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(54) **MAGNETIC TOOL HOLSTER**

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(57) **ABSTRACT**

A magnetic holder/holster device is disclosed. The device includes a holster body to hold a tool, one or more magnets coupled to the surface of the body for holding work items, a securing strap, and an apparatus to removably attach to a belt. The one or more magnets are distributed across the surface so as to allow metallic work items to be secured to substantially all points of the surface. In some embodiments, the magnets are permanently coupled to the surface of the device. In some embodiments, the magnets are removably attached to the surface. In operation, the magnetic tool holder/holster allows a worker wearing the holder/holster device to securely hold metallic work items readily accessible on the magnetic holder/holster body via the magnetic attraction of the magnets. The magnetic tool holder/holster has the advantage of preventing the spilling of metallic work items as well as making them more convenient to use by ensuring secure and convenient placing capabilities.

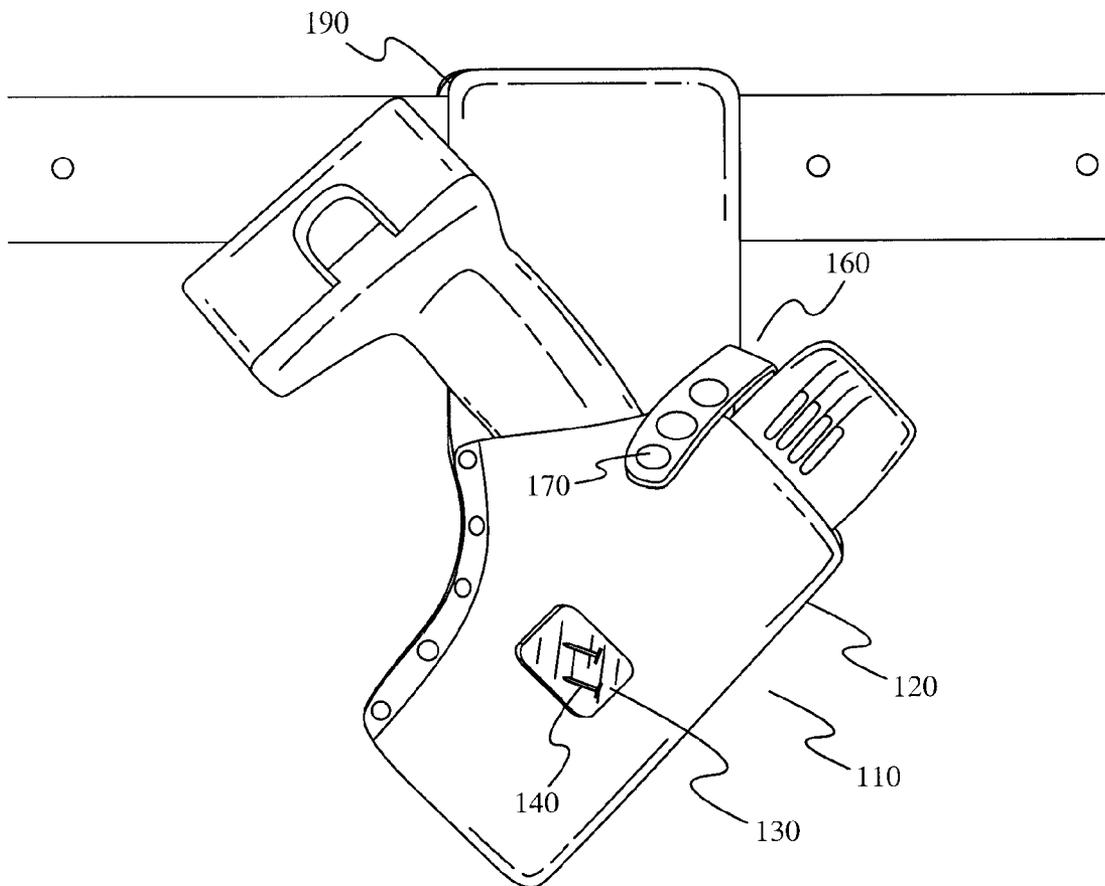
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Related U.S. Application Data

(60) Provisional application No. 61/133,057, filed on Jun. 24, 2008.



