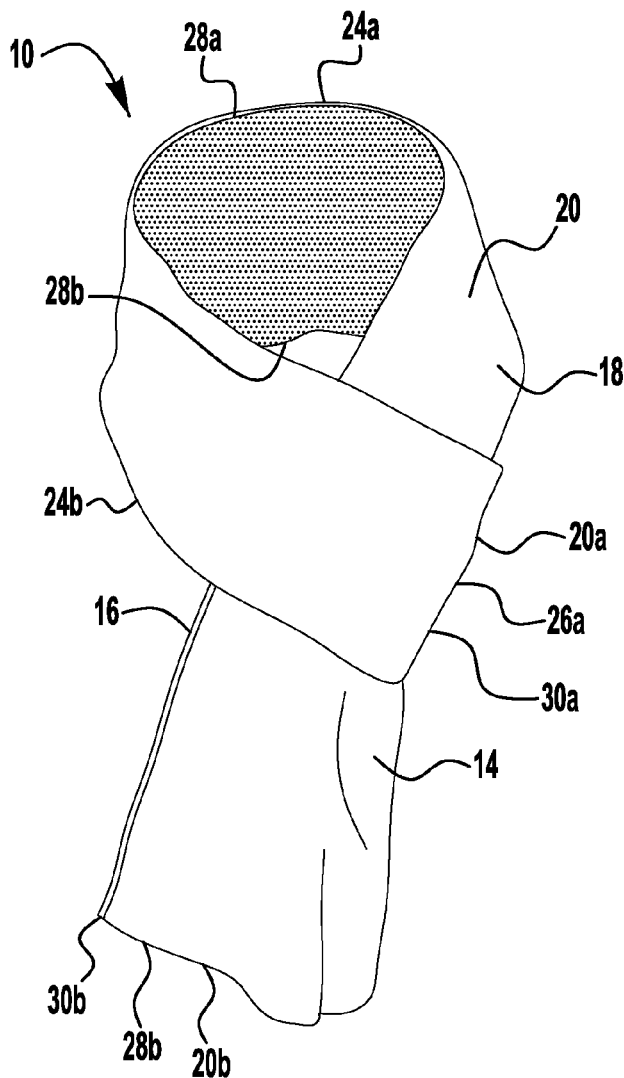




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(19) **United States**(12) **Patent Application Publication**
Chopra et al.(10) **Pub. No.: US 2017/0079346 A1**(43) **Pub. Date: Mar. 23, 2017**(54) **REVERSIBLE WATERPROOF GARMENT**(71) Applicants: **Sonia Chopra**, Great Falls, VA (US);
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Aarti Hari Chopra, Great Falls, VA (US)(21) Appl. No.: **14/859,498**(22) Filed: **Sep. 21, 2015****Publication Classification**(51) **Int. Cl.**
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A41D 23/00 (2006.01)(52) **U.S. Cl.**CPC **A41D 15/005** (2013.01); **A41D 23/00**
(2013.01); **A41D 31/02** (2013.01)(57) **ABSTRACT**

A reversible infinity scarf to provide protection in both dry and wet conditions is formed of a continuous looped body having a first length of material adapted for the dry conditions and a second length of material adapted for the wet conditions attached to each other. The first and second lengths of material have first and second latitudinal edges extending the length of the scarf and first and second longitudinal edges extending the width of the scarf. The first and second lengths of material are attached to each other along their first and second latitudinal edges and along their first and second longitudinal edges at the first and second free ends of the first and second lengths of material. The first and second free ends of the first and second lengths of material are interconnected to form the continuous looped body of the infinity scarf.



