Systems and methods are provided herein that provide for a tether apparatus.
FORM GRIP LOOP IN GRIP STRAP

POSITION DRINK CONTAINER WITHIN GRIP LOOP

CONFIGURE ADJUSTABLE CONNECTOR SO THAT DRINK CONTAINER IS HELD BY GRIP LOOP

ATTACH TETHER TO ANCHOR OBJECT

DONE

Fig. 7
TETHER APPARATUS AND METHOD

RELATED REFERENCES

[0001] This application claims priority to U.S. Provisional Application 60/938,415 filed May 16, 2007. The foregoing application is hereby incorporated by reference in its entirety as if fully set forth herein.

FIELD

[0002] This invention relates generally to tethers, and more specifically, to systems and methods for providing a tether apparatus.

BACKGROUND

[0003] Many people have experienced a cup, glass, or other drinking container accidently falling from a table or other surface. Although most adults do not regularly drop their drinking containers, young children and infants regularly lose control of drinking containers—sometimes intentionally. To address this issue, various products exist that are designed to tether a child’s drink container to a high-chair or other place where a child uses the drink container; however, such products are deficient in various ways.

[0004] Typically, drink container tethers have a portion that holds a drink container, have an extended tether portion, and are capable of being joined to an object. Many of these tethers have a holding portion that includes a fixed-length elastic loop that may be positioned around a drink container. While such a configuration provides for drinking containers of different sizes, the range of sizes is nonetheless limited. Additionally, in products where the loop is fixed in a closed position, the drink container tether is not easily compatible with drink containers having handles or other protruding loops.

[0005] Moreover, while these tether products are configured to hold a drinking container, many fail to securely hold a drinking container because the surface that contacts the drinking container does not provide adequate frictional engagement with the container. The loop holding the container is typically not tight enough to hold the container securely and/or the internal surface of the loop does not create sufficient friction between the loop and the container.

[0006] Along with holding the drink container, tether products may typically be secured to a second object. Many products provide a fixed loop so that the tether may be wrapped around the object and passed through the loop to secure it to the object. Such a configuration is cumbersome to use, and typically the drink container must be removed each time the tether is secured to a new object because the drink container cannot fit through the fixed loop.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The present invention will be described by way of exemplary embodiments but not limitations, illustrated in the accompanying drawings in which like references denote similar elements, and in which:

[0008] FIG. 1 is an environmental view of a drink container tether apparatus gripping a drink container, in accordance with various embodiments.

[0009] FIG. 2 is a side view of a drink container tether apparatus in accordance with various embodiments.

[0010] FIG. 3 is a further side view of a drink container tether apparatus in accordance with various embodiments.

[0011] FIG. 4 is a close-up view of a drink container tether apparatus in accordance with various embodiments.

[0012] FIG. 5 is another close-up view of a drink container tether apparatus in accordance with various embodiments.

[0013] FIG. 6 is a further close-up view of a drink container tether apparatus in accordance with various embodiments.

[0014] FIG. 7 is a block diagram depicting an exemplary method of tethering a drink container, in accordance with various embodiments.

DESCRIPTION

[0015] Illustrative embodiments presented herein include, but are not limited to, systems and methods for providing a drink container tether apparatus.

[0016] Various aspects of the illustrative embodiments will be described using terms commonly employed by those skilled in the art to convey the substance of their work to others skilled in the art. However, it will be apparent to those skilled in the art that the embodiments described herein may be practiced with only some of the described aspects. For purposes of explanation, specific numbers, materials and configurations are set forth in order to provide a thorough understanding of the illustrative embodiments. However, it will be apparent to one skilled in the art that the embodiments described herein may be practiced without the specific details. In other instances, well-known features are omitted or simplified in order to not obscure the illustrative embodiments.

[0017] Further, various operations will be described as multiple discrete operations, in turn, in a manner that is most helpful in understanding the embodiments described herein; however, the order of description should not be construed as to imply that these operations are necessarily order dependent. In particular, these operations need not be performed in the order of presentation.

[0018] The phrase “in one embodiment” is used repeatedly. The phrase generally does not refer to the same embodiment; however, it may. The terms “comprising,” “having” and “including” are synonymous, unless the context dictates otherwise.

