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HEAD MOUNTED UMBRELLA AND METHOD OF MANUFACTURING THE SAME

BACKGROUND OF THE INVENTION

Field of the Invention

The present invention relates to an umbrella adapted to be mounted on user's head and shoulders and a method of manufacturing the same which is intended to shelter the user from the rain, and more particularly to a head mounted umbrella and a method of manufacturing the same which is intended to reduce its manufacturing cost and time and to be stably held on a user's body without shaking, and which is intended to prevent a user's face from getting wet with rain water by the transparent hood shade, and to be conveniently hung on a hanger by its hook member.

Description of the Prior Art

In past times, a head mounted umbrella, which is used for sheltering a user from the rain as shown in FIG. 1, has been produced and put on the market by the inventor.

The head mounted umbrella proposed by the inventor comprises a hood part 10 made of a waterproof material and having a front opening, a body covering part 11 made of a waterproof material, which is coupled to a lower circumferential edge of the hood part 10 and formed into a

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skirt shape or a conical shape, and an annular elastic ring 12 coupled to an outer peripheral edge of the body covering part 11 by an attaching cloth strip 12a.

The prior art head mounted umbrella is generally manufactured in such a way that the hood part 10 and the body covering part 11 having the annular elastic ring 12 attached thereto are separately prepared, and the body covering part 11 is attached to the lower edge of the hood part 10 by a sewing operation.

More specifically, a waterproof cloth is first cut to obtain a basic cloth 11' having a central opening 11a and a circular peripheral edge 11b, as shown in FIG. 2A. Thereafter, the annular elastic ring 12 is attached to the peripheral edge 11b of the basic cloth 11' by the attaching cloth strip 12a, as shown in FIG. 2B. In this procedure, the annular elastic ring 12 is brought into contact with an inner surface of the loop-shaped attaching cloth strip 12a, and the attaching cloth strip 12a is inwardly folded at upper and lower edges of the elastic ring 12 to form a "U" shape in section. Subsequently, the peripheral edge 11b of the basic cloth 11' is disposed between the upper and lower folded edges of the attaching cloth strip 12a, and the upper and lower folded edges of the attaching cloth strip 12a are sewn together with the basic cloth 11', so that the elastic ring 12 is securely attached to the peripheral edge of the basic cloth 11'.

Thereafter, the basic cloth 11' and the elastic ring 12 attached to each other are interposed between a upper mold 1 and a lower mold 2, and then heated to be shaped into a desired skirt form, as shown in FIG. 2C.

As a result, a skirt-shaped body covering part 11 is produced, as shown in FIG. 2D.

Since the above prior art head mounted umbrella is adapted to be worn on a user's head to shelter the user from the rain without using his both hands, the umbrella can afford convenient use to a user. Furthermore, since the annular elastic ring 12 can be folded several times to be compact, the umbrella is easy to store and carry.

However, since the above head mounted umbrella requires expensive molds and a molding process in a manufacturing process of the body covering part 11, considerable manufacturing costs and time are consumed. In addition, since this kind of head mounted umbrella must be produced in various sizes, i.e., umbrellas for children, umbrellas for young people and umbrellas for adults, and thus various molds suited for the several sized umbrella must be used, manufacturing cost for the umbrellas is further increased.

In addition to the above problems, the prior art umbrella has another problem in that the head mounted umbrella cannot thoroughly shield a user from the rain because the body covering part 11 of the umbrella is shaken by wind or collision

with an adjacent umbrella. Furthermore, a user cannot prevent his face from getting wet with rain water through a face opening of the hood part of the umbrella, and also the umbrella cannot be hung on a hanger in a storage closet.

SUMMARY OF THE INVENTION

Accordingly, the present invention has been made keeping in mind the above problems occurring in the prior art, and an object of the present invention is to provide a head mounted umbrella which is intended to remarkably reduce its manufacturing cost and time period by eliminating a shaping process by molds.