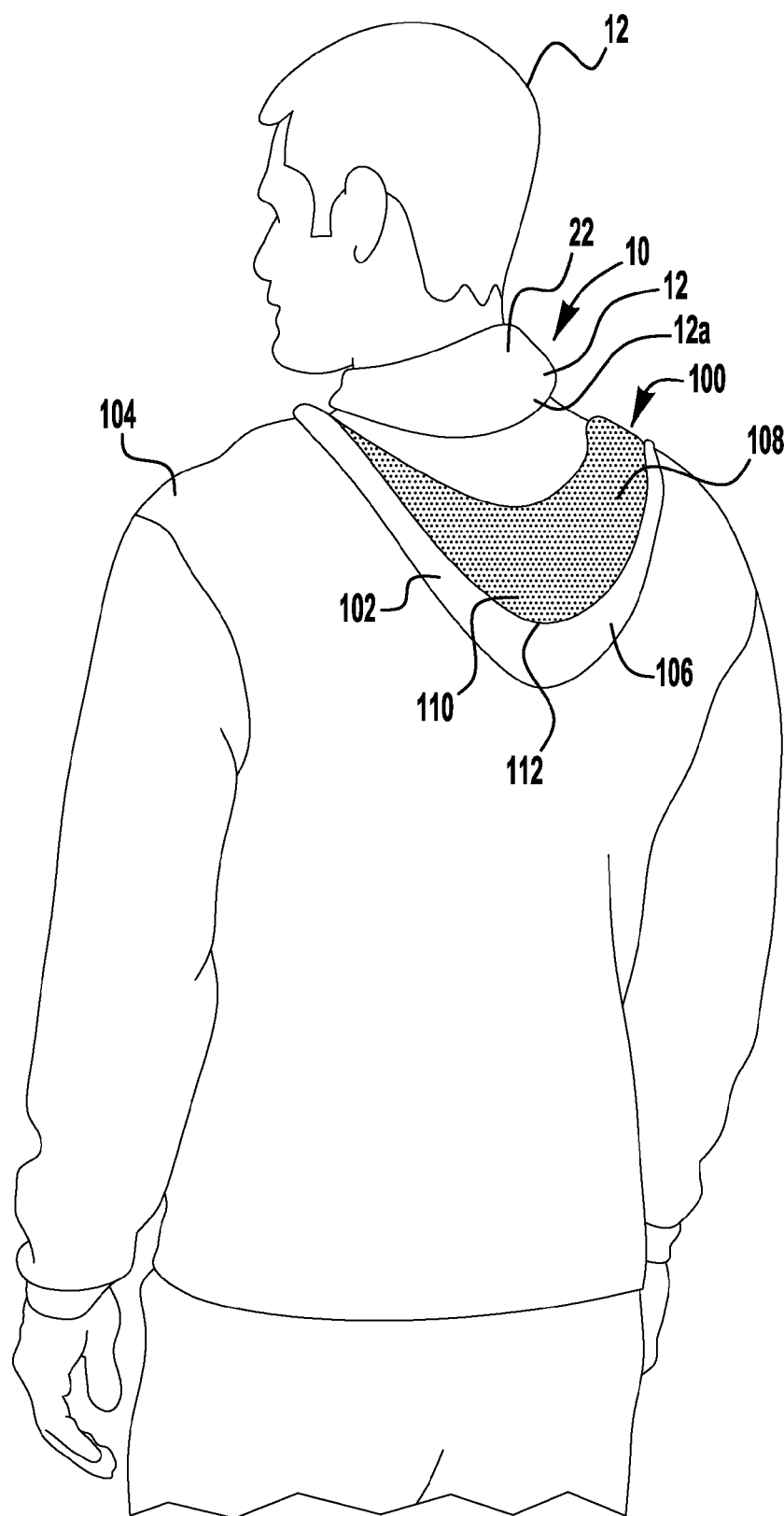
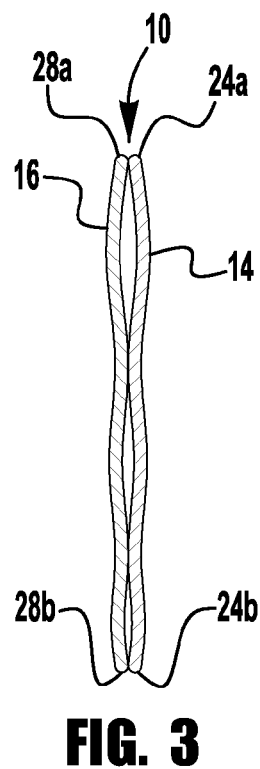
