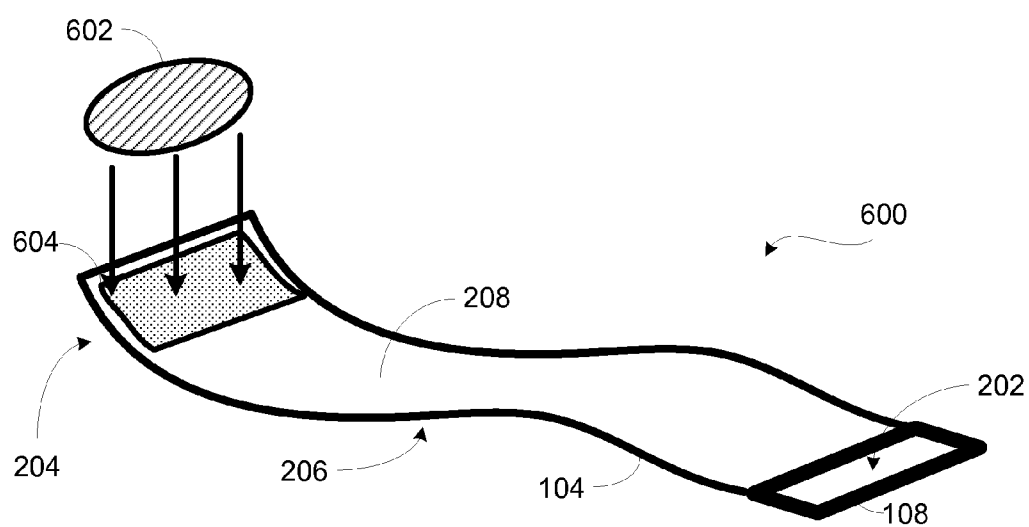


FIG. 6

SAFETY ARM BAND FOR MOBILE DEVICES

FIELD OF THE INVENTION

[0001] The present invention generally relates safety devices for pedestrians, more specifically, relates to safety devices for mobile phone users.

BACKGROUND OF THE INVENTION

[0002] Mobile communication devices are essential to the modern daily life; and they enable us to be in contact with work and also with friends. Because the mobile communication devices serve as a channel to the modern society, people carry them to anywhere and everywhere.

[0003] Many accessories have been invented to protect these valuable communication devices but not many of these accessories have been invented with safety of a user in mind.

[0004] Therefore, it is to a wearable mobile device case that provides a safety feature to a user the present invention is primarily directed.

SUMMARY OF THE INVENTION

[0005] The present invention has been made to provide night safety to a user carrying a mobile phone. In one embodiment, it is disclosed a wearable mobile device case comprising a casing, an arm band, a fastening device, and a reflective device. The casing, for receiving a mobile device, has a top side and a bottom side. The arm band, attached to the casing, has a first end, a second end, and at least one portion being expandable. The fastening device attaches to the first end of the arm band, and the reflective device attaches to the arm band. The second end of the arm band engages the fastening device and enables the wearable mobile device case to tie to a part of a human body.

[0006] In an alternative embodiment, it is disclosed a safety arm band, for use with a mobile phone case, comprising an arm band, a fastening device, and a reflective device. The arm band, for attaching to the mobile phone case, has a first end, a second end, and at least one portion being expandable. The fastening device attaches to the first end of the arm band and the reflective device attaches to the arm band. The second end of the arm band engages the fastening device and ties the arm band to a part of a human body.

[0007] In yet another alternative embodiment, it is disclosed a safety mobile phone case comprising a casing, for receiving a mobile device, with a top side and a bottom side and at least one reflective device attached to the casing.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The present invention can be understood in more detail by reading the subsequent detailed description in conjunction with the examples and references made to the accompanying drawings, wherein:

[0009] FIG. 1 shows a wearable mobile phone case according to one embodiment of the invention;

[0010] FIG. 2 illustrates an expandable arm band according to one embodiment of the invention;

[0011] FIG. 3 illustrates a wearable mobile phone case in use according to one embodiment of the present invention;

[0012] FIG. 4 is a mobile phone case with reflective feature according to one alternative embodiment of the invention; and

[0013] FIG. 5 is a mobile phone case with reflective feature according to yet another alternative embodiment of the invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0014] In the following description, mobile phone, mobile device, and mobile communication device are used interchangeably. FIG. 1 illustrates a wearable mobile phone case 100 according to one embodiment of the present invention. The wearable mobile phone case 100 includes a mobile phone case 102 for enclosing a mobile phone (not shown). The mobile phone case 102 has a top side and a bottom side; the top side is generally open and through which the mobile phone is inserted. The bottom side is provided with two slots 106 through which an arm band 104 can be inserted. The arm band 104 is usually made from an expandable material, such as elastic, and has a reflective device 110 attached to one end and a fastening device 108 attached to other end.

[0015] FIG. 2 is an illustration 200 of an arm band 104. The arm band 104 has a top side 206 and a bottom side 208. The reflective device 110 is attached to the bottom side 208 at one end of the arm band 104. The fastening device 108, in one embodiment, is a square device with an opening 202 attached to another end of the arm band 104. The fastening device 108 engages the other end of the arm band through a mechanism common known as Velcro™. The top side 206 has a portion made with loops and another portion 204, opposite of the location of the reflective device 110, made with hooks. It is understood that the fastening device 108 may have shapes other than square.

