United States Patent

[11] 3,581,447

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[54] **REVERSIBLE SCOURING PAD**
11 Claims, 8 Drawing Figs.

[52] U.S. Cl. **51/400,**
15/104, 15/93, 401/7, 401/201
[51] Int. Cl. B24d 11/00,
B08b 1/00, A47k 7/02
[50] Field of Search 51/394-
—407; 15/104.93, 104.94, 227, 209.5; 401/16, 25,
201, 7

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ABSTRACT: A versatile cleansing article and reversible pillow-shaped scouring pad comprising a pair of layers of substrate material each having a strong abrasion surface and a 060264363 milder abrasion surface. The two layers are joined to each other along at least two edges and preferably along three edges thereof for enabling the pad to be reversed and to permit insertion of soap or detergent in the pillow.

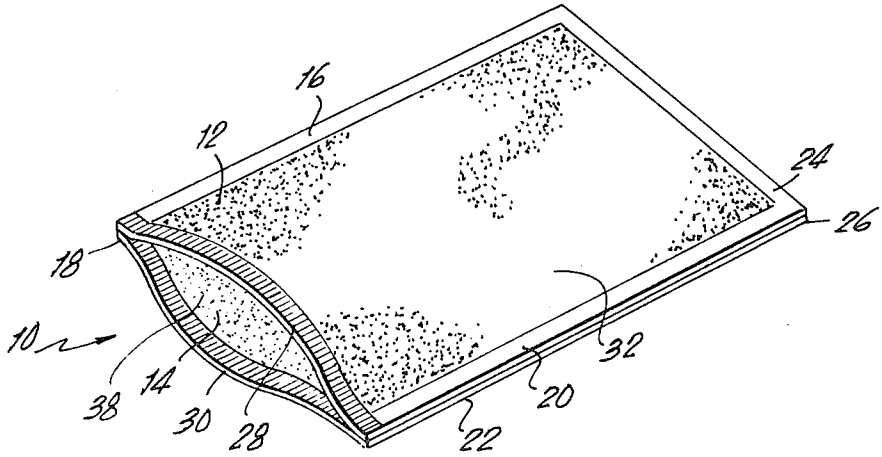


FIG. 1

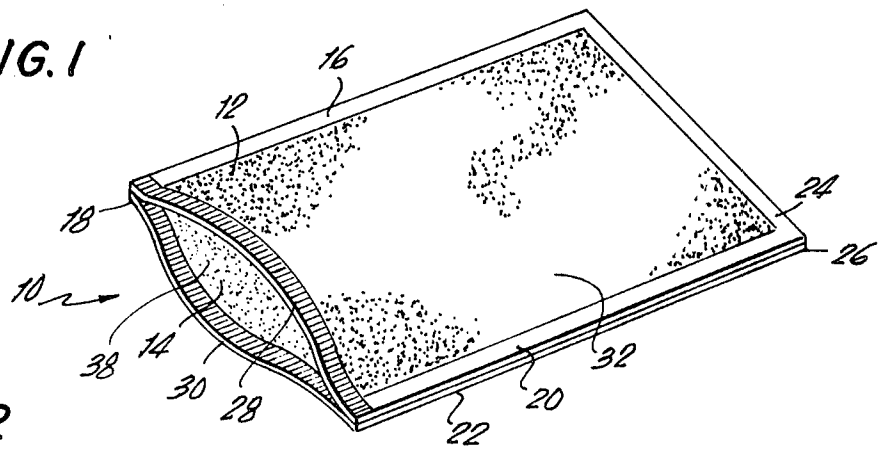


FIG. 2

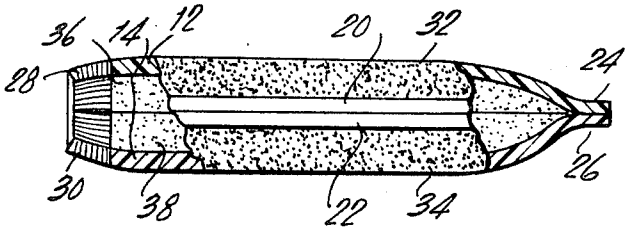


FIG. 3

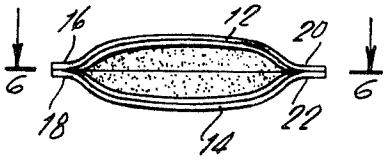


FIG. 5

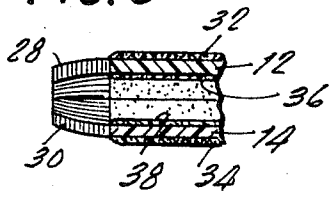


FIG. 4

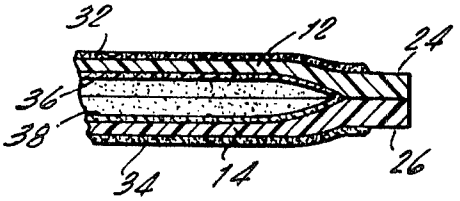
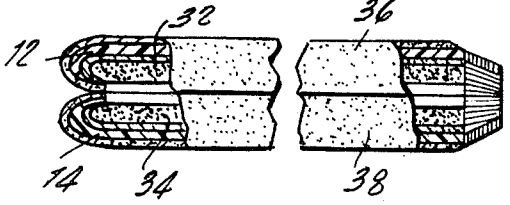