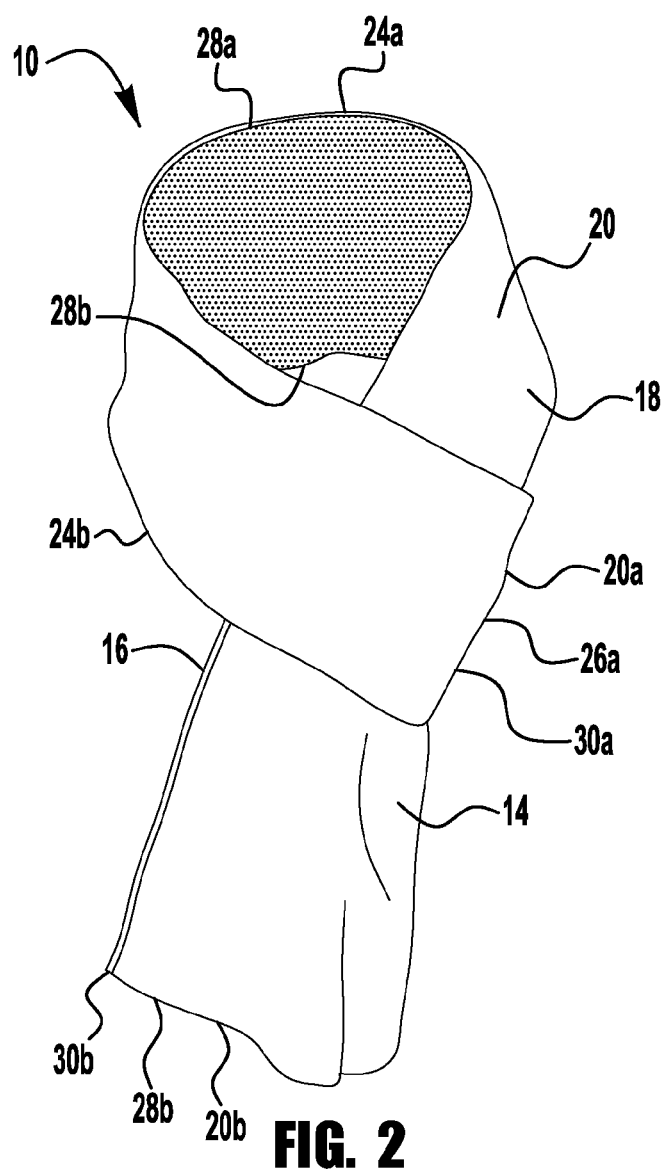


