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3,064,301

FINGER PRINTING SYSTEM

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FIG. 1.

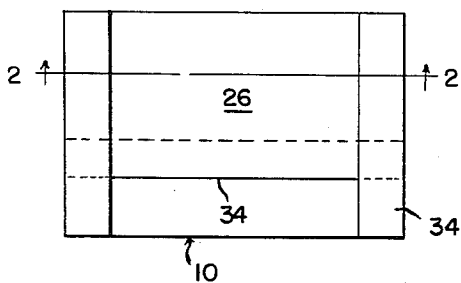


FIG. 2.

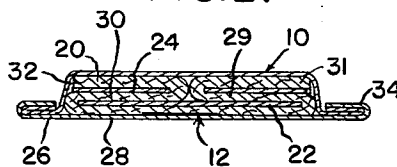
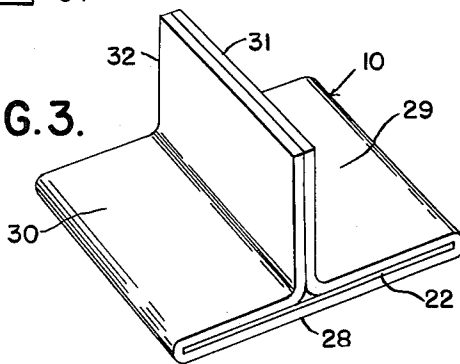


FIG. 3.



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1

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FINGER PRINTING SYSTEM

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11 Claims. (Cl. 15—506)

The present invention relates generally to finger printing and refers more specifically to individually packaged disposable sanitized applicators.

It has previously been known to take prints of fingers and similar objects using a pad saturated with a colorless solution and paper coated with another colorless solution which solutions are so related to each other that on contact of a subject coated with one solution with a paper coated with the other solution a print of the subject is formed. Printing with the colorless solutions of the past has however not been entirely satisfactory due to undesirable characteristics of the solutions and apparatus with which they were used.

For example, the colorless solutions of the past contained no sanitizer and therefore paper and pads having such solutions thereon were considered unsatisfactory for hospital and other uses where sterile conditions are necessary. In particular the pads which at present are used for applying a colorless solution to fingers or the like of a plurality of different people are especially unsanitary.

Also, the use of individual sheets of printing paper in obtaining a print especially prints of babies' feet or hands for example in a hospital and the use of a flat rigid pad for coating the finger to be printed is undesirable. The pad does not conform to the member to be coated and is awkward to handle.

Therefore it is one of the objects of the present invention to provide individually sanitized packaged disposable applicators for use in applying a colorless solution to fingers or similar objects to be printed.

It is another object to provide individually packaged sanitized applicators for use in printing fingers and similar objects.

More specifically it is an object to provide an individually packaged disposable sanitized applicator for applying a solution to fingers or similar objects, comprising an elongated rectangular pad of absorbent material having a central, intermediate and end portions, wherein the intermediate portions are returned along the central portion and the end portions are returned along the intermediate portion, whereby the intermediate portion is sandwiched between the central and end portions of the elongated pad, and a wrapping therefor.

Another object is to provide an individually packaged applicator as set forth above wherein a part of the central portion is saturated with a solution to be applied thereby and including a stiffening member inserted between the central and intermediate portions of the pad which stiffening member is substantially impervious to the solution.

Another object is to provide an individually packaged applicator as set forth above including spacing members positioned between the intermediate and end portions of the pad to facilitate separation thereof.

Other objects and features of the invention will become apparent as the description proceeds, especially when taken in conjunction with the accompanying drawings, illustrating a preferred embodiment of the invention, wherein:

FIGURE 1 is a plan view of an individually packaged disposable applicator according to the invention.

FIGURE 2 is a cross-section of the applicator illustrated in FIGURE 1 taken on the line 2—2 in FIGURE 1.

FIGURE 3 is a perspective view of an unpackaged and

2

partially unfolded applicator as illustrated in FIGURES 1 and 2.

With particular reference to the figures a specific embodiment of the present invention will now be disclosed.

In accordance with the invention an individually packaged disposable applicator generally indicated 10 is partly saturated with a colorless printing solution 12 containing a sanitizer and is folded in the position illustrated in FIGURE 2 within a wrapper 26 therefor.

More specifically the individually packaged disposable applicator 10 comprises a pad 20 of absorbent material having substantial strength in at least one direction which is substantially lint free such as a material sold under the trade name "Plastipad Pad." The applicator further includes a stiffening member 22 and spacing members 24 positioned relative to the rectangular pad 20 as best shown in FIGURE 2 and the individual wrappers 26.

