PORTABLE HAIR DRYER FOR LONG HAIR

Inventor: Otto Hübner, Mauerkircherstrasse 199, Munich 81, Germany

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Primary Examiner—John J. Camby
Assistant Examiner—James C. Yeung
Attorney, Agent, or Firm—Kenneth S. Goldfarb

ABSTRACT

A light weight hair dryer for use for drying long hair and having inner and outer jackets divided into longitudinal cells and provided with face engaging cushions for preventing loss of warm air while permitting the hair to freely fit within the shoulder-length hood. Flap covered slots are provided for facilitating insertion of long hair.

11 Claims, 3 Drawing Figures
PORTABLE HAIR DRYER FOR LONG HAIR

BACKGROUND OF THE INVENTION

1. Field of the Invention

The invention relates to a hair dryer hood or cap which is light and can be freely worn on the head while it is being used and can be stored when not in use in a space-saving manner; also, it can be put into operation with but a few manipulations.

2. Description of the Prior Art

In a known freely portable and wearable hair dryer hood, the housing of a motor blower with a heating register is detachably connected with an air-tight outer jacket of an inflatable, double-walled hood or cap of flexible foil. The side portions of this hood are divided into longitudinally extending chambers which end in a central distribution chamber in the apex of the hood. The inside jacket of the hood has openings through which the warm air which is pressed from the blower, via the heating register into the distribution chamber, flows out under the hood. During usage the hood with the motor-blower housing is supported upon the hair, via an air cushion which forms in the distribution chamber when the hood is inflated, and via its inside jacket. Thanks to this arrangement, the hood is balanced in equilibrium while seated on the head while in use; its lower rim extends approximately to the neck line.

This very comfortable freely portable hair dryer hood is not suited, however, just as other rigid and semiflexible hair dryers for drying shoulder-length hair; the long hair must be pinned up and since it fills out completely the interior of the hood, the hair dries slowly and irregularly.

SUMMARY OF THE INVENTION

It is an object of the invention to improve the aforementioned hair dryer to a degree so that it can be used directly, without additional means, for drying long hair.

To this end and in accordance with the invention, the inner and outer jackets of the hood in the vicinity of the back of the head extend together beyond the neck, in a downward direction, into a double-walled hose which is open at the bottom, and are interconnected at the lower rim of the hose, while the area of the hood which is situated above the neck is sealed off softly in the vicinity of the facial line, by means of the hood rim which extends below the neck-line from the neck to the forehead. This results in a pressure distribution below the hood which promotes the flow through the hose and prevents escape of the warm air in the vicinity of the facial line. The shoulder-length hair after having been brushed back toward the back of the head is then pushed across the rim of the hood which ends in the neck, and into the hose which is formed by the inner and outer jackets and where the hair hangs down in wisps. The warm air pressed in by the blower between the outer and inner jackets emerges from the openings of the inner jacket below the hood and into the hose, whose bottom is open.

These features provide a uniform drying of the hair and the heretofore usual long drying period is considerably reduced, since the long hair is no longer tied into a slow drying knot in the neck, but hangs loosely in the hose where it is uniformly passed on all sides by the warm air.

Some practice is needed for pushing the moist, long hair into the hose while the hood is upon the head. In order to facilitate this process without impairing the drying efficiency of the hood, a further feature of the invention provides that a slot or aperture be worked into the hood in the vicinity of the neck, along at least one seam, respectively, which proceeds to the side of the head and the neck. These lateral slots provide the wearer of the dryer with free access to the interior of the hood and she can thus push the tail of hair easier into the hose or/and arrange the hair strands situated therein. No loss of drying air occurs thereby since the chambers inflated by pressure filling, on both sides of a slot, keep this slot closed. Preferably, though, flaps can be provided in addition, on the hood jacket, in the area of the slots, which flaps cover these slots.

The characteristics and advantages of the invention will now be described in greater detail with reference to an embodiment example illustrated in the drawing, wherein:

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a side elevational view of dryer hood for long hair the hose thereof being partly shown in section;

FIG. 2 is a front elevational view of the dryer hood, shown partly in section in the apex thereof; and

FIG. 3 is a horizontal sectional view taken along the line III—III of FIG. 1.