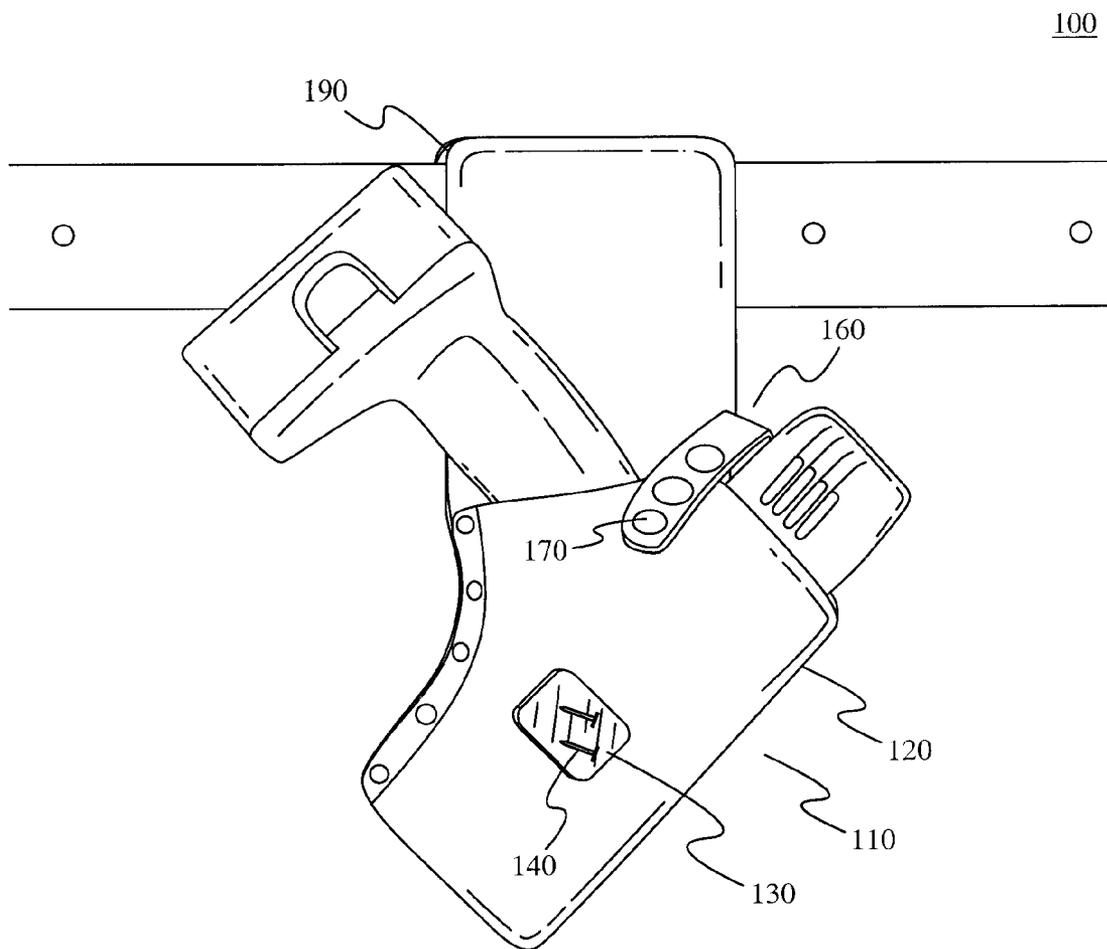


Fig. 1

200

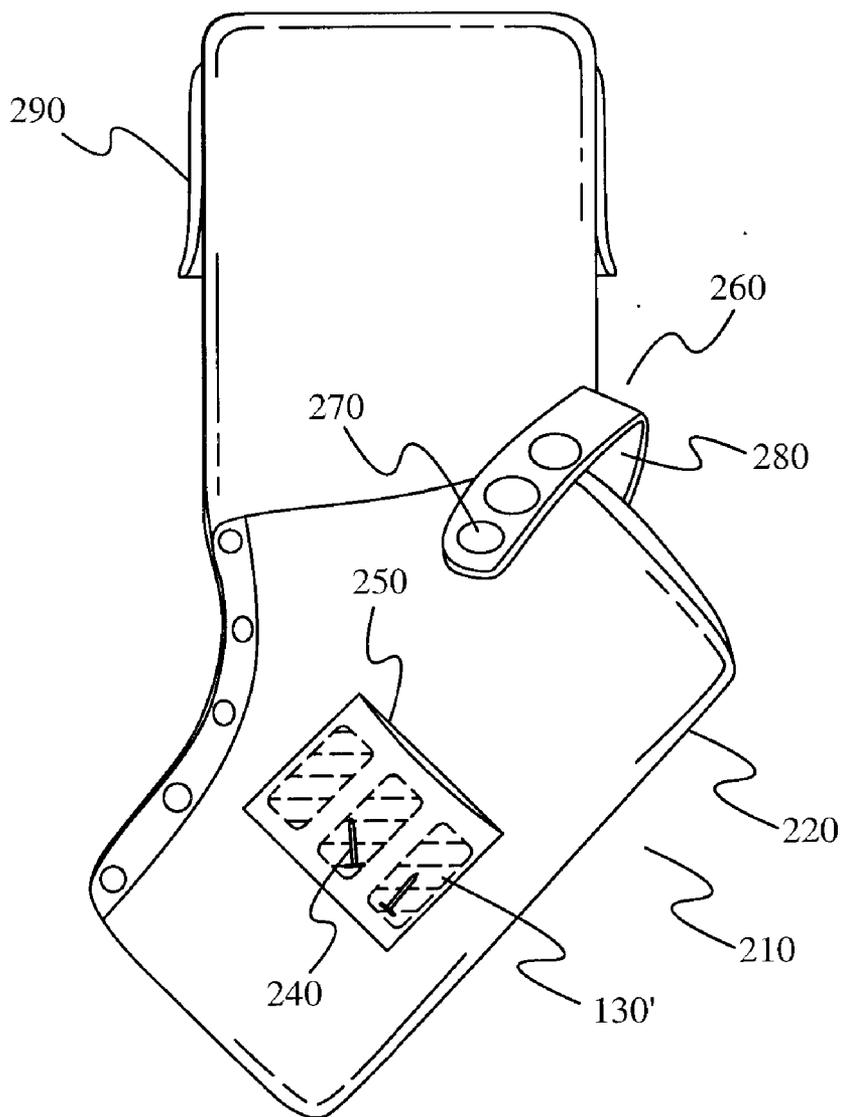


Fig. 2

300

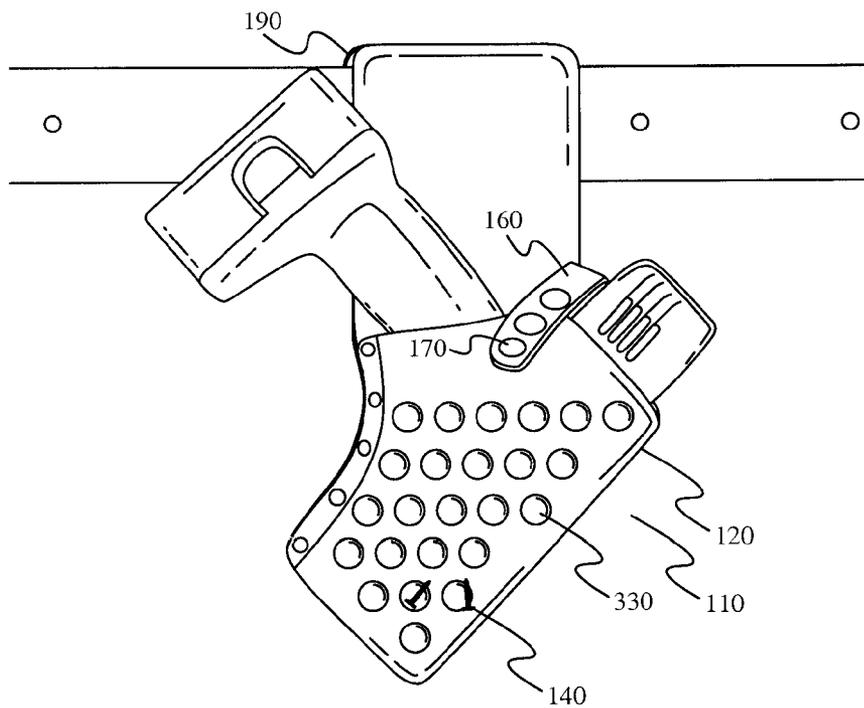


Fig. 3A

300

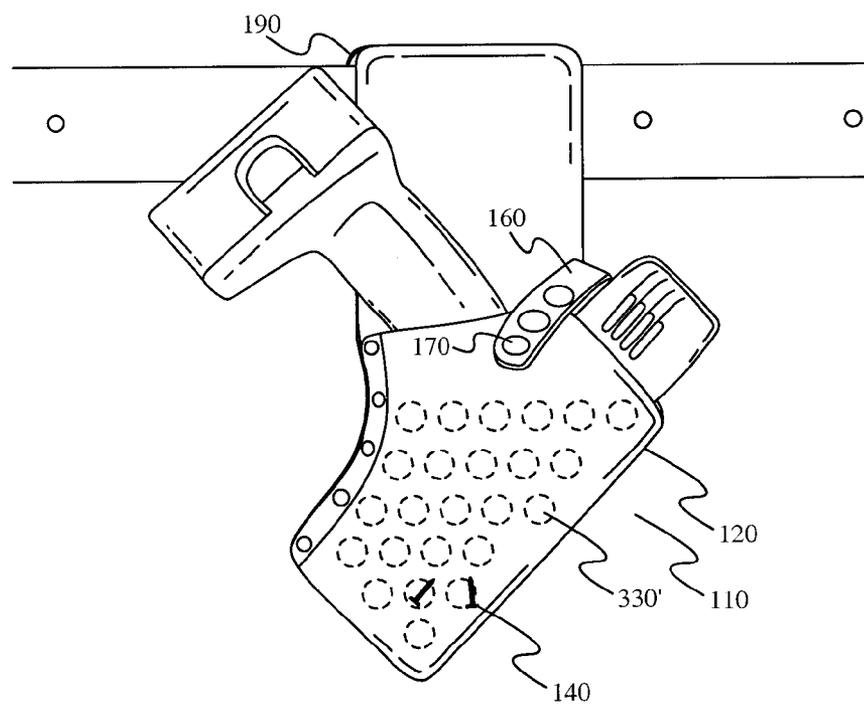


Fig. 3B

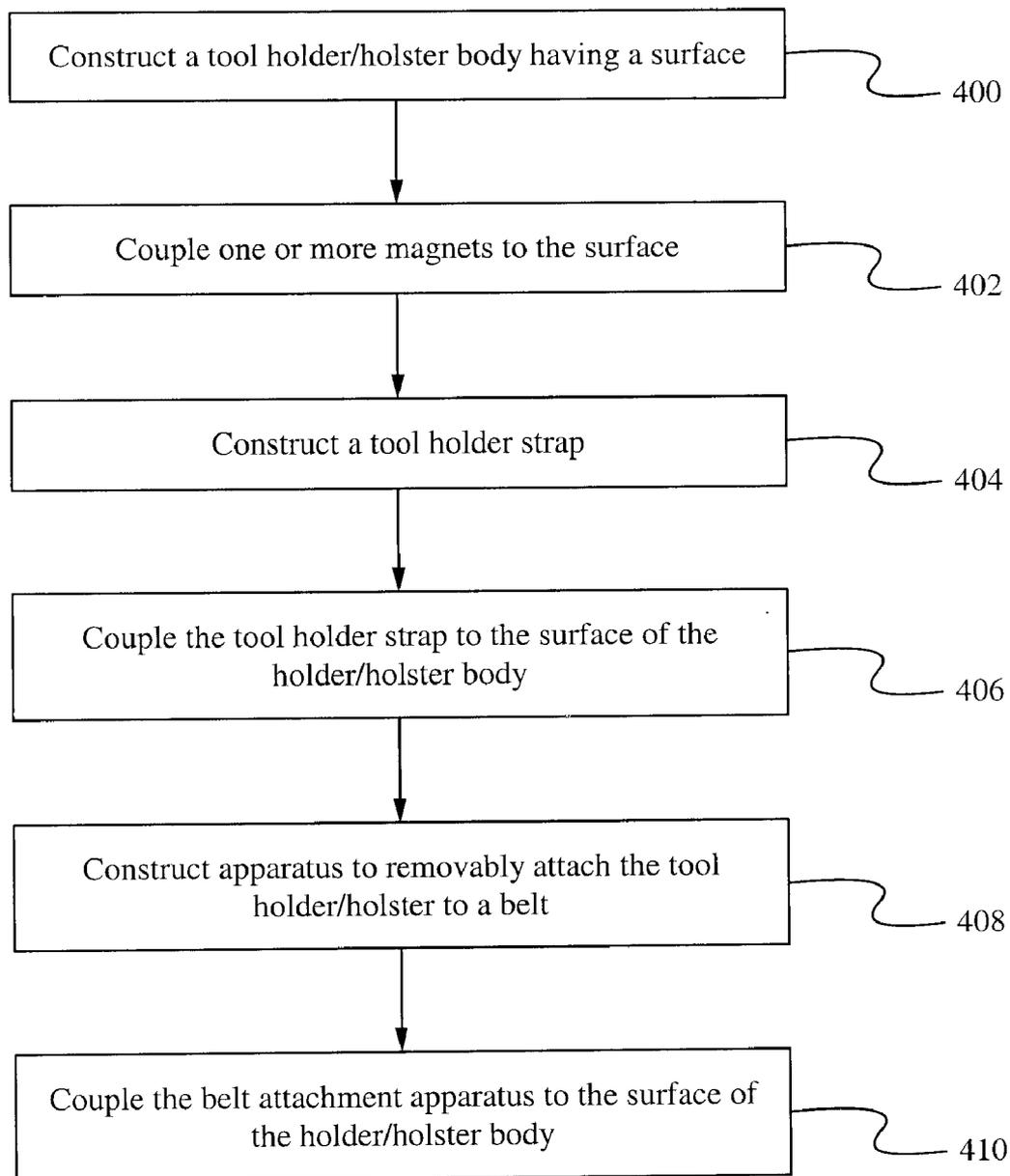


Fig. 4

MAGNETIC TOOL HOLSTER

RELATED APPLICATIONS

[0001] This patent application claims priority under 35 U.S.C. section 119(e) to the co-pending U.S. Provisional Patent Application Ser. No. 61/133,057, filed Jun. 24, 2008, and entitled "MAGNETIC TOOL HOLDERS," which is hereby incorporated by reference.

FIELD OF THE INVENTION

[0002] This invention relates generally to magnetic tool holders. More particularly, the invention relates to a magnetic tool holder/holster device.

BACKGROUND OF THE INVENTION

[0003] Professional users of small hand tools such as carpenters, seamstresses, auto mechanics, electricians, plumbers, construction workers, as well as non-professional do-it-yourselfers are often frustrated whenever they misplace, drop or fumble tools or supplies while doing their jobs. Workers often times wear aprons or similar devices to hold these supplies to keep them close at hand and also to be able to move more freely. However, wearing an apron or similar device has certain limitations. For instance, repetitive reaching in pockets for supplies is tedious. Moreover, wearing an apron or similar device does not help the task of reaching for supplies while holding a perfectly aligned work piece or holding a heavy work piece with one hand and some tool with the other. Additionally, aprons and similar devices are prone to accidentally spill the tools and work items that are held within the pockets of the apron or similar device. Often this spillage is caused because the worker accidentally knocked the tools or work items over with their hands or because of how the worker is positioned while doing their job. Other times the contents will spill whenever the worker removes the pouch from his waist and puts it down.

