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(54) **ABSORBENT HEADBAND DEVICE**

(57) **ABSTRACT**

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A moisture absorbent headband device is provided that comprises a highly absorbent inner layer and a fabric shell outer layer. Both the inner core and outer shell layer having a generally rectangular shape. The outer layer is fixedly attached to an elastic means for securing the device to a user's forehead. When worn on the forehead while in the shower the moisture absorbent headband device inhibits the entry of soap and water into a user's eyes, nose, ears and mouth. In one embodiment, the device is disposable after a given number of uses. In an alternative embodiment, the outer fabric layer is closed at along one end of the inner layer and has an opening at the other end for removably inserting the absorbent inner layer into the outer fabric shell, providing a replaceable inner structure and permanent outer structure.





FIG. 1

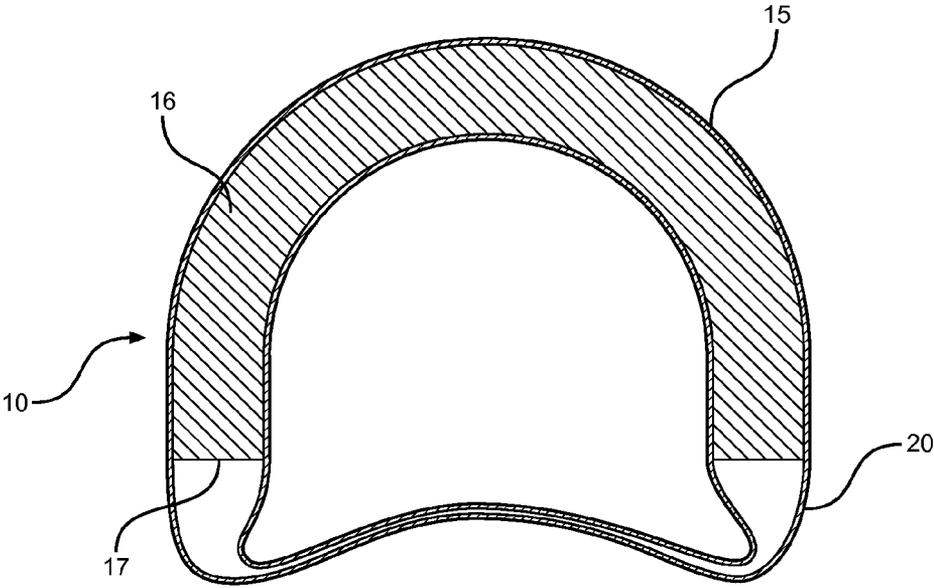


FIG. 2

ABSORBENT HEADBAND DEVICE

BACKGROUND OF THE INVENTION

[0001] 1. Field of the Invention

[0002] The present invention relates to an absorbent headband for protecting the wearer's eyes, nose, ears and mouth from shampoo, conditioner, soap and other potentially harmful or irritating products encountered while taking a shower.

[0003] Showering is a daily ritual for many adults and requires the use of a plurality of personal hygiene products such as shampoo, conditioner, body wash, and facial cleanser among others. Such personal hygiene products are often made of chemical compounds and contain one or more ingredients which are potentially harmful or irritating to the eyes, and hazardous if ingested. These products pose only a minimal risk to adults, who are aware of the need to keep the substances out of their eyes, nose, ears and mouth, and can take steps to prevent such occurrences. Children present a more difficult challenge because of their lack of familiarity with the risks associated with eye contact or ingestion of personal hygiene products. Children have a tendency to hold their eyes and mouths open while in the shower, and often use their hands to wipe haphazardly at their faces when bathing. This creates potential for products used on their hair and face to drip into their eyes, nose and mouth, and then be spread around by a child seeking to wipe his or her face.

[0004] 2. Description of the Prior Art

[0005] The prior art contains a variety of devices worn on the head for absorbing moisture of different sorts. These devices have familiar design and structural elements for the purposes of moisture absorption; however they are not adapted for the task of absorption in a moisture-rich environment such as a shower or bath.

[0006] Kim, U.S. Pat. No. 5,175,887 discloses as sweatband device worn on the forehead and comprising a resilient inner layer and an absorbent outer layer. The device is held to the head by pressure near the ears.

[0007] Lange, U.S. Pat. No. 4,523,091 discloses a device worn on the head for preventing damage to the skin during a hair dye treatment. It is comprised of a flat, heat insulating absorbent material that wraps around the entire hairline.

[0008] McConville, U.S. patent discloses a device worn on the head for absorbing perspiration, consisting of an elastic band with sponge material attached in sections along the length of the device.

[0009] Altman, U.S. Pat. No. 6,012,171 discloses an absorbent pad apparatus to be worn on the face for the purposes of protecting the forehead and face during hair dye treatment. The pad is made of an absorbent material and is held to the wearer's head by adhesive or ear hooks such as those used in goggles.

