A non-slip pad for attaching to a shoulder strap of a bag, such as a golf bag, is disclosed. The pad comprises an elongated generally flat base having a non-slip pattern formed into a front side thereof. The non-slip pattern comprises a plurality of ridges each having either a triangular cross-section or a trapezoidal cross-section. The non-slip pad is generally rectangular in shape. An elongated generally flat rectangular elastic strap holder is attached to the backside of the base and slidably holds the shoulder strap between the strap holder and the base. As such, the non-slip pad may be slidably adjusted with respect to the shoulder strap for optimal comfort and carrying ease of the user. A non-slip strap comprising a strap and a non-slip pad are also disclosed.
NON-SLIP SHOULDER PAD AND STRAP

FIELD OF THE INVENTION

[0001] The present invention relates to shoulder straps for carrying items such as bags, and more particularly to a non-slip shoulder pad incorporated into a carrying strap utilized on bags.

DISCUSSION OF RELATED ART

[0002] Carrying heavy bags has always been a burden to the user. When a user has to carry such a bag and walk for some distance, such as when carrying a golf bag while walking a golf course, having a gripping handle or shoulder strap facilitates carrying. Although golf bags are typically provided with carrying handles for use over short distances, a shoulder strap provides more convenience and comfort for carrying such bags over longer distances.

[0003] However, when the bags are relatively heavy, one of the problems encountered is the strap pad tending to slip off the shoulder as the user walks or otherwise moves. Further, such straps can dig into the shoulder and cause discomfort.

[0004] Various attempts have been made in the prior art to provide padded straps or comfortable straps for use on golf bags. The materials and designs of such prior art devices include foam pads, fur liners, cushioned straps and other devices aimed at increasing the user's comfort and the strap's effectiveness at staying in place on the user's shoulder. Unfortunately, attempts to increase comfort often decrease the stability of the shoulder strap on the user's shoulder. The movement of the bag and carrier strap often results in an increased incidence of the strap slipping off the shoulder, causing potential damage and discomfort to the user.

[0005] For example, Levine (U.S. Pat. No. 4,125,904) discloses a strap for a shoulder bag including both comfort padding and non-slip materials. McCles et al. of U.S. Pat. No. 4,879,768 also addresses this problem. Additionally, Reimers (U.S. Pat. No. 5,292,044) discloses a non-slip carry strap that secures on the human shoulder. None of the above referenced prior art devices have adequately solved the user's difficulties, as such devices still tend to slip and cause discomfort to the user.

[0006] Therefore, there is a need for an inexpensive slip preventing shoulder strap that is more effective at holding a heavy bag or other load securely on a user's shoulder while walking, yet provides less discomfort to the user. Such a needed device would be inexpensive to manufacture, aesthetically pleasing, and easy to attach to existing bag straps. The present invention accomplishes these objectives.

SUMMARY OF THE INVENTION

[0007] Because of the unsatisfactory nature of the current covers, pads, and increased-friction attachments, the development of such an advanced non-slip shoulder strap is needed. Accordingly, it is the first object of the present invention to provide a carrying strap for a shoulder bag that provides maximum comfort to the user's shoulder. It is the second object of the present invention to provide a shoulder strap that minimizes slippage along a user's shoulder during movement, such as when the user is walking, regardless of clothing material, while being easily removed or attached to the strap if desired. It is the third object of the present invention to provide a device with an aesthetically pleasing, visually attractive appearance. It is the forth object of the present invention to provide a long lasting and durable non-slip surface to the shoulder engaging portion of a shoulder strap.

[0008] The present invention is a non-slip pad for attaching to a shoulder strap of a bag, such as a golf bag. The pad comprises an elongated generally flat base having a non-slip pattern formed into a front side thereof. The non-slip pattern comprises a plurality of ridges each having either a triangular cross-section or a trapezoidal cross-section. The non-slip pad is generally rectangular in shape, but may preferably have rounded corners.

[0009] An elongated generally flat rectangular strap holder is attached to the backside of the base and slidably holds the shoulder strap between the strap holder and the base. As such, the non-slip pad may be slidably adjusted with respect to the shoulder strap for optimal comfort and carrying ease of the user.

[0010] This invention is intended to minimize the relative lateral slippage between the bag strap and user's shoulder, even when the user's walking or other movements cause the user's shoulder to dip slightly. The ridges are preferably comprised of a high-friction soft rubber, soft plastic, fabric material, or other high-friction material that does not cause discomfort when resting with some force on the user's shoulder.