[0016] FIG. 3 is an illustration 300 of the arm band 104 in use. The arm band 104 is first inserted through two openings 106 on the mobile phone case 102. When the end with the reflective device 110 passes through the opening 202, with the top side 208 facing in, the hooks on the portion 204 can engage loops on the other portion of the top side 206. The arm band 104, being made from elastic material, can easily adjust tightly to the arm of the user and the reflective device 110 will reflect light that shines on the reflective device 110, thus increasing the visibility of the user during the night time.

[0017] Though the invention is fully described in the embodiment above, the invention can be easily modified in different embodiments. For example, the arm band 104 can have only one part made from elastic material while the rest of the arm band 104 is made from different material. The loops and hooks mechanism can also be replaced by other mechanisms, such as click-lock mechanism or other suitable mechanism.

[0018] Although the present invention has been described with reference to the preferred embodiments, it will be understood that the invention is not limited to the details described thereof. Various substitutions and modifications have been suggested in the foregoing description, and others will occur to those of ordinary skill in the art. Therefore, all such substitutions and modifications are intended to be embraced within the scope of the invention as defined in the appended claims. It is understood that features shown in different figures and different embodiments can be easily combined within the scope of the invention.

[0019] Additional safety can be provided to the user through alternative embodiment shown in FIGS. 4 and 5. FIG. 4 is an illustration 400 of a mobile phone case 402 with several reflective devices 404 attached. These reflective

devices can be stickers with adhesive and glued to the mobile phone case **402** and can also be from a plastic material and molded into part of the mobile phone case **402** during the manufacturing of the mobile phone case **402**. FIG. **5** is yet another alternative embodiment in which the reflective device **504** is made part of the mobile phone case **502**.

[0020] FIG. **6** is an illustration **600** of an alternative embodiment of the arm band **104**. The reflective device **602** can be detachable from the arm band **104**. The reflective device **602** has hooks on one side and the reflective material on the other side. One portion of the bottom side **208** can be made with loops onto which the reflective device **602** can be attached. The reflective device **602** can have different shapes and the reflective material can be of different colors. A user may buy one arm band **104** and multiple reflective devices **602**. So, the user may choose different reflective device **602** each time he wears the arm band **104**. The reflective device **602** may also be made with a message area for displaying individual messages, such as user's name and phone number, or other greeting messages, such as "have a nice day." In yet another alternative embodiment, the reflective device **602** may include a simple electrical circuit with a LED powered by a battery and a switch. The reflective device **602** can be attached to the arm band **104** and the LED actively flashing when it is switched on.

[0021] It will be apparent to a person skilled in the relevant art that features described in different embodiments described in the present specification may be combined. It is to be appreciated that the Detailed Description section, and not the Summary and Abstract sections, is intended to be used to interpret the claims. The Summary and Abstract sections may set forth one or more but not all exemplary embodiments of the present technology as contemplated by the inventor(s), and thus, are not intended to limit the present technology and the appended claims in any way.

What is claimed is:

1. A wearable mobile device case comprising:
 - a casing, for receiving a mobile device, with a top side and a bottom side;
 - an arm band, attached to the casing, with a first end, a second end, and at least one portion being expandable;
 - a fastening device attached to the first end of the arm band;
 - and
 - a reflective device attached to the arm band, wherein the second end of the arm band engages the fastening device and enables the wearable mobile device case to tie to a part of a human body.
2. The wearable mobile phone case of claim **1**, wherein the bottom side of the casing further has at least two slots and the arm band attaches to the casing by passing through the at least two slots.
3. The wearable mobile phone case of claim **1**, wherein the arm band further comprises a top side and a bottom side, at least a first portion of the top side of the arm band comprises

a plurality of loops, and at least a second portion of the top side of the arm band comprises a plurality of hooks.

4. The wearable mobile phone case of claim **1**, wherein the fastening device comprises a square device with an opening.

5. The wearable mobile phone case of claim **1**, wherein the reflective device can be removed from the arm band without damaging the arm band.

6. The wearable mobile phone case of claim **5**, wherein the reflective device further comprises a plurality of hooks on a first side and a reflective material on a second side.

7. The wearable mobile phone case of claim **6**, wherein the reflective device further comprises a message area for displaying messages.

8. A safety arm band, for use with a mobile phone case, comprising:

- an arm band, for attaching to the mobile phone case, with a first end, a second end, and at least one portion being expandable;

- a fastening device attached to the first end of the arm band;
- and

- a reflective device attached to the arm band,

- wherein the second end of the arm band engages the fastening device and ties the arm band to a part of a human body.

9. The safety arm band of claim **8**, wherein the arm band further comprises a top side and a bottom side, at least a first portion of the top side of the arm band comprises a plurality of loops, and at least a second portion of the top side of the arm band comprises a plurality of hooks.

10. The safety arm band of claim **8**, wherein the fastening device comprises a square device with an opening.

11. The safety arm band of claim **8**, wherein the reflective device can be removed from the arm band without damaging the arm band.

12. The safety arm band of claim **11**, wherein the reflective device further comprises a plurality of hooks on a first side and a reflective material on a second side.

13. The safety arm band of claim **12**, wherein the reflective device further comprises a message area for displaying messages.

14. The safety arm band of claim **8**, wherein the reflective device further comprises a LED.

- 15. A safety mobile phone case comprising:

- a casing, for receiving a mobile device, with a top side and a bottom side; and

- at least one reflective device attached to the casing.

16. The safety mobile phone case of claim **15**, wherein the bottom side of the casing further has at least two slots for an arm band to pass through the casing.

17. The safety mobile phone case of claim **15**, wherein the at least one reflective device is made from a plastic material and molded into the casing.

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