Another object of the present invention is to provide a head mounted umbrella, which is adapted to be stably worn on a user without shaking when the umbrella is exposed to wind or collides with an adjacent umbrella.

Still another object of the present invention is to provide a head mounted umbrella which is intended to prevent a user's face from getting with rain water through a front face opening of its hood part.

A further object of the present invention is to provide a head mounted umbrella, which is adapted to be easily hung on a hanger.

A further object of the present invention is to provide a

head mounted umbrella and a method thereof which is adapted to be stably worn on a user without its shaking when the umbrella is exposed to wind or collides with an adjacent umbrella.

In order to accomplish the above objects, the present invention provides a head mounted umbrella comprising: a hood part made of a waterproof material and having a front opening; a body covering part made of a waterproof material, which is manufactured in such a way that a circular basic cloth having a central opening and at least one cut portion, the cut portion being extended between an edge of the central opening and an outer edge of the basic cloth and widened toward the outer edge of the basic cloth, is prepared, and adjacent radial edges of the basic cloth are coupled to each other to form a skirt shape, and which is coupled to a lower edge of the hood part; and an annular elastic ring coupled to an outer peripheral edge of the body covering part by an attaching cloth strip.

The body covering part may be provided with a pair of axillary straps at both sides of its lower surface corresponding to user's both shoulders.

The hood part may be provided with a hood shade at an upper edge of the front opening, which is forwardly extended by a certain length, and may be provided with a chin strap which is attached at its one end to a side of the hood part below the front opening to encircle a user's chin portion, the other end of the chin strap being provided with a fastening member, the

hood part being provided at the other side below the front opening with a fastening member to mate with the fastening member of the chin strap.

The body covering part may be provided at its outer peripheral edge with a hook member attached thereto.

In order to accomplish the above objects, the present invention provides a method of manufacturing a head mounted umbrella, comprising the steps of: preparing a hood part made of a waterproof cloth and having a front opening; preparing a body covering part made of a waterproof cloth, which is manufactured in such a way that a circular basic cloth having a circular edge is cut away to have a central opening and at least one cut portion such that the cut portion is extended between an edge of the central opening and the outer edge of the basic cloth and widened toward the outer edge of the basic cloth 21; connecting adjacent radial edges of the basic cloth to each other to form a skirt shape; and attaching an annular elastic ring to the outer edge of the skirt-shaped basic cloth 21 by an attaching strip.

BRIEF DESCRIPTION OF THE DRAWINGS

The above and other objects, features and advantages of the present invention will be more clearly understood from the following detailed description taken in conjunction with the

accompanying drawings, in which:

FIG. 1 is a perspective view of a prior art head mounted umbrella;

FIGS. 2A to 2D show a process of manufacturing a body covering part of the prior art umbrella;

FIG. 3 is a perspective view of a head mounted umbrella according to the present invention;

FIG. 4 is a perspective view of the umbrella according to the present invention worn on a user, which is partially broken away;

FIGS. 5A to 5C show a process of manufacturing a body covering part of the umbrella according to the present invention;

FIG. 6 is a plan view of another embodiment of a basic cloth for constituting the body covering part according to the present invention.

DETAILED DESCRIPTION OF THE INVENTION

This invention will be described in further detail by way of example with reference to the accompanying drawings.

FIG. 1 is a perspective view showing a head mounted umbrella according to the present invention, and FIG. 2 is a perspective view showing the head mounted umbrella which is worn on a user's head.

As shown in the drawings, the head mounted umbrella according to the present invention comprises a hood part 20 made of a waterproof cloth and having a front opening, a body covering part 21 made of a waterproof cloth, which is coupled to a lower circumferential edge of the hood part 20 and formed into a skirt shape or a conical shape, and an annular elastic ring 22 coupled to an outer peripheral edge of the body covering part 11 by an attaching cloth strip 22a.

The hood part 20, the body covering part 21 and the attaching cloth strip 22a may be produced by many kinds of material. Preferably, they are made of synthetic resin material, which is hard to tear and is excellent in water proofing property.