FIG. 7



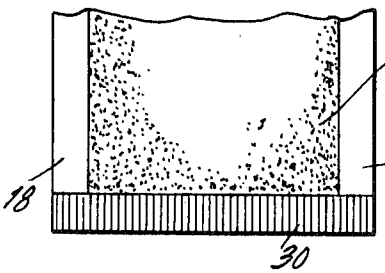
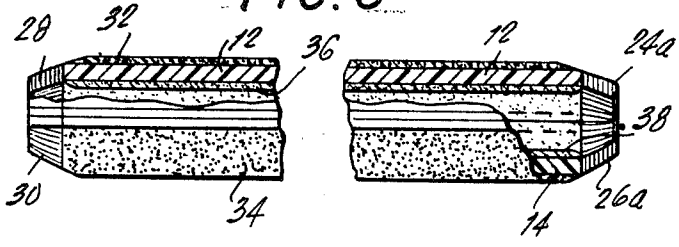


FIG. 6

FIG. 8



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REVERSIBLE SCOURING PAD

This invention relates to a cleansing article and more particularly to a versatile scouring pad.

In the past, various types of scouring pads have been produced. Basically steel wool has been used to provide a strong abrasive scouring pad while certain plastics, with and without coatings thereon, have been used to provide a mild abrasive surface for other types of scouring.

The present invention provides a versatile dual-purpose scouring pad capable of performing both the functions of a strong abrasive scouring pad and a mild abrasive scouring pad, while also permitting the insertion of soap or detergent or other suitable wetting agent into the pad in a manner where the pad itself will facilitate the digestion of the wetting agent so that the pad may be conveniently used with optimum effect.

It is a further object of the invention to provide a pillow-shaped scouring pad which may be reversed so as to bring either a strong abrasive surface or a mild abrasive surface on the outside of the scouring pad, and which may be worn as a mitten, and which may conveniently receive therein various types of wetting agents in the form of pieces of soap, soap or detergent powder, or the like.

A further object of the invention resides in the provision of a versatile cleansing article made of any convenient substrate material, including a cellulosic material, such as paper or cotton, wool, or the like, or which may be made from a metallic material such as foil, or which may be made of synthetic materials e.g. nylon, polyester, polyolefins or the like, and which can be the product of weaving, knitting, extrusion, wet and dry nonwoven processes such as felting or the like.

The rough abrasive material may be provided by a coating of a strongly abrasive very hard material such as carborundum, boron nitride, silex, nutshells and the like and the mild abrasive surface may be provided by a coating of melamine, nylon, polypropylene, jeweler's rouge or the like, or may be the surface of the substrate material.

It is yet another object of the invention to provide a versatile scouring pad having two substrate layers formed in the shape of a pillow and in which two or more pairs of abutting edges can be heat sealed or otherwise bonded together by adhesives, solvents, or the like, or else stitched together.

An additional object of the invention resides in the provision of a pillow-shaped scouring pad that allows for the insertion of soap scraps, dishcloths, sponges or the like for further assisting the abrasive surface thereof with detergency, absorbency, bulk or the like in its cleansing operations and which may be worn as a mitten on the hand if so desired.

These, together with the various ancillary objects and features of this invention, which will become apparent as the following description proceeds, are attained by this reversible scouring pad, preferred embodiments of which are illustrated in the accompanying drawing, by way of example only, wherein:

FIG. 1 is a perspective view of a pillow-shaped scouring pad constructed in accordance with the concepts of the present invention;

FIG. 2 is a longitudinal sectional view of the scouring pad;

FIG. 3 is an end elevational view of the scouring pad in a reduced scale;

FIG. 4 is a transverse sectional view of the scouring pad showing the coating on the substrate material;

FIG. 5 is a sectional detail view illustrating one form of opening for the form of scouring pad which is sealed on three sides;

FIG. 6 is a horizontal sectional view taken along the plane of line 6–6 in FIG. 3;

FIG. 7 is a longitudinal sectional detail view similar to FIG. 2, but showing the scouring pad as reversed; and,

FIG. 8 is a longitudinal sectional view of a modified form of the invention which is sealed on two sides and open at each end.