The pad 20 of the applicator 10 includes a central portion 28, intermediate portions 29 and 30 and end portions 31 and 32. As shown in FIGURE 2 the central portion of the applicator is positioned against one side of the stiffening member 22 and the intermediate portions 29 and 30 thereof are returned along the other side of the stiffening member. Spacing means 24 are then placed on the exposed surface of the intermediate portions of the pad 20 and the end portions of the pad are returned along their respective intermediate portions to form a flat rectangular applicator which is then packaged in an individual wrapper 26.

The solution 12 with which a part of the central portion of the applicator of the invention is saturated as shown best in FIGURE 2 is an oxidant solution containing a sanitizer. The solution 12 may be for example ten parts sodium vanadate (ortho) dissolved in ninety parts glycerin (analytical reagent). To this solution 12.8% aqueous solution of benzalkonium chloride concentrate is added so that the strength of the benzalkonium chloride sanitizer is equivalent of 1:5000 aqueous solution.

The pad 20 may be terminal rinsed with a solution of one gram benzalkonium chloride to five thousand cubic centimeters of water if desired to further sanitize the pad. This solution is sanitary and substantially colorless when applied to fingers and other similar objects which are to be printed.

The reinforcing member 22 may be cellulose acetate approximately .015" thick or other relatively stiff material which is non-reactive and substantially impervious to the solution 12. The stiffener serves to prevent the intermediate and end portions of the pad 20 from becoming saturated with the solution 12 and adds rigidity to the pad. The spacing members 24 may be any suitable material such as wax-paper operable to prevent the intermediate and end portions of the pad from sticking together.

The wrapper 26 as shown may be wax-paper, polyethylene plastic or similar material which is easily foldable and non-reactive with the solution 12. The wrappers 26 serve to keep the individual applicators free from contamination before use and may be wrapped around the assembled pad reinforcing and spacing members as shown in FIGURE 2 and folded to provide a complete closure as indicated at 34.

As shown in FIGURE 3 the wrapping 36 may be removed from the pad 20 and the end portions of the pad turned at right angles to the intermediate and central portions thereof to provide a gripping surface which may be held between the thumb and forefinger during the application of the solution 12 to a finger or other object to be printed.

Since the pads 20 are individually packaged and are intended to be disposed of immediately after use the printing procedure is much more sanitary than previous

printing methods whereby a single pad is used a plurality of times and no sanitizer is used in conjunction with the solution.

The drawings and the foregoing specification constitute a description of the improved sanitary disposable applicator in such full, clear, concise and exact terms as to enable any person skilled in the art to practice the invention, the scope of which is indicated by the appended claims.

What I claim as my invention is:

1. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a liquid saturating a part of said center portion, and a wrapping for said pad which is non-reactive with said liquid.

2. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a liquid saturating a part of said center portion, a stiffening member positioned between said center and intermediate portions of said pad, said stiffening member being substantially impervious to said liquid to prevent saturating of said intermediate and end portions of said pad, and a wrapping for said pad which is non-reactive with said liquid.

3. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a liquid saturating a part of said center portion, a stiffening member of cellulose acetate positioned between said center and intermediate portions of said pad, and a wrapping for said pad which is non-reactive with said liquid.

4. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a liquid saturating a part of said center portion, a stiffening member positioned between said center and intermediate portions of said pad, said stiffening member being substantially impervious to said liquid to prevent saturating of said intermediate and end portions of said pad, spacing members positioned between said intermediate and end portions of said pad to facilitate separation thereof, and a wrapping for said pad which is non-reactive with said liquid.

5. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substan-

tially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, and a liquid saturating a part of said center portion.

6. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a liquid saturating a part of said center portion, a stiffening member positioned between said center and intermediate portions of said pad, said stiffening member being substantially impervious to said liquid to prevent saturating of said intermediate and end portions of said pad.

7. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a stiffening member positioned between said center and intermediate portions of said pad, and a wrapping for said pad.

8. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a liquid saturating a part of said center portion, a stiffening member positioned between said center and intermediate portions of said pad, said stiffening member being substantially impervious to said liquid to prevent saturating of said intermediate and end portions of said pad, and spacing members positioned between said intermediate and end portions of said pad to facilitate separation thereof.

9. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, a stiffening member positioned between said center and intermediate portions of said pad, spacing members positioned between said intermediate and end portions of said pad to facilitate separation thereof, and a wrapping for said pad.

10. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a soft absorbent rectangular pad having a center, intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof, spacing members positioned between said intermediate and end portions of said

pad to facilitate separation thereof, and a wrapping therefor.

11. An individually packaged disposable applicator for applying a liquid to fingers or the like, comprising a pad having a soft absorbent center portion and intermediate and end portions, said intermediate portions being returned along said center portion and extending substantially to the center thereof, said end portions being returned along said intermediate portions and extending from the center of the center portion to the ends thereof, said intermediate portions being sandwiched between said center and end portions thereof and a liquid on a part of said center portion.

5

10

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