The body covering part 21 is manufactured in such a way that a basic cloth 21′ of a circular shape having a central opening 21a and at least one cut portion 21c, which is extended between an edge of the central opening and an outer edge of the basic cloth 21′ and widened toward the outer edge of the basic cloth, is prepared, and adjacent radial edges 21d of the basic cloth 21′ are coupled to each other to form a skirt shape (See FIG. 5A).

The adjacent radial edges 21d of the basic cloth 21′ can be coupled to each other by sewing, heat bonding or adhesives.

The annular elastic ring 22 is attached to a lower peripheral edge of the body covering part 21 is such a way that

the annular elastic ring 22 is brought into contact with an inner surface of the attaching cloth strip 22a, the attaching cloth strip 22a is inwardly folded at upper and lower edges of the elastic ring 12 to form a "U" shape in section, the peripheral edge 21b of the body covering part 21 is disposed between the upper and lower folded edges of the attaching cloth strip 22a, and the upper and lower folded edges of the attaching cloth strip 22a are sewn together with the body covering part 21.

In addition, the head mounted umbrella according to the present invention is provided with a pair of axillary straps 23 at both sides of its lower surface. Although the axillary straps 23 may be various kinds of material and may be sized to have a certain length, they are preferablby made of flexible material. The axillary straps 23 are attached to the lower surface of the body covering part 21 at their both ends such that the straps 23 are positioned at a user's axillae.

The head mounted umbrella according to the present invention also includes a hood shade 24 which is forwardly extended from an upper edge of the front facial opening of the hood part 20, and a chin strap 25 which is attached at its one end to a side of the hood part below the front facial opening to encircle a user's chin. The other end of the chin strap 25 is provided with a fastening member 25a, and the other side of the hood part below the front opening is provided with a

fastening member 25b to mate with the fastening member 25a of the chin strap 25.

The hood shade 24 serves to prevent a user's face from being exposed to rain. It is preferable that the hood shade 24 is made of transparent synthetic resin material so as not to obstruct a user's view.

The chin strap 25 serves to prevent rain water from contacting a user's neck portion under a his chin. The mating fastening members 25a and 25b include Velcro fasteners, buttons and so on.

The head mounted umbrella is also provided at a rear edge of the body covering part 21 with a hook member 26, which is connected to the rear edge by a connecting flap 27 attached to the rear edge. The hook member 26 comprises a hook portion 26a and a base portion 26b connected to the hook portion 26a and caught in the connecting flap 27. The hook member 26 is coupled to the rear edge of the body covering part 21 in such a way that connecting flap 27 is first prepared from a rectangular vinyl sheet, the rectangular vinyl sheet is cut away at its center, the hook portion 26a of the hook member 26 is passed through the central cut portion of the vinyl sheet, the rectangular vinyl sheet is folded to surround the base portion of the hook member 26, and the free edges of the folded vinyl sheet are sewn to a rear edge of the body covering part 21.

A process of manufacturing the head mounted umbrella according to the present invention will now be described.

As shown in FIGS. 5A through 5C, a circular basic cloth 21' having a circular edge 21b is first cut away to have a central opening 21a and at least one cut portion 21c such that the cut portion 21c is extended between an edge of the central opening and the outer edge 21b of the basic cloth 21' and widened toward the outer edge 21b of the basic cloth 21'. Thereafter, adjacent radial edges 21d of the basic cloth 21' are coupled to each other to form a body covering part 21 having a skirt shape. An annular elastic ring 22 is coupled to the peripheral edge 21b of the skirt-shaped basic cloth 21' by an attaching strip 22a.

Although the basic cloth 21' is shown to have one cut portion 21c in FIG. 5A, the basic cloth 21' may have two cut portions 21c as shown in FIG. 6.

As mentioned above, the body covering part 21 is provided with a pair of axillary straps 23, one at each of both sides corresponding to user's shoulders, and is provided with a hook member 26 at its rear peripheral edge.