[0010] Vernon, U.S. Pat. No. 6,564,390 discloses a headband device worn on the forehead which comprises a flexible, resilient core, two absorbent layers and a cloth layer in between.

[0011] The devices disclosed by the prior art do not address the high moisture absorbing capacity needed in moisture rich environments, nor do they adequately address the needs for a stronger method of attaching the device to the wearer's head in a moisture rich environment. The current invention relates to a device worn on the forehead and covers the ears for the purposes of absorbing water, soap, and other bathing products so they do not enter the eyes, nose, ears and mouth of the user. It substantially diverges in design elements from the prior art

and consequently it is clear that there is a need in the art for an improvement to the existing headband devices for moisture absorption. In this regard the instant invention substantially fulfills these needs.

SUMMARY OF THE INVENTION

[0012] In view of the foregoing disadvantages inherent in the known types of moisture absorption headbands now present in the prior art, the present invention provides device with a new, higher degree of moisture absorption wherein the same can be utilized for providing convenience for the user when showering or bathing. The headband device contains an inner layer in the form of a flexible band having two end portions and a middle portion positioned therebetween. The inner layer has uniform width and can be made of different sponge-like materials that can be compressed to lie flat prior to use, and expand significantly when submerged in water. The device also consists of an outer shell layer that encloses the inner sponge layer, and alternatively provides an accessible enclosure for replacing the inner sponge layer.

[0013] The outer shell of the device is made of a stretchable material layer. This layer is a permanent enclosure for an inner band that absorbs moisture. At either end of the inner layer is an extension of the outer shell or other elastic means for attaching the device to the forehead of a wearer. The elastic means may comprise of different methods for attaching a band, including a termination of the outer shell material at the ends of the inner band and a transition to a single elastic band that wraps around the back of the wearer's head or a small elastic loop at each end to hook over the wearer's ears. The preferred embodiment of the disclosed invention continues the outer shell material beyond the two ends of the enclosure to provide a device similar to a headband, in which the shell material is the elastic means for securing the device to a wearer's head. The elastic band is preferably the same material as the outer shell, such as nylon, Lycra, or Poly-Lycra material, or may consist of any suitable elastic material known to one skilled in the art. In an alternate embodiment of the disclosed invention, the fabric layer may provide an opening on least one end portion so that the inner band may be inserted into or removed from the outer shell. In one embodiment, the inner sponge band layer may be removed from the outer fabric shell later at any time and discarded upon the user's determination that the sponge band needs to be replaced with a fresh band. Preferably, the inner sponge is permanently contained within the outer shell of the device, and the entire assembly can be washed or replaced after a particular period of use.

[0014] When the outer shell elastic means is used to attach the device to a user's head, the wearer can enter a shower or other high moisture environment and bathe according to the user's normal routine. The headband device prevents water, soap, and personal hygiene product from dripping down the forehead and into the face or ears.

[0015] It is therefore an object of the present invention to provide a new and improved absorbent headband that has all of the advantages of the prior art and none of the disadvantages.

[0016] Another object of the present invention is to provide a new and improved absorbent headband that is has resilient and durable construction.

[0017] Another object of the present invention is to provide an absorbent headband device that fits above a wearer's eyes

and covers a wearer's ears, preventing soap and water from dripping into the facial region or into the wearer's ears.

[0018] Yet another object of the present invention is to provide a new and improved absorbent headband that has a thick, highly absorbent, flexible core capable of retaining large amounts of fluid in a high moisture environment.

[0019] Still another object of the present invention is to provide a new and improved absorbent headband that attaches to the wearers head by a means which will ensure that the device remains in place while in the intended environment.

[0020] Another object of the present invention is to provide a new and improved absorbent headband that alternatively contains a disposable core sponge portion to facilitate hygienic use of the device.

[0021] Other objects, features and advantages of the present invention will become apparent from the following detailed description taken in conjunction with the accompanying drawings.

BRIEF DESCRIPTIONS OF THE DRAWINGS

[0022] The above invention will be better understood and the objects set forth above, as well as other objects not stated above, will become more apparent after a study of the following detailed description thereof. Such description makes use of the annexed drawings wherein:

[0023] FIG. 1 is a perspective view of the preferred embodiment of the moisture absorbing headband device, worn on the forehead of a user.

[0024] FIG. 2 is a cross sectional top view of the preferred embodiment of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

[0025] Referring now to FIG. 1, there is shown a moisture absorbent headband device 10 according to the present invention. In the preferred embodiment the headband 10 rests against the user's forehead 11 and covers the user's ears to protect the eyes 12, nose 13 ears and mouth 14 from liquids and bathing products. The device comprises an outer fabric shell 15 that is generally rectangular in shape and contacts the wearer's skin when in use. This fabric shell layer 15 may be patterned with a variety of different colors and prints to increase the device's aesthetic appeal.