SUMMARY OF THE INVENTION

[0004] A magnetic tool holder/holster device for holding work items comprises a body having a surface area and one or more magnets coupled to the surface area for holding work items such as drill bits, screws, nails and other fasteners. The one or more magnets providing a magnetic force for attracting magnetically attractable objects and securing them to the surface such that they are readily available for use. The body comprising a tool attachment, belt attachment and any other suitable tool holder/holster accessory.

[0005] One aspect is directed to a tool holster apparatus. The tool holster apparatus comprises a holster body having an opening therein, a surface area and one or more magnets coupled to the surface area for holding work items. The tool holster apparatus comprises a holster body for holding a hammer, drill, wrench or any other tool when not in use. The holster body is an elongated receptacle comprising a first and second surface and an opening therein. In some embodiments, the holster body comprises an elongated portion that is folded so as to create a first and second surface. In this embodiment, the first and second surface are coupled at one side so as to create an opening to hold a tool therein. In some embodiments, the first surface and the second surface comprise separate pieces that are coupled together to create an opening to hold a tool therein. In these embodiments, the first and second surfaces are coupled together by any combination

of rivet, snap, zipper, and/or hook-and-loop fastening system. Further, in these embodiments, the tool holster body comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather and/or rubber. In some embodiments, the bottom of the holster body is open to allow the body of a tool to pass through. In some embodiments, the bottom of the holster body is fully enclosed.

[0006] Another aspect is directed to a holster strap. The holster strap comprises an elongated body comprising a first and second end, wherein the first and second ends are positioned substantially opposite each other and further, wherein the first and second ends are configured to attach to the body of the holster so as to secure a tool within the holster. The first and second ends of the holster strap are attached to the tool holster by any combination of stitching, rivet, button, buckle and/or hook-and-loop fastening system. In some embodiments, the first and second ends of the strap are adjustable and thereby allow the circumference of the loop to adjust to accommodate tools of different sizes. In these embodiments, the holster strap comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather, rubber and/or other material.

[0007] The tool holster apparatus further comprises a device for removably attaching to a belt. In some embodiments, this device is a clip. In some embodiments, the body of the tool holster comprises a first end of the tool holster surface area folded over to couple with a second side of the tool holster surface area so as to form an opening therein to allow a belt to pass through. In this embodiment, the first end of the tool holster surface area couples to the second side of the tool holster surface area by any combination of stitching, hook-and-loop fastening system, zipper, button, and/or a buckle. In some embodiments, the body of the tool holster comprises one or more tool pouches.

[0008] Another embodiment is directed to a tool holder with an optional securing strap. The tool holder comprises a body having an opening therein, a surface area and one or more magnets coupled to the surface of the body for holding work items. In some embodiments, the tool holder comprises an elongated portion that is folded so as to create a first and second surface. In this embodiment, the first and second surface are coupled at one side so as to create an opening to hold a tool therein. In some embodiments, the first surface and the second surface comprise separate pieces that are coupled together to create an opening to hold a tool therein. In these embodiments, the first and second surfaces are coupled together by any combination of rivet, snap, zipper, and/or hook-and-loop fastening system. Further, in these embodiments, the tool holder comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather and/or rubber. In some embodiments, the bottom of the tool holder is open to allow the body of a tool to pass through. In some embodiments, the bottom of the tool holder is fully enclosed.

[0009] Another aspect of the present embodiment is directed to an optional securing strap. The strap comprises an elongated body comprising a first and second end, wherein the first and second ends are positioned substantially opposite each other and further, wherein the first and second ends are configured to attach to the body of the tool holder so as to secure a tool therein. The first and second ends of the strap are attached to the tool holder body by any combination of stitching, rivet, button, buckle and/or hook-and-loop fastening sys-

tem. In some embodiments, the first and second ends of the strap are adjustable and thereby allow the circumference of the loop to adjust to accommodate tools of different sizes. In these embodiments, the securing strap comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather, rubber and/or other material.

[0010] The tool holder further comprises an apparatus for removably attaching the tool holder to a belt. In some embodiments the apparatus is a clip. In some embodiments, the body of the tool holder comprises a first end of the tool holder surface area folded over to couple with a second side of the tool holder surface area so as to form an opening therein to allow a belt to pass through. In this embodiment, the first end of the tool holder surface area couples to the second side of the tool holder surface area by any combination of stitching, hook-and-loop fastening system, zipper, button, and/or a buckle. In some embodiments, the body of the tool holder comprises one or more tool pouches.

[0011] A further aspect is directed to the one or more magnets are removably attached to the surface. In some embodiments, the surface comprises a plurality of layers for housing the one or more magnets wherein the one or more magnets are completely enclosed with the plurality of layers. In some embodiments, the one or more magnets are accessible from within the plurality of layers. In other embodiments, at least some portion of the one or magnets is exposed. In still further embodiments, the magnets are attached to a pocket that is attached to the surface of the holster apparatus. The shape of the one or more magnets is selected from a set comprising a strip, a ball bearing and a disc. In some embodiments, the one or more magnets are positioned to avoid mutual magnetic attraction between each other. In some embodiments, at least one of the one or more magnets comprises a ceramic magnet or a neodymium magnet. In some embodiments, the surface comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, vinyl, neoprene, synthetic leather, rubber or other material. In some embodiments, the one or more magnets are distributed across the surface so as to allow metallic work items to be secured to substantially all points of the surface.