FIG. 1



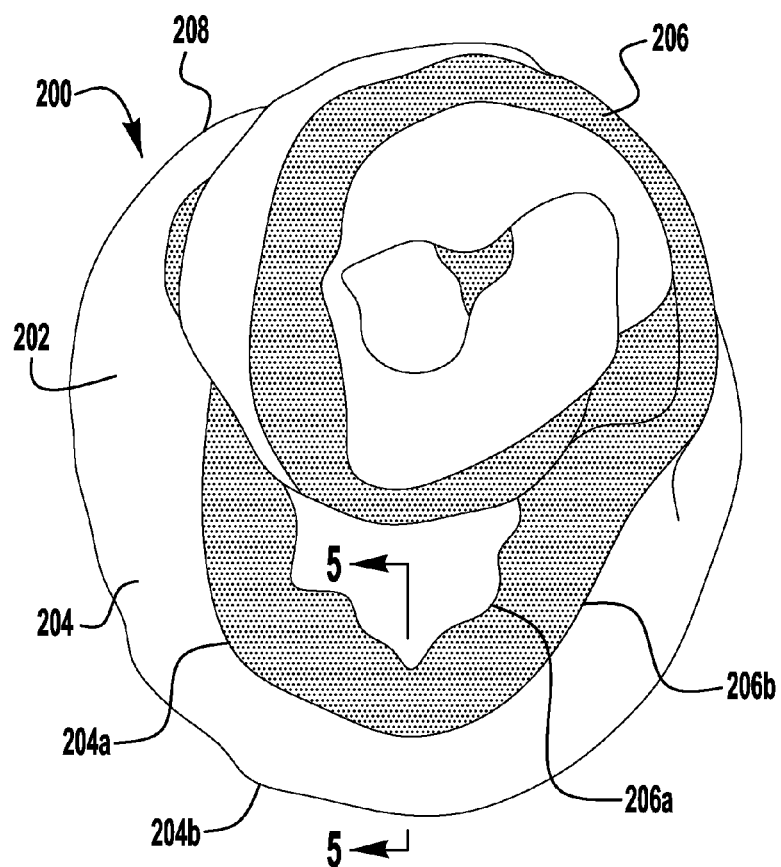


FIG. 4

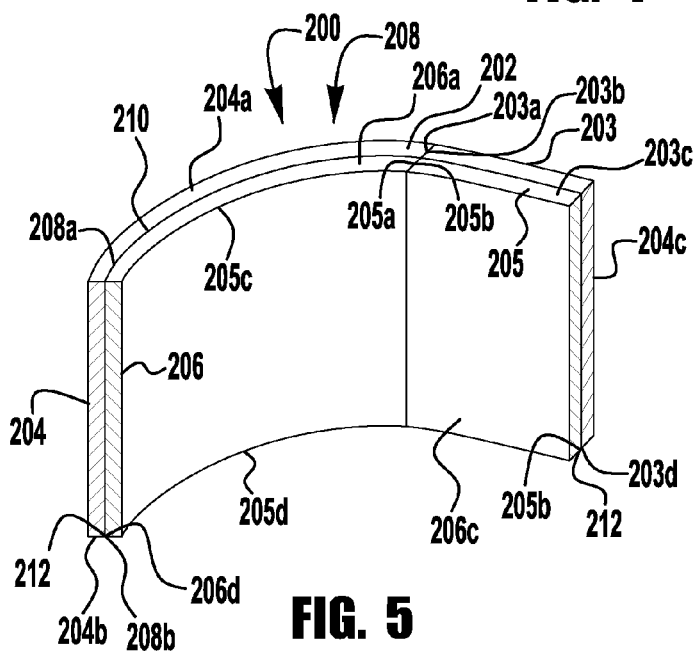


FIG. 5

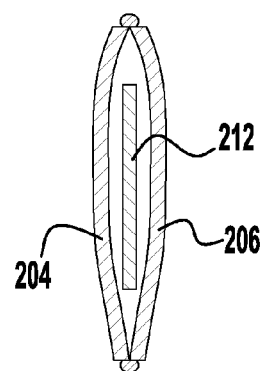


FIG. 6

REVERSIBLE WATERPROOF GARMENT

TECHNICAL FIELD OF THE INVENTION

[0001] The present invention relates to apparel with a reversible waterproof garment and more particularly to a reversible infinity scarf.

BACKGROUND OF THE INVENTION

[0002] From at least the beginning of history, man has attempted to devise garments to protect himself from various undesirable weather conditions with such garments having varying degrees of success. Early humans wore animal pelts and oil treated leather to keep moisture off of their skin and to maintain warmth. With the birth of textile production, oil cloth and other moisture rich cloths began to be used as outer wear. These fabrics wick water off their surfaces rather than absorbing it. Capes, shawls, and head wraps made from moisture-rich materials were used as early raincoats. Maintaining body heat is another prominent issue with outerwear that has been adapted for the outdoors. Many articles of clothing are primarily designed as a fashionable item. These types of clothing can sometimes be impractical for because they are formed of delicate materials which do not stand up to inclement weather conditions, such as rain.

[0003] Also, the need to maintain body temperature exists where human activities are conducted in extreme temperature environments. Very cold environments are often encountered by individuals who pursue outdoor winter activities such as snowmobilers, motorcycle riders, hunters, snow skiers, and workers, such as construction and highway workers, who work outside during the winter. Also, individuals who work in more pedestrian cold environments, such as refrigerated containers are exposed to extreme cold temperatures. Many outer wear garments are made of thin plastics, or coated materials. Lightweight water resistant materials are useful in keeping rain, snow, and other precipitation, but do not retain body heat. Such garments are not ideal for use in cold weather without the use of a jacket or other outer wear item underneath the rain protection garment. A rain protection garment is needed that provides thermal insulation capabilities is needed to address the shortcomings of currently known devices.

[0004] These and other objects and advantages of the invention will become apparent from the following description and from the accompanying drawings which illustrate one embodiment of the invention.

