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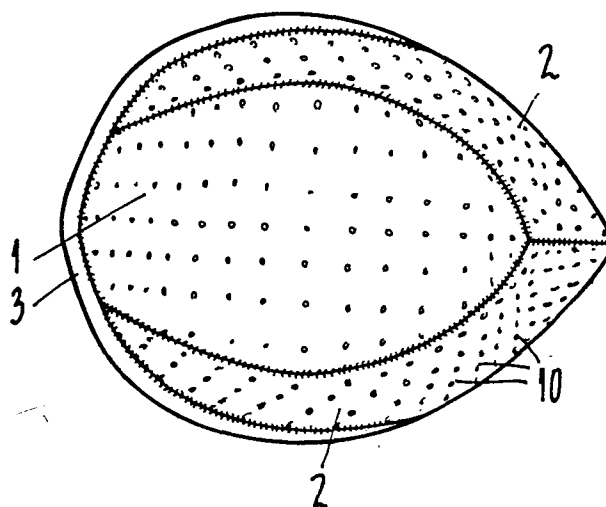
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⑤④ **Head protection cap for bleaching and colouring hair.**

⑤⑦ A close fitting head protection cap (1) for use in the bleaching and colouring of selected hair. The cap is formed of one or more layers including an elastic polymeric layer (30) and has a number of apertures (10) formed through the layer(s) so that selected hair can be drawn through for treatment. The cap (1) overcomes the problem of unwanted colouring which occurred with the prior art methods by preventing treatment solution from contacting non-selected hair.



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HEAD PROTECTION CAP FOR BLEACHING AND COLOURING HAIR

This invention relates to head protection caps used for bleaching and colouring of hair.

In today's hair fashion there is a desire to produce an effect of partial colouring or bleaching of hair. This process involves contacting selected hair with a treatment solution which either colours or bleaches the selected hair.

For the process to be effective, only the selected hair should be coloured.

To achieve this, it is necessary to prevent the treatment solution from contacting the hair which is not to be coloured.

The conventional technique of bleaching or colouring selected tips of hair involves the use of a loose fitting shower cap type arrangement, which is generally made of a thin plastic material and has a peripheral elastic band so as to hold the shower cap onto the head of the person to be treated.

In the colouring process, the shower cap is placed on the head and apertures made in the film material of the cap so as to allow selected hair to be drawn through.

A bleaching or colouring solution is then applied to the exposed tips of the hair so as to only colour the exposed tips, whilst, hopefully, leaving the hair held within the cap in its original form.

One problem of this conventional form of cap is that it is ostensibly designed as a shower cap. That is for the prevention of water from entering under the cap and

wetting the user. As this is the sole purpose of the cap, it is not designed to be close fitting around the head of the user and, indeed, stands a fair distance away from the head.

Because of these problems, it is very difficult to achieve a uniform colouring result in that the amount of colouring on the shaft of an exposed hair varies depending on how close the shower cap can be placed against the head and, because the shower cap is not close fitting, there can be variations in the length of hair actually coloured.

Furthermore, the conventional cap is not impervious to the treatment solution at the apertures made in the surface thereof so hair can be drawn through. Treatment solution can enter the interior of the shower cap through the apertures made, as they do not form a water tight seal around the hair, thus creating the possibility of unwanted colouring of hair held within the confines of the shower cap. This may be exacerbated by tearing of the apertures during use.

In general, the conventional method using a shower cap, is difficult to use and does not provide a comfortable procedure for the person undergoing the treatment.

It would therefore be desirable for there to be a cap which allows selective and consistent bleaching or colouring of hair and which is also adapted to be comfortably worn during the colouring process.

It is an object of the present invention to provide a head protection cap which allows more accurate and consistent colouring or bleaching of selected hair.

In its broadest sense, the present invention provides a close fitting head protection cap for bleaching and colouring of selected hair being formed from one or more layers of material, one of the layers being an elastic polymeric layer, the head cap having a number of apertures formed through the layer or layers so as to allow the hair to be drawn from the head of the person being treated, through the apertures, to the exterior of the cap for subsequent bleaching or colouring.