[0026] Referring now to FIG. 2, there is shown a cross sectional top view of the preferred embodiment of the headband device 10. The absorbent inner layer 16 is enclosed within the fabric shell layer 15. The device 10 has an overall U-shape made up of two end portions 17. The absorbent inner layer 16 is generally rectangular shape and is uniform in thickness across its length. In the preferred embodiment, the length of the device is such that it extends from an area covering one ear of the user across the forehead and to an area covering the opposite ear. The elastic means 20 is a continuation of the outer shell 15, which extends around a user's head to secure the device against the forehead and cover the ears. A number of highly absorbent, compressible materials are contemplated for construction of the inner layer 16, such as cellulose sponge or polyurethane foam.

[0027] The fabric shell layer 15 is rectangular in shape and is a closed structure, protecting the absorbent inner layer 16 within. In an alternate embodiment, the fabric shell layer 15 provides an opening on one end 17 so that the absorbent inner layer 16 can be inserted or removed. This opening 17 allows the user to discard and replace the absorbent layer 16 with a

new one upon determination that hygiene concerns warrant such replacement. The preferred embodiment does not provide a replaceable option, rather a disposable assembly that can be washed or discarded after extended use. The outer fabric shell 15 may consist of any stretchable, washable fabric material known to one skilled in the art, including nylon, Lycra, Poly-Lycra. The fabric will contact a user's skin, therefore surface roughness and stretchability will be a factor. At either end portion of the fabric shell layer 15 an elastic means 20 is attached for the purpose of securing the device to a wearer's forehead 11. The present invention contemplates a number of methods for securing the headband 10 to the user's forehead 11. Shown in the figure is a continuation of the outer shell 15 material to form a circumferential headband device around the user's head. Alternatively, a singular elastic band may be utilized that stretches from one end of the inner band 17 to the other and rests around the back of a user's head when the device 10 is worn. The material chosen for the elastic band is preferably the same used for the fabric shell 15. However, any elastic material that provides adequate securement of the device on a user's forehead may be utilized. A further embodiment of the invention comprises elastic loops attached to each end of the inner band that fit over a wearer's ears. Still other embodiments include variations in elastic means.

[0028] In use an individual places the moisture absorbent headband device 10 on the wearer's forehead 11 and covers the wearer's ears. Said device is secured to the wearer's forehead 11 by an elastic means 20 and can then be used in a high moisture environment such as a shower or bath to prevent soap, water, shampoo and other liquids from entering the eyes 12, nose 13, ears and mouth 14 of the wearer.

[0029] With respect to the above description then, it is to be realized that the optimum dimensional relationships for the parts of the invention, to include variations in size, materials, shape, form, function and manner of operation, assembly and use, are deemed readily apparent and obvious to one skilled in the art, and all equivalent relationships to those illustrated in the drawings and described in the specification are intended to be encompassed by the present invention.

[0030] Therefore, the foregoing is considered as illustrative only of the principles of the invention. Further, since numerous modifications and changes will readily occur to those skilled in the art, it is not desired to limit the invention to the exact construction and operation shown and described, and accordingly, all suitable modifications and equivalents may be resorted to, falling within the scope of the invention.

I claim:

1) A device worn on the forehead and covering the ears of a wearer for protecting the face and ears from shampoo and other bathing products, comprising:

A flexible inner band of highly absorbent material;
said inner band having a middle portion and two end portions positioned on opposite sides of said middle portion;
an outer shell layer having means for receiving said inner band;
said outer shell layer attached at either end to an elastic means for securing to a wearer's head.

2) The device of claim 1, wherein:

said highly absorbent material shrinks when dry and expands when wet.

3) The device of claim 1, wherein:

said band has uniform thickness throughout its length when wet.

- 4) The device of claim 1, wherein:
said outer layer being constructed of nylon, Lycra or Poly-Lycra.
- 5) The device of claim 1, wherein:
said inner band is disposable and may be replaced with another inner band after a period of use.
- 6) The device of claim 1, wherein:
said elastic means is a continuation of said outer shell material and extends around a backside of said wearer's head when in use.
- 7) The device of claim 1, wherein:
said elastic means comprises an elastic band fixedly attached to each end of said outer layer and rests around a backside of said wearer's head when in use.

- 8) The device of claim 1, wherein:
said elastic means comprises two elastic loops fixedly attached to both ends of said outer shell layer, adapted to fit around either wearer's ears.
- 9) The device of claim 1, wherein:
said elastic means being constructed of nylon, Lycra or Poly-Lycra.
- 10) The device of claim 1, wherein:
said highly absorbent material being cellulose sponge.
- 11) The device of claim 1, wherein:
said highly absorbent material being polyurethane foam.

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