[0012] Another aspect is directed to a method of manufacturing a tool holder/holster device. The method comprises constructing a tool holder/holster body having a surface, coupling one or more magnets to the surface for holding work items. The method comprises constructing a tool holder strap, coupling the strap to the tool holder/holster device. The method further comprises constructing a belt attachment apparatus and coupling it to the tool holder/holster apparatus.

BRIEF DESCRIPTION OF THE DRAWINGS

[0013] FIG. 1 illustrates a front view of a magnetic drill holster with a drill and one or more magnetic blocks sewn on the outside for holding work items in accordance with some embodiments.

[0014] FIG. 2 illustrates a front view of a magnetic holster with one or more magnetic blocks embedded within the fabric for holding work items in accordance with some embodiments.

[0015] FIG. 3A illustrates an alternate embodiment of the magnetic blocks in accordance with some embodiments.

[0016] FIG. 3B illustrates a further alternate embodiment of the magnetic blocks embedded within the fabric in accordance with some embodiments.

[0017] FIG. 4 illustrates a flow chart for a method of manufacturing the tool holder/holster device.

DETAILED DESCRIPTION OF THE INVENTION

[0018] In the following description, numerous details are set forth for purpose of explanation. However, one of ordinary skill in the art will realize that the invention may be practiced without the use of these specific details. Throughout the detailed description, the terms tool holder and tool holster apparatus, and holster strap and securing strap are used interchangeably.

[0019] Referring to FIG. 1, a first embodiment of the magnetic holder/holster device 100 is depicted therein. Specifically, the magnetic holder/holster device 100 shown comprises a body 110 with a surface 120, one or magnets 130 coupled to the surface 120 for magnetically holding work items 140. It is noted that the precise structure of the body 110 is able to take many forms which are each compatible with the present device and well known in the art. Alternatively, any number of pockets 250 (FIG. 2) are attached to the surface of the holder/holster device. The holder/holster device 100 comprises a strap 160 coupled to the body 110 of the holder/holster device. The holster strap 160 comprises an elongated body comprising a first end 170 and a second end (not shown) positioned substantially opposite each other, wherein the first end 170 and second end are configured to attach to the body of the holster apparatus so as to form a loop 280 (FIG. 2) to secure a tool. The first end 170 and second end of the holster strap 160 are coupled to the body 110 by any one or more of stitching, hook-and-loop fastening system, zipper, button and/or buckle. In some embodiments, the first end 170 and the second end of the holster are adjustable and thereby allow the circumference of the loop 280 (FIG. 2) to vary. The holster strap 160 comprises various types and combinations of materials including, but not limited to leather, cotton, cotton/polyester blends, plastic, nylon, vinyl, neoprene, synthetic leather, knit and/or rubber. The surface 120 comprises various types and combinations of materials including, but not limited to leather, cotton, cotton/polyester blends, plastic, nylon, vinyl, neoprene, synthetic leather, knit and/or rubber. In some embodiments, the surface 120 further comprises a plurality of layers. In some embodiments, the surface 120 comprises one or more pouches.

[0020] The tool holder/holster device further comprises an apparatus for attaching to a belt. As shown in FIG. 1, in some embodiments, the body 110 is folded over to couple with a second side of the tool holder body (not shown) so as to form an opening 190 therein to allow a belt to pass through. In some embodiments this apparatus is a clip 290 (FIG. 2).

[0021] In some embodiments, the magnets 130 are neodymium magnets. However in other embodiments, the magnets 130 are ceramic or any other type or combination of magnets. Neodymium has been chosen because it is one of the strongest permanent magnets made and does not lose its strength over time. Typically, as shown in FIG. 1, a portion of the magnets 130 is exposed outside of the surface 120. Where the magnets 130 are accessible from the surface 120, various means are able to be utilized to selectively seal the surface 120 to prevent them from falling out of place. These means include, but are not limited to buttons, buckles, snaps, hooks, threads and/or zippers. As shown in FIG. 2, in some embodiments the magnets are embedded within the surface of a pocket. Additionally, in some embodiments, as shown in FIGS. 1 and 2, the magnets 130 and 131' are strips. In some embodiments, as

shown in FIGS. 3A and B, the magnets are small balls 330 or discs 330' respectively. In some embodiments, the magnets comprise any combination of strips, discs and/or small balls.

[0022] As further shown in FIG. 1, the magnets 130 are permanently coupled onto the surface 120. Alternatively, the magnets 130 are removably attached to the surface 120. Where the magnets 130 are removably attached to the surface 120, various means are able to be utilized to removably attach them to the surface 120. These means include, but are not limited to buttons, buckles, snaps, hooks, threads or zippers. In some embodiments, the magnets 130 are positioned along the surface 120 such that mutual magnetic attraction between each other is avoided.