The cap may be made in the form of an integral sheet of elastic polymeric material, or it may be formed from a number of pieces which are connected together, for example, by being glued or sewn together so as to form the cap.

Preferably the elastic polymeric material is a foamed polymer and, more preferably, is a neoprene foam.

In another aspect, the present invention provides a close fitting head protection cap for use in the bleaching and colouring of selected hair comprising at least two layers of material, including a layer of an elastic polymeric material and a layer of a fabric, the polymeric material and fabric having a number of coincident apertures adapted to allow the hair to be drawn from head of the person being treated, through the apertures, to the exterior of the cap for subsequent bleaching and colouring.

The fabric layer is preferably a woven material made from any suitable fibre, for example, nylon, lycra or polyester and the like.

Preferably the elastic polymeric layer is a foamed polymeric material and, more preferably, is a foamed neoprene rubber.

In the second form of the invention the fabric layer may be affixed to the elastic polymeric layer by any known means, for example, by gluing the two layers together using neoprene cement. However, it will be clear to the reader that any suitable form of attachment of the two layers may be used.

The cap of the invention is extremely light and very comfortable for the person being treated, as there is no tension or pressure on the person's head, even if it is worn for a considerable period of time.

Because of the elastic polymeric material used, the head cap is completely waterproof in that the apertures cut into the elastic polymeric layer are such as to contract around hair drawn through the apertures, thus providing a waterproof barrier and, as such, preventing the treatment solution from seeping through onto the scalp and onto any hair not to be treated.

A further advantage of the invention is that, because it is formed from an elastic polymeric material, the one head cap may be used for various head sizes. It will maintain the shape and contour of the head so as prevent any movement or sliding from side to side on the head.

The first form of the invention relating to a single layer of elastic polymeric material is suitable for home use, in that it is relatively inexpensive to produce and can be reused a number of times.

The second form of the invention relating to a cap having at least two layers comprising an elastic polymeric layer and a woven layer provides a head cap which is

more durable, in that it can be used many times and, therefore, is suited to professional use in a hairdressing salon.

When the protection head cap of the invention is made of a foamed material, and in particular a foamed neoprene rubber, this provides the added advantage that any moisture which seeps from the bleach or the steamer is absorbed by the foamed polymeric layer before it reaches the scalp. The fabric also remains soft at all times, with or without the colouring product on it.

In order that the invention may be more readily understood, I shall describe the head cap in more detail in relation to the accompanying drawings, however, it is emphasised that the features described hereafter relate to the preferred embodiment.

In these drawings:-

- Fig. 1 illustrates a plan view of one form of the cap of the invention;
- Fig. 2 shows a side view of the cap of the invention;
- Fig. 3 shows a rear view of the cap of the invention;
- Fig. 4 shows a front view of the cap of the invention; and
- Fig. 5 is a cross section of the laminate used in producing the cap of the preferred embodiment.

The cap illustrated in Figs. 1 to 4 has four panels forming the head piece. However, it will be clear to the reader that the head piece could be made as an integral piece or made from a different number of partitions without departing from the scope of the present invention.

The head piece has four panels, comprising a top panel 1, two side panels 2 and a band 3 which extends across the front of the head piece. The purpose of the band 3 is to prevent the treatment solution and moisture from getting onto the face of the person being treated.

Fig. 5 shows a laminate material which is suitable for forming the head protection cap of the invention.

The laminate comprises a foamed neoprene layer 30 and an open weave cloth like material 11, such as nylon jersey.

In forming the head protection cap of the invention, the neoprene layer 10 is located on the inside of the cap with the open weave material forming the exterior surface of the cap.

As indicated previously, the cap may be formed of a single layer of elastic polymeric material such as neoprene rubber and may be formed of any number of layers, as long as at least one of the layers includes the elastic polymeric sheeting material.

In forming the cap, the panels are formed from the laminate shown in Fig. 5. Here, the neoprene and the nylon jersey layers may be glued together with a neoprene cement.