[0019] The following Figures depict exemplary systems and methods for providing a drink container tether apparatus 100; however, tethering a drink container is simply used for illustrative purposes, and it should be clear to one of ordinary skill in the art that various items can be tethered, which is within the scope of some embodiments.

[0020] In various embodiments, there may be a drink container tether apparatus 100 comprising a grip strap 110 and a tether 115. The grip strap 110 may comprise an adjustable connector 140, a grip anchor 130, and a grip strap pad 130. The tether 115 may be coupled to the grip strap 110 and comprise one or more anchor straps 120, 125 that comprise a releasable connector 135. In some embodiments, the grip strap 110 may be operable to form a grip loop and the tether 115 may be operable to form an anchor loop. Other embodiments provide for methods of tethering a drink container, which includes forming a grip loop, positioning a drink container within the grip loop, configuring the grip loop such that the drink container is held by the grip loop, and attaching the tether 115 to an object by forming an anchor loop around an object.

[0021] FIG. 1 is an environmental view of a drink container tether apparatus 100 gripping a drink container 105, in accordance with various embodiments. The drink container tether
apparatus 100 comprises a grip strap 110 that is shown gripping a drink container 105. The grip strap 110 comprises a length that may encircle the circumference of the drink container 105, and the grip strap 110 loops through a grip anchor 130 and a first length of the grip strap 110 is secured to a second length of the grip strap 110 via an adjustable connector 140.

[0022] The drink container tether apparatus 100 further comprises a tether 115 that is coupled to the grip strap 110 via an extension strap 145 and a ring 150. In the embodiment depicted in FIG. 1, the extension strap 145 is coupled to the grip strap 110, thereby forming a loop that holds the ring 150. The tether 115 comprises a loop that also passes through the ring 150, which thereby couples the tether 115 to the grip strap 110.

[0023] The tether 115 comprises a first and second anchor strap 120, 125 that are coupled to the tether 115 near a distal end of the tether 115. The first and second anchor strap 120, 125 comprise a releasable connector 135 that releasably connects the first and second anchor strap 120, 125. Additionally, the tether 115 may be changed in length via an adjustment member 155.

[0024] Although various structures such as the grip strap 110, tether 115, extension strap 145, first anchor strap 120 and second anchor strap 125 are depicted as being a strap in various embodiments, it should be clear to one of ordinary skill in the art that these structures may be of various lengths, widths, thicknesses, and the like. For example, the grip strap 110, tether 115, extension strap 145, first anchor strap 120 and second anchor strap 125 may be shaped like a tube, spring, or other shape, whether it be regular or irregular. Additionally, in some embodiments, the grip strap 110, tether 115, extension strap 145, first anchor strap 120 and/or second anchor strap 125 may comprise an elastic material.

[0025] As depicted in FIG. 1, the drink container tether apparatus 100 may grip a drink container 105; however, in alternate embodiments the drink container tether apparatus 100 may grip various objects in other than a drink container.

[0026] FIG. 2 is a side view of a drink container tether apparatus 100 in accordance with various embodiments. The drink container tether apparatus 100 comprises a grip strap 110 that is coupled to a tether 115, via an extension strap 145 and a ring 150. As depicted in FIG. 2, the extension strap 145 may be coupled to a point along the grip strap 110. For example, in the embodiment depicted in FIG. 2, the extension strap 145 is coupled to the grip strap 110 via sewing. In other embodiments, the extension strap 145 may be coupled to the grip strap 110 via various methods or systems, which may include an adhesive, bolt, grommet, welding, slot, pin, clip, or the like. In a further embodiment, the extension strap 145 may be integrally formed by the grip strap 110. In yet another embodiment, the extension strap 145 may be absent and the tether 115 may be directly coupled to or integrally formed by the grip strap 110.

[0027] Additionally, as shown in FIG. 2, the extension strap 145 may comprise a loop that may be held within the orifice of the ring 150. The tether 115 may also comprise a loop that is held within the orifice of the ring 150, which may thereby couple the tether 115 to the grip strap 110 and/or allow the length of the tether 115 to be modified via an adjustment member 155. In another embodiment, the ring 150 may be absent, or various bodies or members may provide for the coupling of the tether 115 and the grip strap 110. For example, a clip, slot, snap or welding may couple the tether 115 to the extension strap 145.

