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(54) **UNIVERSAL MOBILE DEVICE HOLSTER WITH FORWARD-URGING CURVED SPRING**

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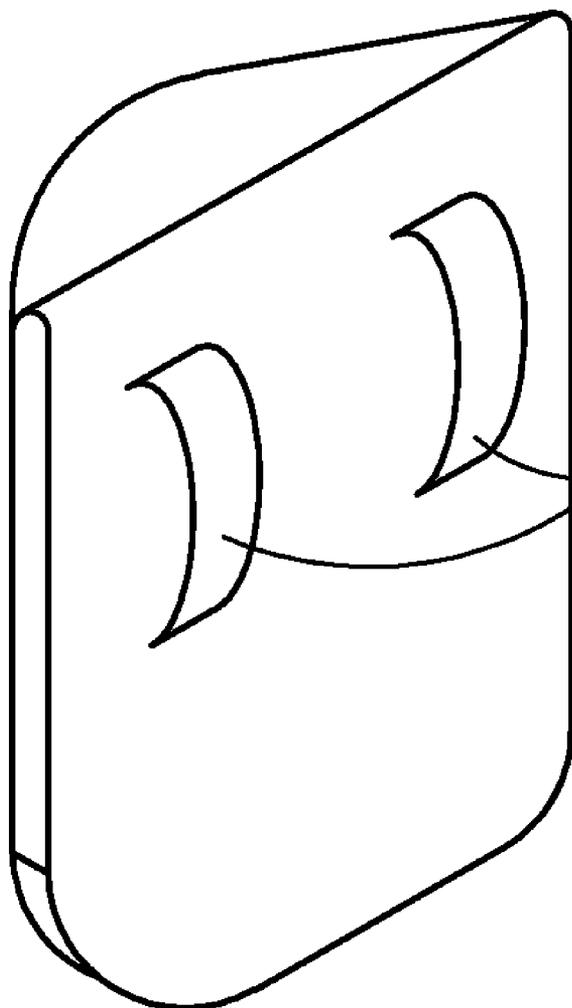
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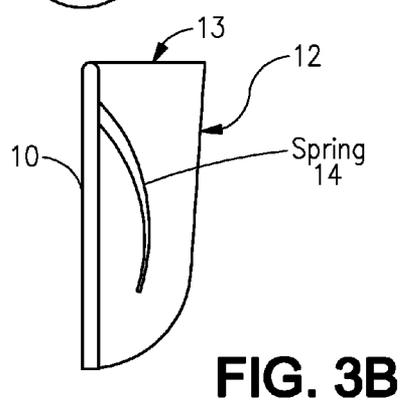