SUMMARY OF THE INVENTION

[0005] According to an embodiment of the present invention, there is disclosed a reversible infinity scarf to provide protection in both dry and wet conditions formed of a continuous looped body having a first length of a first layer of material adapted for the dry conditions and a second length of a second layer of material adapted for the wet conditions having the shape of the first layer and being attached to the first layer. The first length of material has first and second latitudinal edges extending the length of the scarf and first and second longitudinal edges extending the width of the scarf and disposed at first and second free ends at either end of the first and second latitudinal edges. The second length of material has first and second latitudinal edges extending the length of the scarf and first and second longitudinal edges extending the width of the scarf and

disposed a first and second free ends at either end of the first and second latitudinal edges. The first and second lengths of material are attached to each other along their first and second latitudinal edges and along their first and second latitudinal edges at the first and second free ends of the first and second lengths of material. The first and second free ends of the first and second lengths of material are interconnected to form the continuous looped body of the infinity scarf.

BRIEF DESCRIPTION OF THE DRAWINGS

[0006] The structure, operation, and advantages of the present invention will become further apparent upon consideration of the following description taken in conjunction with the accompanying figures (FIGS.). The figures are intended to be illustrative, not limiting. Certain elements in some of the figures may be omitted, or illustrated not-to-scale, for illustrative clarity. The cross-sectional views may be in the form of "slices", or "near-sighted" cross-sectional views, omitting certain background lines which would otherwise be visible in a "true" cross-sectional view, for illustrative clarity.

[0007] In the drawings accompanying the description that follows, both reference numerals and legends (labels, text descriptions) may be used to identify elements. If legends are provided, they are intended merely as an aid to the reader, and should not in any way be interpreted as limiting.

[0008] FIG. 1 is a three-dimensional, rear view of a person wearing a reversible scarf and hood with waterproof material, in accordance with the present invention.

[0009] FIG. 2 is a three-dimensional side view of a reversible scarf formed with a water proof material, in accordance with the present invention.

[0010] FIG. 3 is a side, cross sectional view through line 3-3 of FIG. 2, in accordance with the present invention.

[0011] FIG. 4 is a three-dimensional side view of an infinity scarf folded to place around the neck of a wearer, in accordance with the present invention.

[0012] FIG. 5 is a three-dimensional, partial cross sectional view of a portion of an infinity scarf, in accordance with the present invention. FIG. 6 is a cross sectional view of an embodiment of the infinity scarf having an insert, in accordance with the present invention.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] In the description that follows, numerous details are set forth in order to provide a thorough understanding of the present invention. It will be appreciated by those skilled in the art that variations of these specific details are possible while still achieving the results of the present invention. Well-known processing steps are generally not described in detail in order to avoid unnecessarily obfuscating the description of the present invention.

[0014] In the description that follows, exemplary dimensions may be presented for an illustrative embodiment of the invention. The dimensions should not be interpreted as limiting. They are included to provide a sense of proportion. Generally speaking, it is the relationship between various elements, where they are located, their contrasting compositions, and sometimes their relative sizes that is of significance.

[0015] In the drawings accompanying the description that follows, often both reference numerals and legends (labels, text descriptions) will be used to identify elements. If legends are provided, they are intended merely as an aid to the reader, and should not in any way be interpreted as limiting.

[0016] In general, the present invention is directed to an improved version and use of scarves, hats, caps, and hoodies which are waterproof or water repellent. In normal weather conditions, these items may be worn to be fashionable. In cold weather, these items may be desired for placement about the user 12 as an item of apparel to insulate from the cold and, of course, to also protect the user from rain, snow, sleet, wind, and the like. Conventional scarves, hats, caps, and hoodies either provide protection from cold weather or from wet conditions such as rain or snow. The improved reversible waterproof garment 10 is designed to accomplish both possible functions of the traditional outdoor apparel.

[0017] The reversible waterproof garment 10 incorporates two layers. One of the layers 14 is constructed of a regular fabric and the other layer 16 is constructed of a material that is waterproof, water resistant, and/or water repellent. The reversible waterproof garment 10 is designed such that the first layer 14 is adapted for exterior exposure during dry weather and whereby the opposite second layer 16 is adapted for exterior exposure during inclement weather. The clothing items can be for summer and winter use.

[0018] For winter the reversible waterproof garment 10 will be constructed of two separate layers. A first layer of material 14 is formed of a fleece, such as wool or a type of polyester fabric, and a second layer of material 16 is constructed of a material that is waterproof, water resistant, and/or water repellent. The fabric of the second layer of material 16 is preferably of a lightweight, water-resistant fabric such as non-shrink nylon, which will permit quick drying. Further, a water-resistant spray, material, and/or coating may be applied to the second layer of material 16. Both the first layer of material 14 and the second layer of material 16 may be presented in an unlimited variation in color, print patterns, and the like to provide a variety of ornamental effects on both layers of the reversible waterproof garment 10.

