

DRY TYPE APPLICATION PAD FOR HOT/COLD COMPRESS
BACKGROUND OF THE INVENTION

The present invention relates to an application pad for hot/cold compress, and more particularly to a dry type application
5 pad, which comprises an absorptive polymeric base layer that swells with water.

In order to keep fishes, shrimps, meat, cakes, and any of a variety of foods fresh during delivery or exhibition, ice or ice bags may be used. Regular ice bags can also be used for cold compress.
10 However, these conventional ice bags have a fixed dimension, and are not collapsible when not in use. Further, these ice bags cannot be used for hot compress.

SUMMARY OF THE INVENTION

It is one object of the present invention to provide an
15 application pad, which can be kept dried to minimize space occupation when not in use. It is another object of the present invention to provide an application pad, which can be used for hot compress or cold compress as desired. According to one embodiment of the present invention, the application pad comprises
20 an absorptive base layer, which swells when absorbs water, keeping water retained immovable, a waterproof covering holding the absorptive base layer on the inside, the waterproof covering having a plurality of pores, and a waterproof sealing layer disposed

between the absorptive base layer and the waterproof covering to seal the pores when the absorptive base layer swells with water. According to an alternate form of the present invention, the application pad is comprised of an absorptive base layer, which
5 swells when absorbs water, keeping water retained immovable; and a water-permeable covering holding the absorptive base layer on the inside.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a top view of an application pad according to the
10 present invention.

FIG. 2 is a sectional view of the application pad shown in FIG. 1.

FIG. 3 is similar to FIG. 2 but showing the absorptive base layer swelled with water.

15 FIG. 4 illustrates an application pad according to a second embodiment of the present invention.

FIG. 5 is a sectional view of an application pad according to a third embodiment of the present invention.

FIG. 6 is similar to FIG. 5 but showing the absorptive base
20 layer swelled with water.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring to FIGS. 1 and 2, an application pad 10 is shown comprising an absorptive base layer 12, and a waterproof covering

16 holding the inner absorptive layer 12 on the inside. The absorptive layer 12 is comprised of a piece of non-woven fabric covered with absorptive acrylic copolymer 14. Alternatively, the absorptive layer 12 can be a piece of paper coated with acrylic copolymer. The waterproof covering 16 has pores 20 through which water pass. A waterproof sealing film 22 is covered on the waterproof covering 16 over the pores 20, having two distal ends 18 fastened to two distal ends of the waterproof covering 16 by a heat-sealing apparatus.

10 Referring to FIG. 3 and FIG. 2 again, when water passes through the pores 20 into the inside of the waterproof covering 16, the absorptive acrylic copolymer 14 of the inner absorptive layer 12 immediately absorbs the water and then swells. When the absorptive acrylic copolymer 14 of the inner absorptive layer 12 swells, the waterproof covering 16 is expanded and stretched outwards against the waterproof sealing film 22, thereby causing the waterproof sealing film 22 to seal the pores 20, and therefore the application pad is maintained in a watertight condition.

The aforesaid waterproof covering 16 and waterproof sealing film 22 are made of plastic film material, for example, polyethylene film. The waterproof covering 16 can be made having multiple layers.

FIG. 4 shows an alternate form of the present invention.

According to this alternate form, waterproof sealing strips 24 are provided at the inner absorptive layer 12 corresponding to the pores 20 on the waterproof covering 16. When the inner absorptive layer 12 swells with water, the waterproof sealing strips 24 are forced
5 against the inside wall of the waterproof covering 16 to seal the pores 20.

FIGS. 5 and 6 show another alternate form of the present invention. According to this alternate form, the application pad is comprised of an inner absorptive layer 12 formed of a piece of
10 non-woven fabric covered with absorptive acrylic copolymer 14, and a water-permeable covering 16 holding the inner absorptive layer 12 on the inside. The water-permeable covering 16 can be made of non-woven fabric, or suitable material that admits water, and peripherally sealed through a heat-sealing process. Through the
15 water-permeable covering 16, a hot or cold liquid is applied to the inner absorptive layer 12.

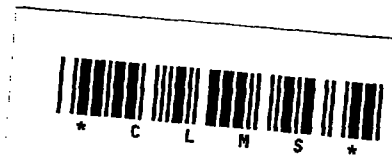
The application pad is as thin as a sheet member when dried. When in the dry state, the application pad requires less storage and transportation space, and is convenient for carrying with the user.

20 When swelled with water, water is kept immovable in the inner absorptive layer, and the application pad is maintained in a flat shape having a smooth surface. The application pad, when swelled with water, can be heated in a microwave stove for hot

compress, or refrigerated in a refrigerator for cold compress.

While only one embodiment of the present invention has been shown and described, it will be understood that various modifications and changes could be made thereunto without departing from the spirit and scope of the invention disclosed.

What the invention claimed is:



1. An application pad for hot/cold compress, comprising:
an absorptive base layer, which swells, when absorbs water,
keeping water retained immovable;
5 a waterproof covering holding said absorptive base layer on
the inside, said waterproof covering having a plurality of pores;
and
a waterproof sealing layer disposed between said
absorptive base layer and said waterproof covering to seal said
10 pores when said absorptive base layer swells with water.
2. The application pad of claim 1 wherein said absorptive
base layer is a non-woven fabric covered with an absorptive
polymer.
3. The application pad of claim 1 wherein said absorptive
15 base layer is a sheet of paper covered with an absorptive polymer.
4. The application pad of claim 1 wherein said waterproof
sealing is fastened to said waterproof covering through a heat-
sealing process.
5. An application pad for hot/cold compress, comprising:
20 an absorptive base layer, which swells when absorbs water,
keeping water retained immovable; and
a water-permeable covering holding said absorptive base
layer on the inside.

6. The application pad of claim 5 wherein said absorptive base layer is a non-woven fabric covered with an absorptive polymer.

7. The application pad of claim 5 wherein said absorptive
5 base layer is a sheet of paper covered with an absorptive polymer.

8. The application pad of claim 5 wherein said water-permeable covering is peripherally sealed through a heat-sealing process.

9. The application pad of claim 5 wherein said water-
10 permeable covering is made of water-permeable non-woven fabric.