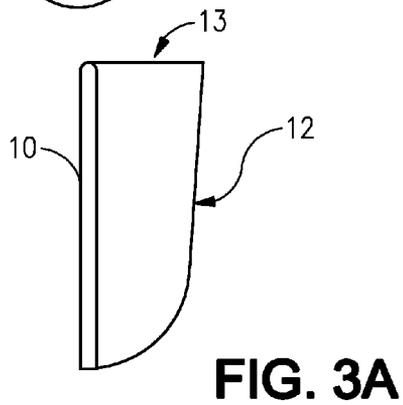
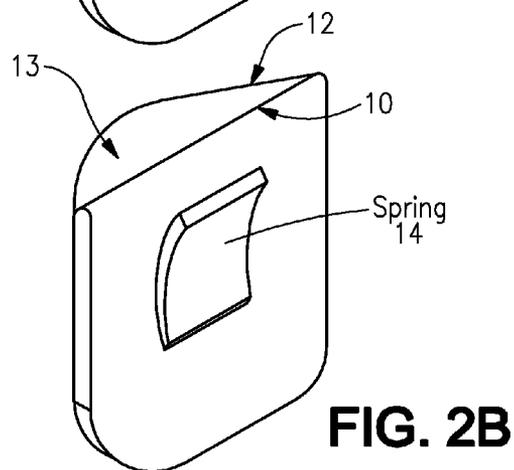
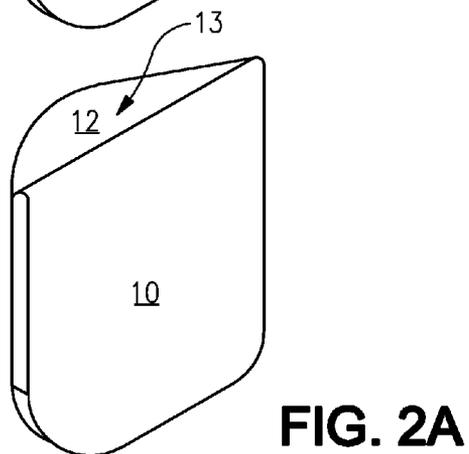
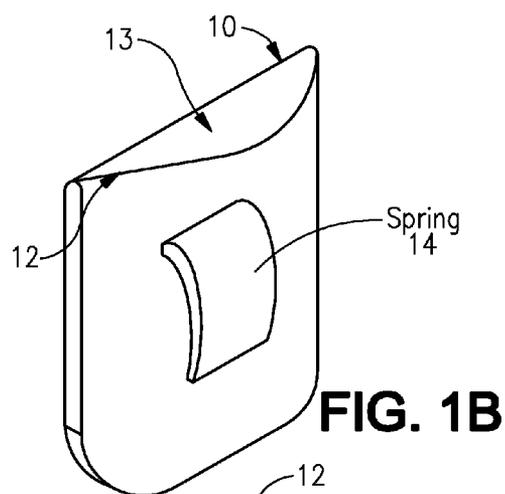
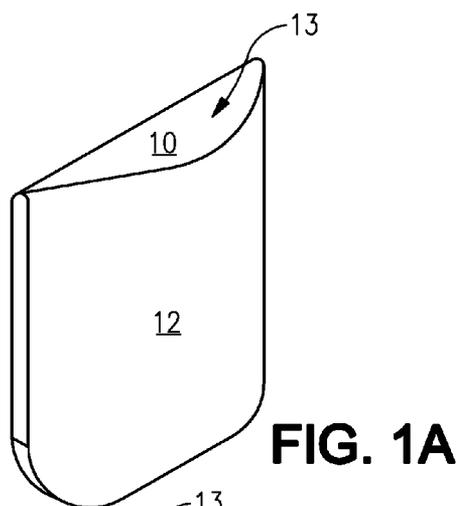
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(57) **ABSTRACT**