[0019] While the reversible waterproof garment 10 can be constructed of two layers of material as discussed herein before, it should be noted that the reversible waterproof garment 10 may be constructed of one layer of material formed of regular material, such as silk, polyester, or cotton fabric on one side and a waterproof or water repellent material, such as nylon or plastic, on the other side.

[0020] FIG. 1 illustrates both the first embodiment of the reversible waterproof garment 10 and a second embodiment of the reversible waterproof garment 100. The first embodiment of the reversible waterproof garment 10 is a scarf 18. The scarf 10 comprises an elongated body 20 having two distally-spaced ends 20a and 20b, with a range in length between 12 inches and 48 inches, and a width with a range in length between 12 inches and 48 inches. While the body 20 is elongated and generally rectangular in shape, the length of the scarf 10 is not limited and may vary considerably. The scarf 10 is constructed of two layers of material. The first layer of material 14 can be a type of textile including, but by no means limited to, wool, cotton, silk, or synthetic textiles. The second layer of material 16 is con-

structed of a material that is waterproof, water resistant, and/or water repellent such as nylon, polyurethane laminate and polyester.

[0021] For example, the scarf 10 may be cut to be a relatively-short length to serve as a neck wrap for the user 12. The scarf 10 may be manufactured by looms and other machinery and methods known in the apparel art, such as by machine and hand stitching.

[0022] The scarf is worn about the neck 12a of the user 12. As seen in FIG. 2, the scarf has a first layer of material 14 which is formed of a textile including, but by no means limited to cotton, silk, or synthetic textiles and for warmth of a fleece material or wool. A second layer 16 is constructed of a material that is waterproof. It is within the terms of the embodiment that the scarf 10 may include one or more middle layers (not shown) positioned between the first layer of material 14 and the second layer of material 16 for additional warmth.

[0023] As seen in FIG. 2, the first layer of material 14 has first and second latitudinal edges 24a and 24b, and first and second longitudinal edges 26a and 26b. The second layer of material 16 has first and second latitudinal edges 28a and 28b, and first and second longitudinal edges 30a and 30b. As seen in FIG. 3, the first layer of material 14 is generally seamed to the second layer 16 are along width of the first and second edges latitudinal 24a and 24b of the first layer and first and second latitudinal edges 28a and 28b of the second layer, respectively, and along the first and second longitudinal edges 26a and 26b of the first layer and first and second longitudinal edges 30a and 30b of the second layer, respectively.

[0024] It should be noted that the two layers of material may be fused together to form a single piece of material with a first side adapted for dry conditions and a second side adapted for wet conditions.

[0025] The second embodiment of the reversible waterproof garment 100, as seen in FIG. 1, comprises a hood 102, which is attached to a traditional sweatshirt 104. Similar to the first embodiment of the reversible waterproof garment 10, there is a first layer 106 which can be formed of a textile, a fleece material or a type of polyester fabric, and a second layer 108 is constructed of a material that is waterproof, water resistant, and/or water repellent. The fabric of the second layer 108 should be a lightweight, water-resistant fabric such as non-shrink nylon, nylon, polyurethane laminate and polyester, which will permit quick drying. Further, a water-resistant spray, material, and/or coating may be applied to the second layer 108.

[0026] The first layer of material 106 and the second layer of material 108 may be joined in any desired fashion, such as by sewing the second layer along its edge 110 to the edge 112 of the first layer.

[0027] FIG. 4 illustrates a third embodiment of the reversible waterproof garment 200, which comprises a reversible infinity scarf 202 formed of a continuous looped body having a first layer of material 204 adapted for the dry conditions and a second layer of material 206 adapted for the wet conditions. The second layer of material 206 has substantially the same shape as the first layer of material and is secured to the first layer of material to form a scarf that is both fashionable and can provide protection from inclement wet weather. Similar to the first embodiment of the reversible waterproof garment 10, the first layer 204 can be formed of a textile, a fleece material or a type of polyester fabric, and

the second layer **206** can be constructed of a material that is waterproof, water resistant, and/or water repellent such as non-shrink nylon, polyurethane laminate and polyester which will permit quick drying. In another embodiment, both layers of material can be formed of the similar materials but with a water-resistant spray, material, and/or coating applied to an inner surface **206a** of the second layer **206**. The reversible infinity scarf **202** is designed such that the first layer of material **204** can be of a fashionable material adapted for exterior exposure during dry weather while the second layer of material **206** is adapted for exterior exposure during inclement weather. During inclement weather, the scarf is turned inside out so that the second layer **206** is on the outside of the scarf and the first layer of material **204** is on the inside of the scarf.