[0028] The grip strap 110 further comprises a grip anchor 130 and an adjustable connector 140, which comprises a first loop fastener 210 and a first hook fastener 220. In the embodiment depicted in FIG. 2, the length of first hook fastener 220 is located at a distal end of the grip strap 110 and adjacent to the length of first loop fastener 210; however, in other embodiments, the first loop fastener 210 and first hook fastener 220 may be located in various positions or may be absent. In one embodiment, the first loop fastener 210 may be loop Velcro® and the first hook fastener 220 may be hook Velcro®.

[0029] In another embodiment, the end of the grip strap 110 comprising the adjustable connector 140 is configured such that the end of the grip strap 110 may be passed through the grip anchor 130 and a portion of the first hook fastener 220 may be joined with a portion of the first loop fastener 210 to form a grip loop.

[0030] In another embodiment, the grip strap 110, the grip anchor 130 and/or adjustable connector 140 may be absent. In a further embodiment, the grip strap 110 may form a grip loop via various methods and/or structures for attachment, which may include an adhesive, a slot and pin, a clip, or the like.

[0031] Returning to the tether 115, the tether 115 comprises a first and second anchor strap 120, 125. In one embodiment, the first and second anchor strap 120, 125 may be coupled to the tether 115 via stitching, adhesive, welding, clip, bolt, grommet, pin, or the like. Additionally, in a further embodiment, one or more of the first and second anchor strap 120, 125 may be integrally formed by the tether 115. In a still further embodiment, one or more of the first and second anchor strap 120, 125 may be absent.

[0032] As depicted in the embodiment of FIG. 2, the first and second anchor strap 120, 125 comprise a releasable connector 135, which comprises a second loop fastener 230 and second hook fastener 240. The second hook fastener 240 may be coupled to the first anchor strap 120, and the second loop fastener 230 may be coupled to the second anchor strap 125. In another embodiment, the second hook fastener 240 may be coupled to the second anchor strap 125, and the second loop fastener 230 may be coupled to the first anchor strap 120.

[0033] Additionally, in a further embodiment, there may be a first anchor strap 120 that comprises a releasable connector 135 and the releasable connector 135 is operable to form an anchor loop with the tether 115. In a still further embodiment, the tether 115 may comprise a releasable connector 135, an adjustable connector 140 or a portion thereof. In yet another embodiment, a releasable connector 135, an adjustable connector 140 or a portion thereof may be integrally formed by a tether 115, grip strap 110, first or second anchor strap 120, 125, or the like.

[0034] FIG. 3 is a further side view of a drink container tether apparatus 100 in accordance with various embodiments. The drink container tether apparatus 100 comprises a grip strap 110 that is coupled to a tether 115, via an extension strap 145 and a ring 150. The extension strap 145 may be coupled to a point along the grip strap 110 and/or allow the length of the tether 115 to be modified via an adjustment member 155. In another embodiment, the ring 150 may be absent, or various bodies or members may provide for the
a loop of the grip strap 110. The grip strap pad 310 may be comprised of various materials, including rubber, plastic, latex, and the like.

[0036] In one embodiment, an end of the grip strap 110 may be passed through the grip anchor 130 such that a grip loop is formed and the grip strap pad 310 is on an inside surface of the grip loop. In another embodiment, it may be desirable to have the grip strap pad 310 comprise a material that is sticky or high-friction so that the grip strap pad 310 may provide a secure grip on a drink container 105 or other object. In still another embodiment, the grip strap pad 310 may be absent or may be integrally formed by the grip strap 110. In yet another embodiment, the grip strap pad 310 may be coupled to the grip strap 110 via stitching, adhesive, staple, bolt, or the like.

[0037] Returning to the tether 115, the tether 115 may be adjustable by length, which may be provided by configuration of an adjustment member 155. In one embodiment, the tether 115 may be adjustable by length via other structures or methods. The tether 115 comprises a first and second anchor strap 120, 125. As depicted in FIG. 3, the first and second anchor strap 120, 125 may comprise stitching, which may couple a second loop fastener 230 or second hook fastener 240 (not shown in FIG. 3) to the first and/or second anchor strap 120, 125. In one embodiment, the first and second anchor strap 120, 125 may be coupled to the tether 115 or may be integrally formed therewith. In another embodiment, the first and second anchor strap 120, 125 are operable to form an anchor loop.