A universal mobile device holster is disclosed, the holster including a shell having a front side and a back side, which together define a cavity with an opening adapted to receive a mobile device. The holster also includes at least one forward-urging spring attached within the cavity, and adapted for applying forward force for aligning and for applying forward gripping pressure on a mobile device held within the cavity for ensuring that the mobile device is removably secure within the holster.



Belt loops
50



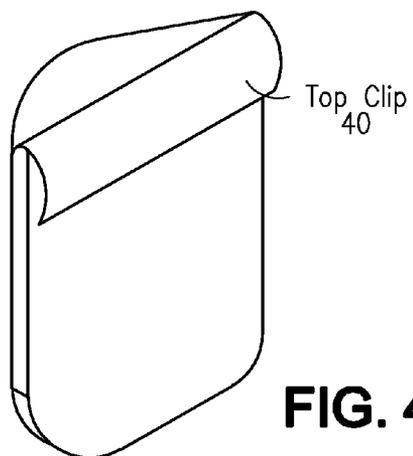


FIG. 4

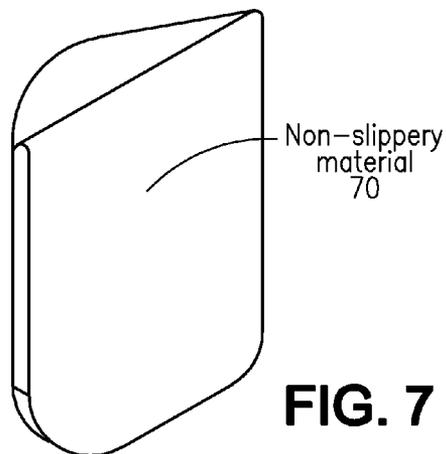


FIG. 7

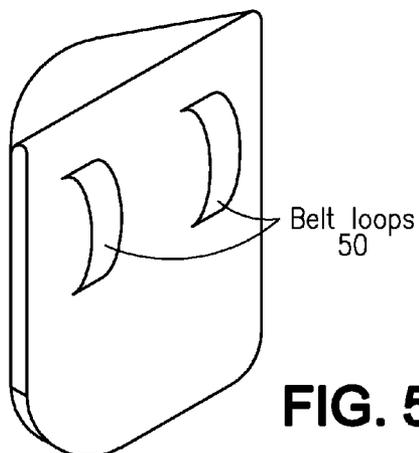


FIG. 5

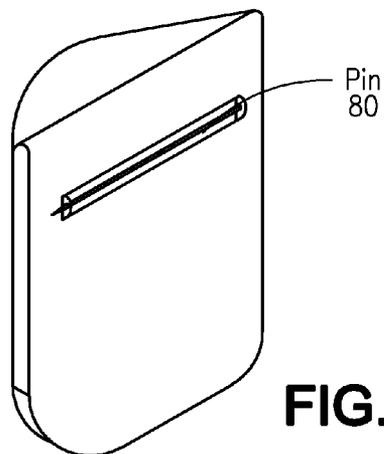


FIG. 8

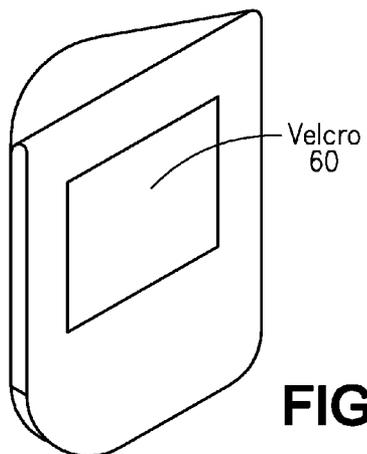


FIG. 6

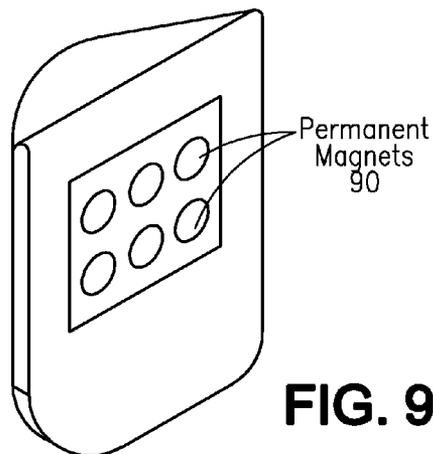


FIG. 9

UNIVERSAL MOBILE DEVICE HOLSTER WITH FORWARD-URGING CURVED SPRING

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims priority of co-pending U.S. patent application Ser. No. 12/493,453 filed Jun. 26, 2009, and entitled "Mobile Device Holster", which claims priority from Provisional Patent Application Ser. Number 61/133,380 filed Jun. 27, 2008, and entitled "Mobile Device Quick Draw Holster", the entirety of each patent application being incorporated herein by reference.

FIELD OF THE INVENTION

[0002] This invention relates generally to mobile devices, and more particularly to mobile device accessories.