[0023] FIG. 2 shows another aspect of the present application directed to a magnetic tool holder 200. FIG. 2 illustrates an embodiment with one or more magnetic blocks 130' for holding work items embedded within the surface of a pocket 250. The magnetic tool holder 200 comprises a body 210 with a surface 220, one or more magnets 130' embedded within the surface of a pocket 250 for magnetically holding work items 240. It is noted that the precise structure of the body is able to take many forms which are each compatible with the present application and well known in the art. The surface 220 comprises various types and combinations of materials including, but not limited to leather, cotton, cotton/polyester blends, plastic, nylon, vinyl, neoprene, synthetic leather, knit or rubber. In some embodiments, the surface 220 further comprises a plurality of layers. FIG. 2 demonstrates an optional securing strap 260. The securing strap comprises an elongated body comprising a first end 270 and second end (not shown), wherein the first end 270 and second end are positioned substantially opposite each other and further, wherein the first end 270 and second end are configured to attach to the body of the tool holder so as to secure a tool therein (not shown). The first end 270 and second end of the strap are attached to the tool holder body by any combination of stitching, rivet, button, buckle and/or hook-and-loop fastening system. In some embodiments, the first end 270 and second end of the strap are adjustable and thereby allow the circumference of the loop 280 to adjust to accommodate tools of different sizes. In these embodiments, the securing strap 260 comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather, rubber and/or other material. The tool holder 200 further comprises an apparatus for attaching to a belt. As shown in FIG. 2, in some embodiments this apparatus is a clip 290.

[0024] In some embodiments, the magnets 130' are neodymium magnets. However in some embodiments, the magnets 130' are ceramic or any other type or combination of magnets. Neodymium has been chosen because it is one of the strongest permanent magnets made and does not lose its strength over time. Typically, as shown in FIG. 1, a portion of the magnets 130 is exposed outside of the surface 120. In some embodiments, as shown in FIG. 2, the magnets 130' are embedded within the surface of a pocket 250 attached to the surface 220 of the tool holder body 210. In some embodiments, the magnets 130' are embedded within the surface 220 of the tool holder body 210. In further embodiments, the magnets 130' are accessible from the surface 220. Where the magnets 130' are accessible from the surface, various means are able to be utilized to seal them into the surface 220 to prevent them from falling out of place. These means include, but are not limited to buttons, buckles, snaps, hooks, threads, or zippers. Additionally, as shown in FIGS. 1 and 2, the magnets are strips.

Alternatively, as shown in FIGS. 3A and B, the magnets are small balls 330 or discs 330' respectively. In some embodiments, the magnets 130' comprise any combination of strips, discs or small balls.

[0025] In some embodiments, the magnets 130' are permanently coupled onto the surface of the pocket 250. Alternatively, the magnets 130' are removably attached to the surface of the pocket 250. Where the magnets 130' are removably attached to the pocket 250, various means are able to be used to removably attach them to the pocket 250. These means include, but are not limited to buttons, buckles, snaps, hooks, threads and/or zippers. In some embodiments, the magnets 130' are positioned along the pocket 250 such that mutual magnetic attraction between each other is avoided.

[0026] In operation, this design of the magnetic tool holder/holster device 100 and 200 allows a worker wearing the holder/holster device to securely hold metallic work items readily accessible on the magnetic holder/holster body via the magnetic attraction of the magnets. By doing so, the magnetic tool holder/holster of the present application has the advantage of preventing the spilling of metallic work items as well as making them more convenient to use by ensuring secure and convenient placing capabilities.

[0027] The magnetic tool holder/holster described herein comprises a body having a surface and one or more magnets coupled to the surface for holding work items. By incorporating these magnets with the body of the tool holster, the present device allows a worker wearing or using the holster to securely hold metallic tools and other items in readily accessible location on the body via the magnetic attraction of the magnets. Thus, the worker is able to work more efficiently as they are less likely to fumble or drop tools and other items thereby increasing work production. Further, the present device allows for more flexibility in the workers body position while working because the magnets prevent tools from falling when tilted, even if tilted completely upside down. Accordingly, the magnetic tool holder/holster device described herein has numerous advantages.

[0028] Another aspect is directed to a method of manufacturing the tool holder/holster device. This method will now be discussed in conjunction with the flow chart illustrated in FIG. 4. In particular, a tool holder/holster body having a surface is constructed at the step 400. One or more magnets are then coupled to the surface at the step 402. At the step 404, a tool holder strap is constructed. In some embodiments, the strap comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather and/or rubber. At the step 406, the tool holder strap is coupled to the tool holder/holster device. At the step 408, an apparatus to removably attach the tool holder/holster device to a belt is constructed. In some embodiments the apparatus is a clip. In some embodiments, the body of the tool holder/holster comprises a first end of the tool holster surface area folded over to couple with a second side of the tool holster surface area so as to form an opening therein to allow a belt to pass through. At the step 410, the apparatus to attach the tool holder/holster to the belt is coupled to the tool holder/holster device.