[0038] FIG. 4 is a close-up view of a drink container tether apparatus 100 in accordance with various embodiments. Depicted in FIG. 4 is a grip strap 110 that comprises a grip anchor 130, and a tether 115 that comprises an adjustment member 155. Coupled to the grip strap 110 is an extension strap 145. The extension strap 145 comprises a loop that holds a ring 150. Additionally, the tether 115 comprises a loop that is also held within the ring 150. Accordingly, the tether 115 may be coupled to the grip strap 110, via the extension strap 145 and the ring 150.

[0039] The grip strap 110 comprises a loop that holds the grip anchor 130. As depicted in FIG. 4, the grip anchor 130 may comprise a linear portion and a curved portion. The linear portion may be held by a loop formed by the grip strap 110. It should be clear to one of ordinary skill in the art that the grip anchor 130 comprises various shapes and sizes in various embodiments, and that the grip anchor 130 may be absent or replaced with other structures in various embodiments.

[0040] FIG. 5 is another close-up view of a drink container tether apparatus 100 in accordance with various embodiments. Depicted in FIG. 5 is a tether 115, which comprises a first and second anchor strap 120, 125. The first and second anchor strap 120, 125 comprise a releasable connector 135, and are depicted in a configuration forming an anchor loop. In one embodiment, the first and second anchor strap 120, 125 may comprise a hook and loop releasable connector 135 such as Velcro®, and the first and/or second anchor strap 120, 125 may comprise a loop fastener and/or a length of hook fastener. In another embodiment, the releasable connector 135 may comprise an adhesive, a slot and pin, a clip, a hook, or the like.

[0041] In yet another embodiment, an anchor loop may be formed by releasably connecting the first anchor strap 120 to the tether 115 and the first anchor strap 120 and the tether 115 may comprise a releasable connector 135.

[0042] FIG. 6 is a further close-up view of a drink container tether apparatus 100 configured to form a grip loop, in accordance with various embodiments. As shown in FIG. 6, the drink container tether apparatus 100 comprises a grip strap 110, an extension strap 145, a ring 150 and a tether 115. The tether 115 further comprises an adjustment member 155. The grip strap 110 further comprises a grip anchor 130, a grip strap pad 310, and an adjustable connector 140. The grip strap pad 310 is coupled to a first side of the grip strap 110 and the adjustable connector 140 is coupled to a second side of the grip strap 110. The grip anchor 130 is held by a loop formed by the grip strap 110 and an end of the grip strap 110 may be passed through an orifice of the grip anchor 130. The adjustable connector 140 may adjustably connect the grip strap 110 along a length of the grip strap 110, which may thereby form a grip loop. The grip loop may have an internal surface and the grip strap pad 310 may be positioned on a length of the internal surface of the grip strap pad 310 when a grip loop is formed by the grip strap 110. In various embodiments, it may be desirable to have the grip strap pad 310 positioned on the internal surface of a grip loop because an object held within the grip loop may be held more securely. In one embodiment, the grips strap pad 310 may be coupled to the grip strap 110 or the grip strap pad 310 may be an integral part of the grip strap 110.

[0043] As depicted in FIG. 6, the extension strap 145 may be coupled to the grip strap 110 and the extension strap 145 may form a loop. The loop formed by the extension strap 145 may hold a portion of the ring 150, and a loop in the tether 115 may hold another portion of the ring 150. In another embodiment, the ring 150 and/or the extension strap 145 may be absent. In a further embodiment, the tether 115 may be coupled directly to the grip strap 110.

[0044] FIG. 7 is a block diagram depicting an exemplary method of tethering a drink container, in accordance with an embodiment. For purposes of illustration, reference will be made to the embodiments of a drink container tether apparatus 100 as described and shown in FIGS. 1-6, however, the following method may be performed with a drink container tether apparatus 100 according to various other embodiments.

[0045] In block 710 a grip loop is formed in a grip strap 110 and in block 720 a drink container 105 is positioned within the grip loop. In block 730 the adjustable connector 140 on the grip strap 110 is configured such that the drink container 105 is held by the grip loop. For example, a portion of the grip strap 110 that has passed through the grip anchor 130 may be pulled so that the circumference of the grip loop constricts around the drink container 105. The adjustable connector 140 may then be engaged to secure the configuration of the grip loop and grip strap 110. In one embodiment, the grip strap pad 310 may be in contact with the drink container 105.