[0028] Referring to FIG. 5, the reversible infinity scarf **202** typically incorporates a first length **203** of a first layer of material **204** and a second length **205** of a second layer of material **206**, as seen in the cross sectional view of FIG. 5. The first length **203** has opposite longitudinal free ends **203a** and **203b** and the second length **205** has opposite longitudinal free ends **205a** and **205b**. Typically, the first and second lengths **203** and **205**, respectively, are attached to each other by first and second seams **210** and **212** along their upper and lower latitudinal edges **203c** and **203d** of length **203** and upper and lower latitudinal edges **205c** and **205d** of length **205** by any means such as sewing or by any means such as an adhesive. After the first and second lengths **203** and **205** are attached to each other, the interconnected longitudinal free ends **203a** and **205a** are attached to the interconnected longitudinal free ends **203b** and **205b** to form a continuous looped body generally known as an infinity scarf.

[0029] Referring to FIG. 5, the first layer of material **204** has first and second latitudinal edges **204a** and **204b**. The second layer of material **206** has first and second latitudinal edges **206a** and **206b**. The first layer of material **204** is generally attached to second layer **206** by sewing together and forming a seam **208a** between the first and second edges latitudinal **204a** and **206a** and a seam **208b** between the first and second latitudinal edges **204b** and **206b**, respectively. When the two layers are attached together, there is effectively a single layer of material formed of the two layers **204** and **206** that are bonded together. The first layer of a material can be formed of a silk, polyester, or cotton fabric and the second layer can be a waterproof, water resistant, or water repellent material, such as nylon or plastic. Both layers **204** and **206** may be presented in an unlimited variation in color, print patterns, and the like to provide a variety of ornamental effects on both layers of the reversible waterproof garment **200**.

[0030] It is within the terms of the invention for both the first and second layers **204** and **206** to be constructed of a non waterproof, water resistant or water resistant fabric. In that case, a water-resistant spray, material, and/or coating may be applied to the surface **206c** of the second layer of material **206** and/or the surface **204c** of the first layer of material **204**.

[0031] It is also within the terms of the invention for both the first and second layers **204** and **206** to be constructed of a waterproof, water resistant or water resistant fabric.

[0032] The infinity scarf **202** is designed for both summer and winter use. For colder weather such as in the winter, one or more middle layers such as a third layer **212**, see FIG. 6,

is placed between the first layer of material **204** (compare FIG. 5) and the second layer **206** (compare FIG. 5). The additional layer **212** can be constructed of a material such as wool or fleece.

[0033] The scarf is worn about the neck **12a** of the user **12**. The infinity scarf **202** comprises an elongated looped body **208** (partially shown in FIG. 5), with a range in length between 18 inches and 48 inches, and a diameter with a range of between 12 inches and 24 inches. While the body **208** is elongated and generally rectangular in shape, the length of the infinity scarf **202** is not limited and may vary considerably. For example, the first and second free ends of the first and second lengths of material can be more narrow than a portion of the continuous looped body between the first and second free ends of the infinity scarf. In other words, one side or the middle of the scarf may be wider than the ends of the scarf to give better coverage for the head and/or hair during rain or snow or damp weather conditions. The infinity scarf **202** may be manufactured by looms and other machinery and methods known in the apparel art, such as by machine and hand stitching.

[0034] Although the invention has been shown and described with respect to a certain preferred embodiment or embodiments, certain equivalent alterations and modifications will occur to others skilled in the art upon the reading and understanding of this specification and the annexed drawings. In particular regard to the various functions performed by the above described components (assemblies, devices, etc.) the terms (including a reference to a "means") used to describe such components are intended to correspond, unless otherwise indicated, to any component which performs the specified function of the described component (i.e., that is functionally equivalent), even though not structurally equivalent to the disclosed structure which performs the function in the herein illustrated exemplary embodiments of the invention. In addition, while a particular feature of the invention may have been disclosed with respect to only one of several embodiments, such feature may be combined with one or more features of the other embodiments as may be desired and advantageous for any given or particular application.