The laminate is then cut to a cap shape which is blind stitched and overlapped at the seams. The cap may be sealed with a water resistant sealant which makes the cap completely waterproof.

The head cap of the present invention has the further advantage that it will not discolour with bleach or other colouring chemicals and, it is only over a long period of time, that the fabric will fade slightly.

The perforations or apertures 10 are formed by conventional methods by using needles or tubes which penetrate through the layer or layers of the laminate, if a laminate is used. The number of apertures made and their location is selected on the desired use.

In use, the cap is placed on the head of the person to be treated and the tips desired to be treated are pulled through the apertures 10 of the cap with, for example, a crochet hook. Because of the close fitting nature of the cap and the material used, the operator can almost feel the hair underneath, thus allowing the hook to go through the apertures gently without hurting the person's head when the hair is pulled through, making the procedure more efficient and painless.

Because of the nature of the neoprene layer, the aperture contracts around the exposed hair filaments, so as to form an effective water-tight seal which prevents any treatment solution from entering the cap itself and to then contact the hair therebeneath.

The treatment solution is then placed over the exposed hair and allowed to remain there for the prescribed time and then the cap removed.

Because the cap is close fitting, those strands of hair selected for tipping are coloured almost down to the scalp and each set of selected hair is consistently dyed in that the cap conforms closely to the shape of the client's head, thus producing uniform bleaching or colouring of the hair.

It will be seen from what has been discussed above, that the present invention provides a head protection can which is both easy to use and effective.

The head cap version involving at least two layers is well suited to professional use in that deterioration of the neoprene layer is prevented by the open weave cloth layer 11.

It will be realised that the present invention is not limited to the use of a single layer of sheet material or to the two layer material and can be readily applied to multi-layer material including other layers on either side of the elastic polymeric layer without departing from the spirit and scope of the invention.

Furthermore, the actual means by which the head piece is constructed can vary and includes any known technique for fabricating articles of this shape.

Also, the head piece can be made one piece without the need for stitching.

The fabric layer may be made of any suitable material, such as nylon, lycra or polyester and is preferably one which is resistant to attack from the treatment solutions.

The actual number of apertures introduced into the head cap may vary depending on the desired use and, it may be the case that only the top panel 1, for example, includes a number of perforations.

In the light of what has been said above, it will be clear that many variations may be made to the various elements of the invention without departing from the inventive scope thereof.

CLAIMS:

1. A close fitting head protection cap (1) for use in the bleaching and colouring of selected hair being formed from one or more layers of material, one of the layers being an elastic polymeric layer (30), the head cap having a number of apertures (10) formed through the layer or layers so as to allow the hair to be drawn from the head of the person being treated, through the apertures, to the exterior of the cap for subsequent bleaching or colouring.
2. A close fitting cap as defined in claim 1 wherein the elastic polymeric layer is formed from an elastic foamed polymer (30).
3. A close fitting cap according to any one of the preceding claims wherein the elastic polymeric material (30) is foamed neoprene.
4. A close fitting cap as defined in any one of the preceding claims wherein the cap is formed from a number of panels which have been secured together to form the cap.
5. A close fitting head protection cap (1) for use in the bleaching and colouring of selected hair comprising at least two layers of material including a layer of elastic polymeric material (30) and a fabric layer (11), the polymeric material (30) and fabric layer (11) having a number of coincident apertures (10) adapted to allow the hair to be drawn from the head of the person being treated, through the apertures, to the exterior of the cap for subsequent bleaching and colouring.
6. A close fitting head protection cap as defined in claim 5 wherein the elastic polymeric material (30) is a foamed polymer.
7. A close fitting cap according to any one of the preceding claims wherein the elastic polymeric material (30) is foamed neoprene.
8. A close fitting cap as defined in any one of claims 5 to 7 wherein the fabric layer (11) is a woven fabric and is selected from woven nylon, lycra or polyester.

9. A close fitting cap according to any one of claims 5 to 8 wherein the cap is formed from a number of panels, the panels being securely connected to each other so as to provide a waterproof barrier.