[0046] Returning to the method, in block 740 the tether 115 is attached to an object and the method is done 799. In one embodiment, the tether 115 may be attached to an object by forming an anchor loop around the object. For example a first anchor strap 120 may releasably connect to the tether 115 via a releasable connector 135, or the first anchor strap 120 may releasably connect to the second anchor strap 125 via a releasable connector 135.

[0047] In one embodiment, a drink container 105 such as a child’s “sippy-cup” may be held by a grip loop, and an anchor loop may be formed around a child’s high-chair, car seat, or the like. In another embodiment, tethering a child’s “sippy-cup” to a high-chair or car seat may be desirable because children commonly throw their “sippy-cup” while drinking,
and having it tethered to a high-chair or car seat, or the like, would make retrieval of the “sippy-cup” easier.

Additionally, although specific embodiments have been illustrated and described herein, it will be appreciated by those of ordinary skill in the art and others, that a wide variety of alternate and/or equivalent implementations may be substituted for the specific embodiments shown in the described without departing from the scope of the embodiments described herein. This application is intended to cover any adaptations or variations of the embodiment discussed herein.

While various embodiments have been illustrated and described, as noted above, many changes may be made without departing from the spirit and scope of the embodiments described herein.

1. A tether apparatus comprising:
   a grip strap comprising:
   a grip anchor located on a grip strap anchor point; and
   an adjustable connector operable to releasably secure said grip strap to said first grip anchor at a grip strap connector point such that said grip strap forms a grip loop; and
   a grip strap pad located on a first grip strap side configured to be positioned on an inner surface of said grip loop;
   a tether coupled to said grip strap at a first tether end; and
   a first anchor strap coupled to said tether at a second tether end, said first anchor strap comprising a releasable connector operable to releasably form an anchor loop.

2. The tether apparatus of claim 1, wherein said tether is adjustable by length.

3. The tether apparatus of claim 2, wherein said tether comprises an adjustment member.

4. The tether apparatus of claim 1, wherein said grip strap and tether are coupled via an extension strap.

5. The tether apparatus of claim 4, wherein said grip strap and tether are further coupled via a ring.

6. The tether apparatus of claim 5, wherein said grip strap and said extension strap are coupled via stitching.

7. The tether apparatus of claim 6, a loop of said extension strap and a loop of said tether are held by said ring.

8. The tether apparatus of claim 1, wherein said tether comprises a strap.

9. The tether apparatus of claim 1, wherein said grip anchor point is located at a first grip strap end.

10. The tether apparatus of claim 9, wherein said grip anchor comprises a ring.

11. The tether apparatus of claim 1, wherein said grip strap further comprises a second grip strap side, which comprises said adjustable connector.

12. The tether apparatus of claim 11, wherein said adjustable connector comprises a hook-and-loop fastener.

13. The tether apparatus of claim 12, wherein said hook-and-loop fastener comprises a length of hook fastener located adjacent to a length of loop fastener.

14. The tether apparatus of claim 13, wherein said length of hook fastener is located at a second grip strap end.

15. The tether apparatus of claim 1, wherein said releasable connector comprises a hook-and-loop fastener.

16. The tether apparatus of claim 15, wherein said tether further comprises a second anchor strap.

17. The tether apparatus of claim 16, wherein said second anchor strap comprises a length of loop fastener and said first anchor strap comprises a length of hook fastener.

18. The tether apparatus of claim 17, wherein said first anchor strap and said second anchor strap are operable to form said anchor loop.

19. The tether apparatus of claim 1, wherein said grip strap and said tether are coupled perpendicularly.

20. A method of tethering a drink container with a drink container tether apparatus, the method comprising:
   forming a grip loop in a grip strap, said grip strap comprising:
   a first grip anchor located on a grip strap anchor point; an adjustable connector operable to releasably secure said grip strap to said first grip anchor at a grip strap connector point such that said grip strap forms said grip loop;
   a grip strap pad located on a first grip strap side configured to be positioned on an inner surface of said grip loop;
   positioning the drink container within said grip loop; configuring said adjustable connector such that the drink container is held within said grip loop; coupling a tether to an anchor object by forming an anchor loop in said tether, wherein said anchor object is positioned within said anchor loop, said tether coupled to said grip strap at a first tether end and said tether comprising an anchor strap coupled to said tether at a second tether end, said anchor strap comprising a releasable connector operable to form said anchor loop.

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