[0011] The invention is adapted for utilization with any of a wide variety of bags and is intended to provide comfort to the user's shoulder in carrying such bag over a long distance. These and other objects and advantages of the present invention will become clear to those skilled in the art in view of the description of the best presently known mode of carrying out the invention and the industrial applicability of the preferred embodiment as described herein and as illustrated in the several figures of the drawing.

BRIEF DESCRIPTION OF THE DRAWINGS

[0012] FIG. 1 is a bottom plan view of the invention, illustrating a pattern of parallel ridges formed in a non-slip shoulder pad of the invention;

[0013] FIG. 2 is a top plan view of the invention, illustrating a strap holding means of the non-slip pad;

[0014] FIG. 3 is a cross-sectional view of the invention, taken generally along lines 3-3 of FIG. 2;

[0015] FIG. 4A is a cross-sectional view of ridges of the invention, illustrating ridges with triangular cross-sections;

[0016] FIG. 4B is a cross-sectional view of ridges of the invention, illustrating ridges with scalene right angle triangular cross-sections;

[0017] FIG. 4C is a cross-sectional view of ridges of the invention, illustrating ridges with obtuse-angled triangular cross-sections;

[0018] FIG. 4D is a cross-sectional view of ridges of the invention, illustrating ridges with trapezoidal cross-sections;
FIG. 5 is a side elevational view of the invention shown in use on a user's shoulder and attached to a bag.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

The present invention is a non-slip pad 10 for attaching to a shoulder strap 20 (FIG. 1), such as those formed from a generally flat nylon material. The pad 10 comprises an elongated generally flat base 30 having a non-slip pattern 40 formed into a front side 34 thereof. The non-slip pattern 40 comprises a plurality of ridges 50 each having either a triangular cross-section 70 or a trapezoidal cross-section 80 (FIGS. 4A-D). The non-slip pad 10 is generally rectangular in shape, but may preferably have rounded corners (FIGS. 1 and 2).

An elongated generally flat rectangular strap holder 60 is attached at each of a longer side 62 thereof proximate to a longer side 32 of a back side 36 of the base 30 (FIG. 2). The strap holder 60 slidably holds the shoulder strap 20 between the strap holder 60 and the base 30. As such, the non-slip pad 10 may be slidably adjusted with respect to the shoulder strap 20 for optimal comfort and carrying ease of the user. The strap holder 60 may be made from an elastic sheet material such that the ends of the strap 20, even if same include relatively large rings, hooks, or other attachment means 18, may still pass between the pad 10 and the strap holder 60 by expending the strap holder 60. A strap holder 60 made from an elastic material has the further advantage of holding the pad 10 in place along the strap 20 by spring force, yet not in a permanent fashion so that the pad 10 may be easily adjusted along the strap 20 manually.

In an alternate embodiment of the invention, the strap holder 60 comprises a plurality of elastic belt-loop like sections (not shown), thereby reducing the amount of material necessary for manufacturing the strap holder 60. However, such an embodiment requires additional assembly labor, as a plurality of belt-loop like sections must be attached to the backside 36 of the base 30.

The triangular cross-section 70 of the parallel ridges 50 may be of an isosceles triangular section (FIG. 4A), a scalene right angle triangle 72 (FIG. 4B), an obtuse-angled triangle 74 (FIG. 4C), or a trapezoidal shape 80 (FIG. 4D), or a combination of any of all of these shapes. Further, the generally parallel ridges 50 are arranged in the same axis as the shoulder strap 20, such that the ridges 50 will engage the user's shoulder 13 across the shoulder 13 to prevent lateral slippage of the non-slip pad 10 with the shoulder 13. This invention is intended to minimize the relative lateral slippage between the bag strap 20 and user's shoulder 13, even when the user's walking or other movements cause the user's shoulder 13 to dip slightly. The ridges 50 are preferably comprised of a high-friction soft rubber, soft plastic, fabric material, or other high-friction material that does not cause discomfort when resting with some force on the user's shoulder 13. The ridges 50 may be formed integral to the pad 10, or attached thereto in ways known and common in the art, such as with adhesive, ultrasonic bonding, or fabric stitching, or the like. As such, the ridges frictionally hold the non-slip pad 10 to the shoulder 13, even when the forces of gravity tend to pull the non-slip pad 10 away from the user. The pad 10 maybe made of a soft rubber material, a cushioned fabric material, or the like, provided that the strap holder 60 and the ridges 50 may be easily and permanently attached thereto.

