BRAIDED PLASTIC BAG BELTS AND HANDLES

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ABSTRACT

A braided water resistant flexible strong plastic rope and method of making, comprising a first, second and third braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces. When the central, left and right braided strands are braided together they form a braided water resistant flexible strong plastic rope. The rope can be used for braided belts and handles.
BRAIDED PLASTIC BAG BELTS AND HANDLES

CROSS REFERENCE TO RELATED APPLICATIONS


FIELD

[0002] The present embodiments relate to a braided water resistant flexible strong plastic rope and method of making, comprising a first, second and third braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces. When the central, left and right braided strands are braided together they form a braided water resistant flexible strong plastic rope. The rope can be used for braided belts and handles.

BACKGROUND

[0003] A need exists for handles and belts made from woven plastic bags that can be used to support weight, such as handles for ladies purses and seat belts.

[0004] A need exists for an environmentally friendly material that does not require the killing of animals that is lightweight, visually appealing, texturally appealing, individually unique, and easy to manufacture.

[0005] A further need exists for a handle and belt made from clean household discards, including non-biodegradable plastic grocery bags, that would otherwise occupy a landfill.

[0006] A need also exists for a belt and handle and a method of making belts and handles that can be performed safely and easily, from a manufacturer’s home, with a minimum of specialized equipment and special training.

[0007] The present embodiments meet these needs.

BRIEF DESCRIPTION OF THE DRAWINGS

[0008] The detailed description will be better understood in conjunction with the accompanying drawings as follows:

[0009] FIG. 1 depicts a braided plastic bag handle embodiment.

[0010] FIG. 2 depicts another braided plastic bag handle embodiment.

[0011] FIG. 3 depicts a braided plastic bag for a lanyard.

[0012] FIG. 4 depicts a braided plastic bag for a belt.

[0013] FIG. 5 depicts a flip flop useable with the invention.

[0014] The present embodiments are detailed below with reference to the listed Figures.

DETAILED DESCRIPTION OF THE EMBODIMENTS

[0015] Before explaining the present apparatus in detail, it is to be understood that the apparatus and method are not limited to the particular embodiments and that it can be practiced or carried out in various ways.

[0016] The present embodiments generally relate to a belting material and handles that are made from braided plastic bags, such as plastic grocery bags and similar flexible plastic items, and a method for making braided handles of the braided plastic bag fabric having a variety of lengths.

[0017] The present braided material and method beneficially utilizes clean household discards that would otherwise occupy space in a landfill, such as plastic grocery bags, plastic newspaper bags, plastic bottles and caps, and similar discarded plastic items, to form lightweight, recyclable, tear and snag-resistant sheets of fabric that can be used to manufacture articles, such as handbags, tote bags, and placemats.

[0018] Each year, Americans throw away some 100 billion polyethylene plastic bags, of which only about 0.6 percent are recycled.

[0019] Large volumes of discarded plastic goods typically require a large quantity of hydrocarbon-based fuels, such as oil, to produce and refine. When discarded, this plastic does not biodegrade for hundreds, if not thousands of years, occupying limited space in landfills and posing a potential danger to wildlife, such as birds and fish.

[0020] While some types of plastic can be recycled, the process of melting plastic and molding or extruding new plastic articles requires energy, and often, the articles formed from recycled plastic have a less pleasant appearance or diminished performance compared to articles formed from new plastic.

[0021] The braided material and method can utilize clean plastic discards without requiring an energy-consuming recycling process. Plastic materials, such as plastic grocery bags, can be cut and tied to form ribbons, which can then be woven to form sheets of fabric that can be used to fashion articles.

[0022] The braided material and method can require a minimum amount of space, equipment, and training to utilize. The braided material and method can require only simple materials, such as wooden frames with nails, or frames made from recycled plastic, such as plastic water bottles, via injection molding, a single individual can create a woven sheet of plastic bag fabric in about one hour.

[0023] Any small space, such as neighborhood church space, a community center space, or an individual’s home, can be used to manufacture the braided plastic bag handle.

[0024] The present braided plastic bag handle can be created without requiring any special skills or training, allowing individuals to produce the present braided plastic bag handle for extra income, on a flexible, piecework basis. Individuals making the present braided plastic bag handle can safely and efficiently perform this task in their homes, such as while caring for children.

[0025] The present braided plastic bag handle and method additionally possess the advantage of being useable to create unique, “one-of-a-kind” articles. Each piece of clean discarded plastic can have a unique combination of colors in a unique pattern, and a unique combination of textures. Pieces of clean plastic can be selected to form woven plastic fabric sheets having selected coloration and patterns, allowing unique articles to have a customized appearance. Decorative materials, such as glittery threads or reflective materials, can be woven with or in place of one or more plastic ribbons to further customize and decorate an article.