BACKGROUND

[0003] Mobile devices such as cellular mobile devices, PDA's, GPS's, and the like, have provided great convenience in communications, personal organization, and computing, and are now commonplace and widely popular. The added convenience provided by such mobile devices has led to many people becoming dependent upon the devices. Such dependence has placed an obligation on many mobile device users to keep the device with them, within earshot, nearby, and/or on their person, at all times. There are many ways to store the devices on or near the user, such as placing them in pockets, pocket books, purses, etc. Many of these storage methods however, can cause damage due to such things as other articles coming in contact with them, or by being crushed. Damage can also occur if the device unintentionally falls or slips out of its storage location.

[0004] Holsters have been devised to store mobile devices to prevent such damage. These holsters, however, are custom-designed for one particular type of mobile device, thereby making them unsuitable for use with devices other than the device for which the holster was designed.

SUMMARY

[0005] A universal mobile device holster is disclosed which can be used with mobile devices of a variety of shapes and sizes, nevertheless securely holding the mobile device, while also allowing quick and efficient removal of the mobile device from the holster.

[0006] A general aspect of the invention is a universal mobile device holster. The holster includes: an open shell having a front side and a back side, which together define a cavity with an opening adapted to receive a mobile device; and at least one forward-urging positioning device disposed within the cavity, the at least one forward-urging positioning device being adapted to urge the mobile device forward against the front side so as to securely and removably hold the mobile device within the open shell.

[0007] In some embodiments, the at least one forward-urging positioning device includes a curved spring. In further embodiments, the curved spring is attached to the back side of the open shell.

[0008] In some embodiments, an inner surface of the cavity opposite to the forward-urging positioning device provides friction when contacted by the mobile device, thereby resist-

ing vertical movement of the mobile device so as to retain the device in the holster unless the mobile device is intentionally removed from the holster.

[0009] In some embodiments, the back side is substantially flat, and the front side is substantially curved.

[0010] In some embodiments, the cavity is about 30 to 300 percent larger in volume than the mobile device to be inserted.

[0011] In some embodiments, the universal mobile device holder further includes at least one attachment mechanism for attaching the open shell to a garment.

[0012] In some embodiments, the at least one attachment mechanism includes an extended clip disposed along the top of the back side of the open shell.

[0013] In some embodiments, the at least one attachment mechanism includes at least one belt loop attached to the back side of the open shell.

[0014] In some embodiments, the at least one attachment mechanism includes hook and loop material attached to the back side of the open shell.

[0015] In some embodiments, the at least one attachment mechanism includes non-slip material attached to the back side of the open shell.

[0016] In some embodiments, the at least one attachment mechanism includes a pin and pin receiver attached to the back side of the open shell.

[0017] In some embodiments, the at least one attachment mechanism includes a plurality of permanent magnets attached to the back side of the open shell.

[0018] Another general aspect of the invention is a universal mobile device holster including: an open shell having a front side, and a back side, which together define a cavity with an opening adapted to receive a mobile device; at least one forward-urging positioning device disposed within the cavity, the at least one forward-urging positioning device being adapted to urge the mobile device forward against the front side so as to securely and removably hold the mobile device within the open shell; and an attachment mechanism disposed on the back side of the open shell capable of attaching the open shell to a garment.

[0019] In some embodiments, the attachment mechanism includes an extended clip disposed along the top of the back side of the open shell.

[0020] In some embodiments, the attachment mechanism includes at least one belt loop attached to the back side of the open shell.

[0021] In some embodiments, the attachment mechanism includes a patch of a hook and loop material attached to the back side of the open shell.

[0022] In some embodiments, the attachment mechanism includes a pin and pin receiver attached to the back side of the open shell.

[0023] In some embodiments, the attachment mechanism includes a plurality of permanent magnets attached to the back side of the open shell.

[0024] Another general aspect of the invention is a universal mobile device holster including: an open shell having a front side, and a back side, which together define a cavity with an opening adapted to receive a mobile device; at least one forward-urging positioning device disposed within the cavity, the at least one forward-urging positioning device being adapted to urge the mobile device forward against the front side so as to securely and removably hold the mobile device within the open shell; and non-slip material attached to at

least the back side of the open shell for resisting removal of the universal mobile device holster from a pocket of a garment.