The hood part 20 is separately manufactured. The hood part 20 is provided with the transparent hood shade 24, which is attached to an upper edge of the front facial opening of the hood part 21 by a sewing operation. The hood part 20 is further provided with the chin strap 25 below the front

opening, which has the fastening member 25a at its one end. The hood part 20 is provided with the mating fastening member 25b at a position corresponding to the fastening member 25a of the chin strap 25.

The hood part 20, which is attached with the transparent hood shade 24 and the chin strap 25 in a manner described above, is coupled to the body covering part 21 by sewing a lower edge of the hood part 20 to an edge of the central opening of the body covering part 21. As a result, the head mounted umbrella according to the present invention is completely manufactured.

According to the present invention, since the body covering part 21 can be manufactured without molds, it is possible to reduce its manufacturing cost and time period. In addition, since the body covering part 21 is securely held on user's shoulders by the axillary straps 23, the umbrella can be stably worn by the user without shaking when the umbrella is exposed to wind or collision with an adjacent object.

Furthermore, the head mounted umbrella can prevent a user's face from getting wet with rain water by the transparent hood shade 24 and the chin strap 25, and can be conveniently hung on a hanger by the hook member 26.

As is the case with the prior art umbrella of the inventor, the head mounted umbrella according to the present invention can be conveniently stored and carried because the

annular elastic ring 22 can be folded many times to be compact and the body covering part 21 and the elastic ring 22 can be packed in the hood part 20.

As described above, the present invention provides a head mounted umbrella which is intended to remarkably reduce its manufacturing cost and time and to be stably held on a user's body without shaking. Furthermore, the head mounted umbrella according to the present invention can prevent a user's face from getting wet with rain water by the transparent hood shade, and can be conveniently hung on a hanger by its hook member.

Although a preferred embodiment of the present invention has been described for illustrative purposes, those skilled in the art will appreciate that various modifications, additions and substitutions are possible, without departing from the scope and spirit of the invention as disclosed in the accompanying claims.

WHAT IS CLAIMED IS:

1. A head mounted umbrella comprising:

a hood part made of a waterproof material and having a front opening;

a body covering part made of a waterproof material, which is manufactured in such a way that a circular basic cloth having a central opening and at least one cut portion, the cut portion being extended between an edge of the central opening and an outer edge of the basic cloth and widened toward the outer edge of the basic cloth, is prepared, and adjacent radial edges of the basic cloth are coupled to each other to form a skirt shape, and which is coupled to a lower edge of the hood part; and

an annular elastic ring coupled to an outer peripheral edge of the body covering part by an attaching cloth strip.

2. The head mounted umbrella as set forth in claim 1, in which the body covering part is provided with a pair of axillary straps at both sides of its lower surface corresponding to user's both shoulders.

3. The head mounted umbrella as set forth in claim 1, in which the hood part is provided with a hood shade at an upper edge of the front opening, which is forwardly extended by a

certain length.

4. The head mounted umbrella as set forth in claim 1, in which the hood part is provided with a chin strap which is attached at its one end to a side of the hood part below the front opening to encircle a user's chin portion, and the other end of the chin strap is provided with a fastening member, the hood part being provided at the other side below the front opening with a fastening member to mate with the fastening member of the chin strap.

5. The head mounted umbrella as set forth in claim 1, in which the body covering part is provided at its outer peripheral edge with a hook member attached thereto.

6. A method of manufacturing a head mounted umbrella, comprising the steps of:

preparing a hood part made of a waterproof cloth and having a front opening;

preparing a body covering part made of a waterproof cloth, which is manufactured in such a way that a circular basic cloth having a circular edge is cut away to have a central opening and at least one cut portion such that the cut portion is extended between an edge of the central opening and the outer edge of the basic cloth and widened toward the outer edge of

the basic cloth 21;

connecting adjacent radial edges of the basic cloth to each other to form a skirt shape; and

attaching an annular elastic ring to the outer edge of the skirt-shaped basic cloth 21 by a attaching strip.