1. A reversible infinity scarf to provide protection in both dry and wet conditions, comprising:

a continuous looped body having a first length of a first layer of material adapted for the dry conditions and a second length of a second layer of material adapted for the wet conditions having the shape of the first layer and being attached to the first layer;

the first length of material having first and second latitudinal edges extending the length of the scarf and first and second longitudinal edges extending the width of the scarf and disposed at first and second free ends at either end of the first and second latitudinal edges; and

the second length of material having first and second latitudinal edges extending the length of the scarf and first and second longitudinal edges extending the width of the scarf and disposed a first and second free ends at either end of the first and second latitudinal edges;

the first and second lengths of material being attached to each other along their first and second latitudinal edges and along their first and second latitudinal edges at the first and second free ends of the first and second lengths of material; and

first and second free ends of the first and second lengths of material being interconnected to form the continuous looped body of the infinity scarf.

2. The reversible infinity scarf of claim 1 wherein the continuous looped body has first and second seams securing the first and second latitudinal edges of the first layer of material to the first and second latitudinal edges of the second layer of material.

3. The reversible infinity scarf of claim 2, wherein the continuous looped body has a third seam securing the first and second longitudinal edges of the first layer of material to the first and second longitudinal edges of the second layer of material.

4. The reversible infinity scarf of claim 3 wherein the first layer of material is substantially the same shape as the second layer of material.

5. The reversible infinity scarf of claim 1 wherein the first layer of material is constructed of a material selected from the group consisting of wool, cotton, silk, and synthetic textiles.

6. The reversible infinity scarf of claim 5 wherein the second layer of material is constructed of a substantially waterproof material that is selected from a group consisting of non-shrink nylon, polyurethane laminate and polyester.

7. The reversible infinity scarf of claim 5 wherein the second layer of material is constructed of a material that is sprayed with a waterproof spray.

8. The reversible infinity scarf of claim 7 wherein the second layer of material is constructed of a non waterproof, water resistant or water resistant fabric having a water-resistant spray, material, and/or coating applied to a surface of second layer of material.

9. The reversible infinity scarf of claim 1 wherein the first and second layers are constructed of a material selected from the group comprising waterproof, water resistant and water resistant fabrics.

10. The reversible infinity scarf of claim 1 wherein the continuous looped body is elongated and generally rectangular in shape.

11. The reversible infinity scarf of claim 10 wherein the elongated looped body has a length of between about 18 inches and 48 inches and a diameter of between about 12 inches and 24 inches.

12. The reversible infinity scarf of claim 1 further including at least one additional layer of material disposed between the first and second layers of material.

13. The reversible infinity scarf of claim 12 wherein the at least one additional layer of material is substantially the same shape as the first and second layers of material.

14. The reversible infinity scarf of claim 13 wherein the at least one additional layer of material is constructed of a material selected from the group comprising wool and fleece.

15. The reversible infinity scarf of claim 12 wherein the elongated looped body has a length of between about 18 inches and 48 inches and a diameter of between about 12 inches and 24 inches.

16. The reversible infinity scarf of claim 12 wherein the continuous looped body has first and second seams securing the first and second latitudinal edges of the first layer of material to the first and second latitudinal edges of the second layer of material.

17. The reversible infinity scarf of claim 16 wherein the continuous looped body has a third seam securing the first and second longitudinal edges of the first layer of material to the first and second longitudinal edges of the second layer of material.

18. The reversible infinity scarf of claim 12 wherein the first layer of material is constructed of a material selected from the group consisting of wool, cotton, silk, and synthetic textiles.

19. The reversible infinity scarf of claim 18 wherein the second layer of material is constructed of a substantially waterproof material that is selected from a group consisting of non-shrink nylon, polyurethane laminate and polyester.

20. The reversible infinity scarf of claim 19 wherein the second layer of material is constructed of a non waterproof, water resistant or water resistant fabric having a water-resistant spray, material, and/or coating applied to a surface of second layer of material.

21. The reversible infinity scarf of claim 1 wherein the first and second free ends of the first and second lengths of material are more narrow than a portion of the continuous looped body between the first and second free ends of the infinity scarf.

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