DETAILED DESCRIPTION OF THE INVENTION

In the drawing, in FIG. 1, attached to a housing 1, is an inflatable, double-walled hood 2. The hood consists of an outer jacket 3 and an inner jacket 4.

The housing for the motor blower comprises a mushroom-shaped cap 17 which functions as a grip or handle and a housing bottom 18 where between an annular disc 19 is disposed as a partition between the suction side and the pressure side of the fanwheel blower 21. The annular disc 19 by forming an annular slot in a holder (not shown in drawing) supports the motor 20 on whose shaft is seated the fanwheel blower 21. The fanwheel blower 21 rotates in the space between the annular disc 19 and the housing bottom 18, which together form the air exhaust opening defined as a cylindrical annular slot. The annular slot 19 and the cap 17 are also arranged spaced from one another so as to form a ring-shaped air inlet opening. The air circulation is indicated by arrows, in FIG. 2. A heating coil 23 is disposed concentric to the fanwheel blower 21.

This provides a rotation-symmetrical embodiment for the entire housing and all features taken together provide a symmetrical and flat arrangement of motor 20, blower 21 and housing 1 relative to and above the hood apex 26. The flat arrangement produces a deep-seated point of gravity which prevents a tilting of the motor-blower housing 1. The air escape opening defined as an annular gap allows the warm air which is circulated between the outer and inner jacket of the hood 2, to flow out uniformly to all sides, whereby the housing bottom 18 prevents a direct flow against the hair in the apex.

The outer jacket 3 of the hood 2 has in the region of the hood apex 26 an inlet whose pliable rim 5 engages in air-tight relation an annular groove 6 on the annular disc 19 of the housing 1.
The inner jacket 4 is fastened in the hood apex 26 to the bottom area 18 of the housing 1, by means of a push button connection 7, and has openings 8 over its entire length. In the apex, the inner jacket 4 carries on its lower side a spacer in the form of a coil 9 bent into a ring, which coil is buttoned by push buttons. The coil 9 is seated on the hair and is flexible and pliable, so that the hood weight distributed over a great plurality of windings is carried by the hair while warm air can freely penetrate between the individual windings, due to the fact that the inner jacket 4 of the hood does not rest on the hair.

Both hood jackets 3, 4 are welded in the vicinity of the hood rims 27 and 15 and at the lateral portions of the hood, in intervals along seams 29, which results in longitudinally extending chambers 10 that open into the central distribution chamber 11, below the hood apex 26 and, during pressure filling, are blown up to form a bulge by the squeezed-in air as can be seen in FIG. 3.

The inner and outer jackets define in the vicinity of the neck up to the shoulder portion, a hose 16 which is open at the bottom and which is adjacent to the hood portion that covers the head whereby the chambers 10 in the hose 16 continue up to the blower rim 15 of the hose.

The hood rim 27 which proceeds around the facial line to the neck, forms chambers which communicate with the distribution chamber 11, namely; one forehead cushion 12, two cheek cushions 13 and one neck cushion 14 which lie in sealing relation against the head. The inner jacket 4 has no openings in these regions. This feature eliminates the necessity of embedding elastic tapes or the like in the hood rim, which, on one hand as for example in bathing caps produce an uncomfortable pressure and, secondly, leave a visible and therefore annoying redness of the skin, at the points of pressure. The forehead and cheek cushions also function for stabilizing the seating of the hood upon the head. The cushions 12, 13, 14 can also be filled with foam.

The openings 8 of the inner jacket are more densely distributed where the hair is very moist. This is primarily in the vicinity of the hood portion about the neck. Through an appropriate distribution of the openings whose diameter can be of various different dimensions, a uniform drying of the hair can be attained in all places. The air performs a circulating movement in the interior of the hood so that the air brushes against the hair for a prolonged duration until it escapes at the bottom rim of the hose.

Now, in order to be able to facilitate the insertion of the hair into the hose 16 when the hood 2 is on the head, and to arrange the hair within, each side of the hood is provided with a seam 29c, in the vicinity of the neck line which is a double seam or has a double width and is divided longitudinally to form a slot 28. The walls of the chambers 10 adjacent to these slots 28 are not damaged thereby. Through these slots 28, it is now possible to put the entire hand from the outside into the cavity of the hose 16, as well as from the lower rim 15.