[0026] The present braided plastic bag handle is further advantageously lightweight. While conventional hand bag handles, tote bag handles, and similar articles made from leather, canvas, and other fabrics and textiles can be heavy, the present braided plastic fabric can be made from thin ribbons of polyethylene or another type of plastic and still possess equal or greater strength and functionality alongside heavier fabrics.
[0027] The present braided plastic bag handle can be water resistant, able to withstand exposure to humidity and moderate precipitation while protecting any contents or covered items from moisture. Conventional fabrics and leather can quickly soak through when exposed to precipitation, while the present braided plastic bag handle fabric does not absorb water.

[0028] The present braided plastic bag handle can be machine-washable without deforming, able to withstand the moisture, physical stresses, and temperature of a washing machine without tearing, stretching, melting, or otherwise deforming, while conventional fabrics may tear, stretch, or experience shrinking.

[0029] It is contemplated that the present braided plastic bag handles and belts can withstand temperatures of up to about 105 degrees Fahrenheit without melting or deforming. In an embodiment, the present braided plastic bag handles and belts can withstand temperatures of up to about 120 degrees Fahrenheit, or more, without melting or deforming.

[0030] The present braided plastic bag handles and belts can also dry rapidly after machine washing, while conventional fabrics that cannot be quickly dried using heat may remain waterlogged for hours, attracting mold and mildew, diminishing in appearance, and acquiring unpleasant odors.

[0031] The present braided plastic bag handles and belts can be tear-resistant, able to resist stretching beyond three percent of its length or width, while having sufficient flexibility and tensile strength to bend or yield when pulled or caught, thereby avoiding becoming torn.

[0032] The flexibility of the present braided plastic bag handles and belts can also allow the belts and handles to be foldable for easy and compact storage.

[0033] The present braided plastic bag handle can be smooth in texture for ease of handling and snag-resistance, avoiding becoming caught and snagged or pulled on objects that would damage a more coarse or rough fabric.

[0034] The present braided plastic bag handle can be recyclable, should any article become damaged beyond usability.

[0035] The present braided plastic bag handle can include a braided water resistant flexible strong plastic rope, comprising a first braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces, a second braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces, a third braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces, wherein the connected plastic bags are water proof, and when the central, left and right braided strands are braided together forming a braided water resistant flexible strong plastic rope, the rope is abrasion resistant exhibiting flexibility and when attached to another material or to itself by sewing provides a secure connection because threads used in sewing can engage all the multiple ribbons, allowing a load to be carried by each ribbon in a secure manner without stretching more than about 3 percent during support the load and without melting at temperatures to about 105 degrees Fahrenheit that is machine washable.

[0036] In an embodiment, the rope can weigh about 0.25 ounces to about 3 ounces per foot of braided water resistant, flexible, abrasion resistant strong plastic rope.

[0037] In an embodiment, the rope can comprise recyclable plastic bags.

[0038] In an embodiment, the rope can comprise tear and snag-resistant braided strands of flexible ribbons of connected plastic bags.

[0039] In an embodiment, the braided strands can further comprise reflective strips braided with the braided strand.

[0040] In an embodiment, a braided belt can be comprised of the rope.

[0041] In an embodiment, a braided lanyard can be comprised of the rope.

[0042] The rope of an embodiment can further comprise at least one glittery thread woven in place of the longitudinal flexible ribbon of connected plastic bags, into the transverse flexible ribbons of connected bags, whereby the braided plastic bag handle will have at least one deliberate bright color and light reflecting effect.

[0043] The fabric of an embodiment can comprise the longitudinal flexible ribbon of connected bags, the transverse flexible ribbon of connected bags, or combinations thereof, and can have a width ranging from about 0.25 inches to about 4 inches.

[0044] The embodiments can further comprise a method for making a braided water resistant flexible strong plastic rope, comprising the forming of a plurality of at least 0.5 wide inch and at least 10 inch diameter circular strips from plastic bags.

[0045] The embodiments can comprise an additional step for interconnecting a first circular strip with a second circular strip forming a first flexible ribbon.

[0046] The embodiments can comprise an additional step for interconnecting a third circular strip with a fourth circular strip forming a second flexible ribbon.

[0047] The embodiments can comprise an additional step for interconnecting a fifth circular strip with a sixth circular strip forming a third flexible ribbon.

[0048] The embodiments can comprise an additional step for braiding the first, second and third flexible ribbons to form a braided strand.

[0049] The embodiments can comprise repeating these steps to form additional braided strands.

[0050] The embodiments can comprise an additional step for braiding three braided strands tighter to form the braided water resistant flexible strong plastic rope.

[0051] The embodiments can further comprise a method for sewing the rope to itself or a fabric forming handle.