The invention is adapted for utilization with any of a wide variety of bags 12 (FIG. 5) and is intended to provide comfort to the user's shoulder 13 in carrying such bag 12 over a long distance. In one embodiment of the invention, the strap 20 is included in a combination non-slip strap 15, both ends of which are connected to bag attachment means 18, such as bag yokes or the like (FIG. 5). The attachment means 18 may also be accomplished utilizing reinforcing patches and heavy stitching, metal clips, or the like (not shown). In such an embodiment, the strap holder 60 may be made from a non-elastic fabric, rubber, or plastic material, and may also be formed integral with the pad 10. As such, the attachment means 18 permanently retain the non-slip pad 10 on the strap 20.

Although the present invention has been described above in terms of specific materials, it is understood that various other materials and various dimensions may be substituted without departing from the efficacy of the invention. Furthermore, although the preferred embodiment has been described with respect to a non-slip pad 10 for attachment to a shoulder strap 20, it is understood that the principles of the present invention are equally applicable for a wide variety of other applications. Thus, while a shoulder strap 20 for a golf bag 12 has been particularly illustrated, clearly such a device could be fashioned for use with shoulder straps 20 for such other applications as ski bags and tennis bags, and other applications where it is desirable to utilize a cushioned non-slip strap 20 in conjunction with normally slippery surfaces such as clothing materials.

1. A non-slip pad for attaching to a shoulder strap, the non-slip pad comprising:
   an elongated generally flat base having a non-slip pattern formed into a front side thereof, the non-slip pattern comprising a plurality of ridges each having a triangular cross-section; and,
   an elongated generally flat rectangular strap holder attached at each of a longer side thereof proximate to a longer side of a back side of the base, the strap holder for slidably holding the shoulder strap between the strap holder and the base.

2. The non-slip pad of claim 1 wherein the triangular cross-section of each parallel ridge is a scalene right angle triangle.

3. The non-slip pad of claim 1 wherein the elongated triangular cross-section of each parallel ridge is an obtuse-angled triangle.

4. The non-slip pad of claim 1 wherein the base is generally rectangular and each ridge is generally parallel to the longer side of the base.

5. The non-slip pad of claim 1 wherein the base is generally rectangular with rounded corners and each ridge is generally parallel to the longer side of the base.

6. A non-slip pad for attaching to a shoulder strap, the non-slip pad comprising:
   an elongated generally flat base having a non-slip pattern formed into a front side thereof, the non-slip pattern comprising a plurality of ridges each having a trapezoidal cross-section; and,
an elongated strap holder attached at each of a longer side thereof proximate to a longer side of a back side of the base, the strap holder for slidably holding the shoulder strap between the strap holder and the base.

7. The non-slip pad of claim 1 wherein the base is generally rectangular and each ridge is generally parallel to the longer side of the base.

8. The non-slip pad of claim 1 wherein the base is generally rectangular with rounded corners and each ridge is generally parallel to the longer side of the base.

9. A non-slip shoulder strap comprising:

an elongated generally flat shoulder strap including at each end thereof a bag attachment means;

an elongated generally flat base having a non-slip pattern formed into a front side thereof, the non-slip pattern comprising a plurality of ridges each having a triangular cross-section; and,

an elongated generally flat rectangular strap holder attached at each of a longer side thereof proximate to a longer side of a back side of the base, the strap holder for slidably holding the shoulder strap between the strap holder and the base.

10. The non-slip shoulder strap of claim 9 wherein the triangular cross-section of each parallel ridge is a scalene right angle triangle.

11. The non-slip shoulder strap of claim 9 wherein the elongated triangular cross-section of each parallel ridge is an obtuse-angled triangle.

12. The non-slip pad of claim 9 wherein the base is generally rectangular and each ridge is generally parallel to the longer side of the base.

13. The non-slip pad of claim 9 wherein the base is generally rectangular with rounded corners and each ridge is generally parallel to the longer side of the base.

14. A non-slip shoulder strap comprising:

an elongated generally flat shoulder strap including at each end thereof a bag attachment means;

an elongated generally flat base having a non-slip pattern formed into a front side thereof, the non-slip pattern comprising a plurality of ridges each having a trapezoidal cross-section; and,

an elongated generally flat rectangular strap holder attached at each of a longer side thereof proximate to a longer side of a back side of the base, the strap holder for slidably holding the shoulder strap between the strap holder and the base.

15. The non-slip shoulder strap of claim 14 wherein the base is generally rectangular and each ridge is generally parallel to the longer side of the base.

16. The non-slip shoulder strap of claim 14 wherein the base is generally rectangular with rounded corners and each ridge is generally parallel to the longer side of the base.

17. The non-slip shoulder strap of claim 14 wherein the strap holder is made from a generally flat elastic material.

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