BRIEF DESCRIPTION OF THE DRAWINGS

[0025] The invention will be more fully understood from the following Detailed Description, in conjunction with the following figures, wherein:

[0026] FIG. 1A is a perspective opaque front view of an embodiment of the universal mobile device holster;

[0027] FIG. 1B is a perspective transparent front view of the embodiment of FIG. 1, showing the spring attached inside;

[0028] FIG. 2A is a perspective opaque back view of the embodiment of FIG. 1A;

[0029] FIG. 2B is a perspective transparent back view of the embodiment of FIG. 2A, showing the spring of FIG. 1B;

[0030] FIG. 3A is an opaque side view of the embodiment of FIGS. 1A and 2A;

[0031] FIG. 3B is a transparent side view of the embodiment of FIG. 3A;

[0032] FIG. 4 is a perspective opaque back view of an embodiment having a top clip attachment device;

[0033] FIG. 5 is a perspective opaque back view of an embodiment having a pair of belt loops as the attachment device;

[0034] FIG. 6 is a perspective opaque back view of an embodiment having a patch of hook and/or loop material as the attachment device;

[0035] FIG. 7 is a perspective opaque back view of an embodiment having at least a patch of non-slippery material so as to maintain the mobile device holster in a pocket of a garment;

[0036] FIG. 8 is a perspective opaque back view of an embodiment having a pin attachment device; and

[0037] FIG. 9 is a perspective opaque back view of an embodiment having a plurality of permanent magnets as the attachment device.

DETAILED DESCRIPTION

[0038] FIG. 1A is a perspective opaque front view of an embodiment of the universal mobile device holster having a back side 10 and a front side 12, which together define a cavity having an opening 13.

[0039] FIG. 1B is a perspective transparent front view of the embodiment of FIG. 1, showing the spring 14 attached inside, the spring 14 being attached to the back side 10. The spring is a piece of curved metal that is resilient, and provides enough force to push the mobile device held within against the opposing wall of the cavity. The spring can be lined or coated with a material, such as fabric, rubber, or plastic, that resists slipping. Likewise, the inner surface of the front side 12 can be coated or covered with a material that resists slipping, such as a fabric that resists slipping.

[0040] FIG. 2A is a perspective opaque back view of the embodiment of FIG. 1A, again showing the back side 10 and the front side 12, also showing the opening 13.

[0041] FIG. 2B is a perspective transparent back view of the embodiment of FIG. 2A, showing the spring 14 of FIG. 1B.

[0042] FIG. 3A is an opaque side view of the embodiment of FIGS. 1A and 2A, showing the back side 10, the front side 12, and the opening 13.

[0043] FIG. 3B is a transparent side view of the embodiment of FIG. 3A, showing the back side 10, the front side 12, and the opening 13, as well as the spring 14.

[0044] FIG. 4 is a perspective opaque back view of an embodiment having a top clip attachment device 40 for attachment of the universal mobile device holster to a garment, a hand bag, or to a backpack.

[0045] FIG. 5 is a perspective opaque back view of an embodiment having a pair of belt loops 50 as the attachment device for attaching to any garment having belt loops.

[0046] FIG. 6 is a perspective opaque back view of an embodiment having a patch of hook and/or loop material (Velcro™) as the attachment device for attaching to any garment or accessory that can bear a patch of hook and/or loop material.

[0047] FIG. 7 is a perspective opaque back view of an embodiment having at least a patch of non-slippery material 70 so as to maintain the mobile device holster in a pocket of a garment.

[0048] FIG. 8 is a perspective opaque back view of an embodiment having a pin attachment device 80 for attaching the mobile holster to any garment or accessory, such as a backpack.