[0052] In an embodiment, the rope can be used to comprise jump ropes, hammocks, handles, belts, flip flops, lanyards, halyards for sail, dock lines for boats, anchor lines for small boats, tow ropes for water skiing, decorative edging for outside furniture, webbing as the sitting material for outside lawn chairs.

[0053] The embodiments can further comprise a plurality of flexible ribbons of connected plastic bags, comprised of a knot of a first, second and third flexible ribbons together and braided to form a central braided strand.

[0054] FIG. 1 depicts a braided plastic bag handle embodiment. The braided plastic bag handle embodiment can contain a braided strand (10), which can include three flexible ribbons of connected plastic bags (12a, 12b, 12c). It is also contemplated that at least one of the three flexible ribbons of connected plastic bags (12a, 12b, 12c) can be replaced by a reflective strip, glittery thread, shiny ribbon or another item that can have at least one deliberate bright color and light reflecting effect.
FIG. 2 depicts an embodiment of a braided water resistant flexible strong plastic rope. In this embodiment, three braided strands (10a, 10b, 10c) can be braided together to form the braided water resistant flexible strong plastic rope (20). It is also contemplated that more than three braided strands can be used to form the braided water resistant flexible strong plastic rope.

FIG. 3 depicts an embodiment of a lanyard (30) made from braided water resistant flexible strong plastic rope.

FIG. 4 depicts a braided belt (40) made from strands of braided water resistant flexible strong plastic rope (20).

FIG. 5 depicts a flip flop useable with the invention. Braided water resistant flexible strong plastic rope (20a, 20b) can be used with a base (50a, 50b) for the foot support. It is also contemplated that additional foot wear can be used, such as a sandal or sneaker.

While these embodiments have been described with emphasis on the embodiments, it should be understood that within the scope of the appended claims, the embodiments might be practiced other than as specifically described herein.

What is claimed is:

1. A braided water resistant flexible strong plastic rope, comprising:
   a. a first braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces;
   b. second braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces; and
   c. a third braided strand of three flexible ribbons of connected plastic bags operable to sustain substantial tensile forces, wherein when the central, left and right braided strands are braided together forming a braided water resistant flexible strong plastic rope, the rope is abrasion resistant exhibiting flexibility and when attached to another material or to itself by sewing provides a secure connection because threads used in sewing can engage all the multiple ribbons, allowing a load to be carried by each ribbon in a secure manner without stretching more than 3 percent during support the load and without melting at temperatures to 105 degrees Fahrenheit that is machine washable.

2. The braided water resistant flexible strong plastic rope of claim 1, wherein the rope weighs 0.25 ounces to 3 ounces per foot of braided water resistant, flexible, abrasion resistant strong plastic rope.

3. The braided water resistant flexible strong plastic rope of claim 1, wherein the rope comprises recyclable plastic bags.

4. The braided water resistant flexible strong plastic rope of claim 1, wherein the rope comprises tear and snag-resistant braided strand of flexible ribbons of connected plastic bags.

5. The braided water resistant flexible strong plastic rope of claim 1, wherein one of the braided strands further comprises a reflective strips braided with the braided strand.

6. A braided belt made of the rope of claim 1.

7. A braided lanyard made of the rope of claim 1.

8. A flip flop comprising a foam base with the foot support comprising the rope of claim 1.

9. The braided water resistant flexible strong plastic rope claim 1, further comprising at least one glittery thread woven in place of the longitudinal flexible ribbon of connected plastic bags, into the transverse flexible ribbons of connected bags, whereby the braided plastic bag handle will have at least one deliberate bright color and light reflecting effect.

10. The braided water resistant flexible claim 1, wherein the longitudinal flexible ribbon of connected bags, the transverse flexible ribbon of connected bags, or combinations thereof, have a width ranging from 0.25 inches to 4 inches.

11. A method for making a braided water resistant flexible strong plastic rope, comprising:
   a. forming a plurality of at least 0.5 wide inch and at least 10 inch diameter circular strips from plastic bags;
   b. interconnecting a first circular strip with a second circular strip forming a first flexible ribbon;
   c. interconnecting a third circular strip with a fourth circular strip forming a second flexible ribbon;
   d. interconnecting a fifth circular strip with a sixth circular strip forming a third flexible ribbon;
   e. braiding the first, second and third flexible ribbons to form a braided strand; and
   f. repeating steps a to e to form additional braided strands.

12. The method of claim 11, further comprises braiding three braided strands tighter to form the rope.

13. The method of claim 11, further comprises sewing the rope to itself or a fabric forming handles.

14. The method of claim 11, wherein the braided water resistant flexible strong plastic rope is used to make jump ropes, hammocks, handles, belts, flip flops, kites, kites for sail, dock lines for boats, anchor lines for small boats, tow ropes for water skiing, decorative edging for outside furniture, webbing as the sitting material for outside lawn chairs.

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