When the blower is running and the hood chambers are filled with pressure, the adjacent chambers 10 seal the slots 28, so that no warm air can escape there-through. Strips or flaps 30 can also be welded on the inner jacket 4, along a rim of a slot 28, as shown on the bottom of FIG. 3. These flaps 30 may be made of the same plastic material as the hood 2 but be painted a different color so that the slots 28 can be easily recognized in the mirror.

The aforedescribed embodiment can be easily modified in its details within the scope of the invention. Thus, the slots 28 may be longer than those illustrated in FIG. 1 and two or more slots can be provided on each side, depending on the number of chambers 10 in the hose 16. When the slots are very long, it may be advantageous to provide pushbuttons for fastening the strips 30 at the opposite-lying slot edge, or to provide a zipper.

The motor 20 is a DC low voltage motor with permanent magnet which, via a rectifier (not shown) and the heating coil 23, is connected as a series resistance with the terminal lead 24, to the power supply net and is so rated that the blower achieves a weight rate of flow of at least 30 m² per hour. Such a motor creates a very low weight for the hair dryer hood which is approximately 400 g. It was surprisingly found that the drying period has been reduced to 25 to 40 minutes.

After the motor 20 is connected, air is sucked from the fanwheel blower 21 through the air inlet opening and blown all around via the annular heating coil 23, through the annular disc-shaped channel between the annular disc 19 and the bottom plate 18, into the distribution chamber 11 formed by the outer jacket 3 and the inner jacket 4. Due to an appropriately generous dimensioning of the apex portion of the inner jacket 4 and due to its central fastening to the housing bottom 18 by means of a push button 7, an annular air cushion forms in the distribution chamber 11 during the inflating process, as a result of dynamic air pressure. This provides in conjunction with the spacer 9, a particularly secure fit upon the hair. The dynamic air pressure also produces the chambers 10, as well as the forehead, cheek and neck cushions 12, 13, 14 which stabilize the entire hood 2, thus making it freely portably wearable.

A latitude of modification, substitution and change is intended in the foregoing disclosure, and in some instances some features of the invention will be employed without a corresponding use of other features.

I claim:

1. A portable hair dryer comprising a housing, a motor blower located within said housing, a heating coil located within said housing, an inflatable double walled hood of flexible foil, said hood including an air-tight outer jacket and a perforate inner jacket, said housing being detachably connected to said outer jacket, said hood being subdivided into longitudinal cells, a central distribution chamber located in the apex of said hood, said longitudinal cells opening into said central distribution chamber, said inner jacket having a plurality of openings whereby heated air passes there-through, said hood including at its lower end a hose portion, said hose having an opening at the lower end thereof, said outer jacket and said inner jacket terminating together and being interconnected at the lower edges thereof to define said opening in said hose, and a hood rim located in said hood positioned above and forwardly of said hose, said hood rim being defined by the interconnected of said inner jacket and said outer jacket.
2. A hair dryer according to claim 1, wherein said hood rim includes a plurality of cushions along the edges thereto.

3. A hair dryer according to claim 1, wherein said hood rim includes a cushion in the rear portion of said rim.

4. A hair dryer according to claim 2, wherein said cushions are filled with a foam material.

5. A hair dryer according to claim 2, wherein said cushions are inflatable.

6. A hair dryer according to claim 1, wherein said motor blower has said heating coil disposed on its pressure side and in concentric relation thereto, so that said housing is arranged above said central distribution space in said hood apex and partly extends thereinto, said outer jacket of said hood being detachably affixed to the outer wall of said housing, said inner jacket being detachably affixed at its apex to the bottom surface of said housing.

7. A hair dryer according to claim 1, wherein arranged at the bottom side of apex of said inner jacket is an air-permeable, ring-shaped elastic spacer coil in the form of a helix or coil bent to form a ring which is adapted to engage the head.

8. A hair dryer according to claim 1, wherein said hood is provided with at least one elongated slot running parallel to said longitudinal cells.

9. A hair dryer according to claim 8, wherein at least one flap is provided adjacent to said slot and adapted to cover said slot.

10. A hair dryer according to claim 9, wherein at least one flap is welded to said outer jacket of said hood along one edge defining said slot, and means for but- toning said flap along the other edge of said slot.

11. A hair dryer according to claim 9, wherein said flap is of a different color from the color of said outer jacket of said hood.