[0029] The invention has been described in terms of specific embodiments incorporating details to facilitate the understanding of the principles of construction and operation of the invention. Such reference herein to specific embodiments and details thereof is not intended to limit the scope of the claims appended hereto. It will be apparent to those skilled in the art that modifications are able to be made in the

embodiment chosen for illustration without departing from the spirit and scope of the invention. Specifically, it will be apparent to one of ordinary skill in the art that the body of the tool holster of the invention is able to be any type and shape of body. Further, it will be apparent to one of ordinary skill in the art that the precise structure of the holster and the holder/holster device is able to be substantially varied to accommodate various tools while still being compatible with the invention. Moreover, it will be apparent to one of ordinary skill in the art that one or more magnets may be attached to any of a variety of surfaces while still being compatible with the invention. Accordingly, the device of the invention is able to be implemented in several different ways and have several different appearances.

We claim:

1. A holster apparatus for receiving work items comprising:

- a. a body having a surface;
- b. one or more magnets coupled to the surface for receiving work items;
- c. an apparatus for removably attaching the holster apparatus to a belt; and
- d. a strap.

2. The holster apparatus as claimed in claim 1, wherein the apparatus for removably attaching the holster apparatus to the belt is a clip.

3. The holster apparatus as claimed in claim 1, wherein the apparatus for removably attaching the holster apparatus to the belt comprises a first end of the body of the holster apparatus folded over to attach to a second side of the holder apparatus body so as to form an opening therein to allow a belt to pass through.

4. The holster apparatus as claimed in claim 1, wherein the holster apparatus body comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather and/or rubber.

5. The holster apparatus as claimed in claim 1, wherein the body is configured to hold a tool such as a hammer, drill, wrench or any other tool.

6. The holster apparatus as claimed in claim 1, wherein the strap is adjustable.

7. The holster apparatus as claimed in claim 1, wherein the strap comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather and/or rubber.

8. The holster apparatus as claimed in claim 1, wherein the one or more magnets are removably attached to the surface of the holster apparatus.

9. The holster apparatus as claimed in claim 1, wherein the one or more magnets are completely enclosed within a plurality of layers.

10. The holster apparatus as claimed in claim 1, wherein a shape of the one or more magnets is selected from a set comprising a strip, a ball bearing and a disc.

11. The holster apparatus as claimed in claim 1, wherein at least one of the one or more magnets comprise a neodymium magnet.

12. The holster apparatus as claimed in claim 1, wherein at least one of the one or more magnets comprise a ceramic magnet.

13. The holster apparatus as claimed in claim 1, wherein at least one of the one or more magnets is coupled to at least one of a one or more pockets.

14. A tool holder comprising:

- a. a substantially rectangular body having a surface;
- b. one or more magnets coupled to the surface of the body for holding work items;
- c. an apparatus for holding a hammer, drill, wrench or any other tool; and
- d. an apparatus for removably attaching the tool holder to a belt.

15. The tool holder as claimed in claim 13, wherein the apparatus for removably attaching the tool holder to the belt is a clip.

16. The tool holder as claimed in claim 13, wherein the apparatus for removably attaching the tool holder to the belt comprises the first end of the tool holder body folded over to attach to a second side of the tool holder body so as to form an opening therein to allow a belt to pass through.

17. The tool holder as claimed in claim 13, wherein the apparatus for holding a hammer, drill, wrench or any other tool comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, neoprene, synthetic leather and/or rubber.

18. The tool holder as claimed in claim 13, further comprising a strap for securing a tool within the tool holder.

19. The tool holder as claimed in claim 18, wherein the strap is adjustable.

20. The tool holder as claimed in claim 18, wherein the strap comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, vinyl, neoprene, synthetic leather and/or rubber.

21. The tool holder as claimed in claim 13, wherein the one or more magnets are removably attached to the surface.

22. The tool holder as claimed in claim 13, wherein the one or more magnets are completely enclosed within a plurality of layers.

23. The tool holder as claimed in claim 13, wherein a shape of the one or more magnets is selected from a set comprising a strip, a ball bearing and a disc.

24. The tool holder as claimed in claim 13, wherein at least one of the one or more magnets comprise a neodymium magnet.

25. The tool holder as claimed in claim 13, wherein at least one of the one or more magnets comprise a ceramic magnet.

26. The tool holder as claimed in claim 13, wherein at least one of the one or more magnets is coupled to a pocket.

27. A tool holder comprising:

- a. a substantially rectangular body having a surface, wherein the surface comprises any combination of leather, cotton, cotton/polyester blends, plastic, nylon, vinyl, neoprene, synthetic leather and/or rubber;
- b. one or more magnets coupled to the body for holding work items;
- c. an apparatus for holding a hammer, drill, wrench or any other tool;
- d. an adjustable strap to secure a hammer, drill, wrench or any other tool; and
- e. an apparatus for attaching the tool holder to a belt wherein the apparatus is one or more of a clip and the first end of the body folded over to attach to a second side of the body so as to form an opening therein to allow a belt to pass through.

28. A method of manufacturing a tool holder/holster apparatus comprising:

- a. constructing a tool holder body having a surface;
- b. coupling one or more magnets to the surface for holding work items;

- c. constructing a tool holder strap;
- d. coupling the strap to the tool holder;
- e. constructing an apparatus to removably attach the tool holder to a belt; and

- f. coupling the apparatus to removably attach the tool holder to a belt to the tool holder.

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