[0049] FIG. 9 is a perspective opaque back view of an embodiment having a plurality of permanent magnets 90 as the attachment device, for attachment to a ferrous metal that is attached or embedded within a garment or accessory.

[0050] Other modifications and implementations will occur to those skilled in the art without departing from the spirit and scope of the invention as claimed. Accordingly, the above description is not intended to limit the invention except as indicated in the following claims.

What is claimed is:

1. A universal mobile device holster, the holster comprising:

an open shell having a front side and a back side, which together define a cavity with an opening adapted to receive a mobile device; and

at least one forward-urging positioning device disposed within the cavity, the at least one forward-urging positioning device being adapted to urge the mobile device forward against the front side so as to securely and removably hold the mobile device within the open shell.

2. The universal mobile device holster of claim 1, wherein the at least one forward-urging positioning device includes a curved spring.

3. The universal mobile device holster of claim 2, wherein the curved spring is attached to the back side of the open shell.

4. The universal mobile device holster of claim 1, wherein an inner surface of the cavity opposite to the forward-urging positioning device provides friction when contacted by the mobile device, thereby resisting vertical movement of the mobile device so as to retain the device in the holster unless the mobile device is intentionally removed from the holster.

5. The universal mobile device holster of claim 1, wherein: the back side is substantially flat, and the front side is substantially curved.

6. The universal mobile device holster of claim 1, wherein the cavity is about 30 to 300 percent larger in volume than the mobile device to be inserted.

7. The universal mobile device holster of claim 1, further comprising:

at least one attachment mechanism for attaching the open shell to a garment.

8. The universal mobile device holster of claim 7, wherein the at least one attachment mechanism includes:
an extended clip disposed along the top of the back side of the open shell.

9. The universal mobile device holster of claim 7, wherein the at least one attachment mechanism includes:
at least one belt loop attached to the back side of the open shell.

10. The universal mobile device holster of claim 7, wherein the at least one attachment mechanism includes:
hook and loop material attached to the back side of the open shell.

11. The universal mobile device holster of claim 7, wherein the at least one attachment mechanism includes:
non-slip material attached to the back side of the open shell.

12. The universal mobile device holster of claim 7, wherein the at least one attachment mechanism includes:
a pin and pin receiver attached to the back side of the open shell.

13. The universal mobile device holster of claim 7, wherein the at least one attachment mechanism includes:
a plurality of permanent magnets attached to the back side of the open shell.

14. A universal mobile device holster comprising:
an open shell having a front side, and a back side, which together define a cavity with an opening adapted to receive a mobile device;

at least one forward-urging positioning device disposed within the cavity, the at least one forward-urging positioning device being adapted to urge the mobile device forward against the front side so as to securely and removably hold the mobile device within the open shell; and

an attachment mechanism disposed on the back side of the open shell capable of attaching the open shell to a garment.

15. The universal mobile device holster of claim 14, wherein the attachment mechanism includes:
an extended clip disposed along the top of the back side of the open shell.

16. The universal mobile device holster of claim 14, wherein the attachment mechanism includes:
at least one belt loop attached to the back side of the open shell.

17. The universal mobile device holster of claim 14, wherein the attachment mechanism includes:
a patch of a hook and loop material attached to the back side of the open shell.

18. The universal mobile device holster of claim 14, wherein the attachment mechanism includes:
a pin and pin receiver attached to the back side of the open shell.

19. The universal mobile device holster of claim 7, wherein the attachment mechanism includes:
a plurality of permanent magnets attached to the back side of the open shell.

20. A universal mobile device holster comprising:
an open shell having a front side, and a back side, which together define a cavity with an opening adapted to receive a mobile device;

at least one forward-urging positioning device disposed within the cavity, the at least one forward-urging positioning device being adapted to urge the mobile device forward against the front side so as to securely and removably hold the mobile device within the open shell; and

non-slip material attached to at least the back side of the open shell for resisting removal of the universal mobile device holster from a pocket of a garment.

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