With continuing reference to the accompanying drawing, wherein like reference numerals designate similar parts throughout the various views and with initial attention to the examples shown in FIGS. 1 through 7, reference numeral 10 generally designates the cleansing article constructed in accordance with the concept of the present invention. This cleansing article includes a pair of substrate layers 12 and 14 which have their side edges 16 and 18, and 20 and 22, as well as their rear edges 24 and 26 secured together by any suitable means such as heat sealing, dielectric sealing, bonding using adhesives, solvents and the like, or by stitching as may be desired. The substrate layers 12 and 14 can be formed of the same material or different material, and can be made of nylon, polyester, or the like, or can be formed from materials such as paper, cotton, wool, metallic wool or foil or any suitable synthetic plastic material by weaving, knitting, extrusion, felting, or wet or dry nonwoven processes. The open end of the pad 10 may have the edges 28 and 30 of the substrate material contoured as desired and they may be elasticized, scoured, or decorated in any manner.

In accordance with the preferred concept of the present invention, the substrate layers 12 and 14 have coatings of abrasive materials thereon. The layers 12 and 14 have coatings 32 and 34 of a strongly abrasive, very hard material such as carborundum, boron nitride, silex, nutshells or the like, while coatings 36 and 38 are provided for the substrate layers 12 and 14 and are formed of melamine resin, nylon, polypropylene, jeweler's rouge, or the like, to form a milder abrasive surface. The coatings 32 and 34 are similar to each other and remote from each other, while the coatings 36 and 38 are adjacent each other so that the entire pad provides a rough abrasive surface for the entire pad in the position as shown in FIG. 2, while when the pad is reversed to the position as shown in FIG. 7, an entire pad having a milder abrasive surface is provided.

It is to be recognized that by making the edges 28 and 32 elasticized, the reversing of the pad is facilitated. The pad may be worn like a mitten and the pillow gives two surfaces which can do two separate jobs, while also allowing for the insertion of soap scraps, soap or detergent powders, dishcloths, sponges, and the like to further assist the abrasive surface with detergency, absorbency, bulk, and the like.

In FIG. 8, there is shown a modified form of the invention where in lieu of the rear edges 24 and 26 being sealed together, they may be left open and as shown at 24*a* and 26*a*, they may be decorated, elasticized, scored, or otherwise left open so that a pad open at both ends is achieved.

It is to be recognized that all of the coatings may be the same and alternatively, the one substrate layer may be entirely coated with one material, while the other substrate layer may be coated with a different material, or the substrate layers themselves may be formed of an abrasive material.

When inserting soap pieces or the like in the pillow 10, the abrasive surface is contacting the soap pieces and digest the soap pieces by causing them to break and become comminuted thereby facilitating the passing into solution with water or the like of the soap pieces.

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. Accordingly, it is appropriate that the appended claims be construed broadly and in a manner consistent with the spirit and scope of the invention herein.

I claim:

1. A cleansing article comprising a pair of superposed layers of material, each of said layers having a relatively rough abrasive surface and a mild abrasive surface, and means joining said layers to each other along at least two edges thereof for enabling said article to be reversed.

2. A reversible cleansing article according to claim 1, wherein each of said layers are fluid permeable, and wetting agent means disposed between said layers.

3. A reversible cleansing article comprising a pair of superposed layers of material, each of said layers being of a relative-

ly rough abrasive material on the surfaces thereof remote from each other, each of said layers being of mild abrasive material on the surfaces thereof adjacent to each other, and means joining said layers to each other along at least two edges thereof for enabling said article to be reversed so that the surfaces having the substantially less rough coating are remote from each other and the surfaces having the relatively rough coating are adjacent each other.

4. A reversible cleansing article comprising a pair of superposed layers of substrate material, each of said layers having a first coating of a relatively rough abrasive material on the surfaces thereof remote from each other, each of said layers having a second coating of substantially less rough abrasive material on the surfaces thereof adjacent to each other, and means joining said layers to each other along at least two edges thereof for enabling said article to be reversed so that the surfaces having the substantially less rough coating are remote from each other and the surfaces having the relatively rough coating are adjacent each other.

5. A reversible cleansing article according to claim 4, wherein each of said layers are fluid permeable, and wetting agent means disposed between said layers.

6. A reversible cleansing article according to claim 4, including means joining said layers to each other along three edges thereof forming a mitten.

7. A reversible cleansing article according to claim 4, wherein said first coating is selected from the group consisting of carborundum, boron nitride, silex, and nutshells.

8. A reversible cleansing article according to claim 7, wherein said second coating is selected from the group consisting of melamine resin, nylon, polypropylene, jeweler's rouge.

9. A reversible cleansing article according to claim 4, wherein said substrate material is formed of a metallic substance.

10. A reversible cleansing article according to claim 4, wherein said substrate material is of a cellulosic substance.

11. A reversible cleansing article according to claim 4, wherein said substrate material is of a synthetic plastic substance.