

[54] **DECORATIVE APPLIQUE HAVING AIR-ACTUATED NOISEMAKER**

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[51] Int. Cl. .... A41d 13/10

[58] Field of Search ..... 2/48, 49 R, 50, 75, 2/80, 244; 46/117, 118, 174, 175

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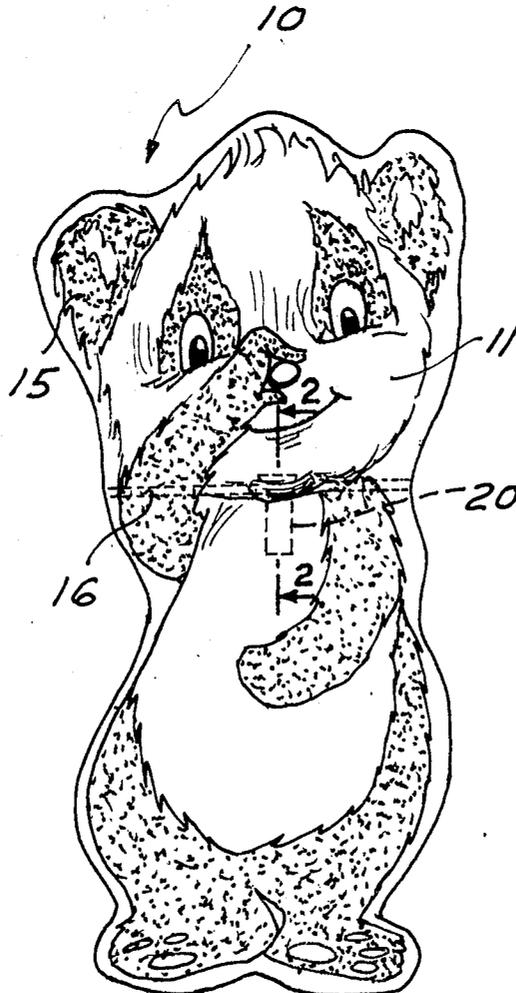
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[57] **ABSTRACT**

A decorative applique comprises a backing member and a flexible covering member superposed on and sealed to the backing member to define therebetween a pair of flexibly contractible air chambers. An air-actuated noisemaker including a vibratory reed is mounted between the pair of air chambers and manual contraction of one chamber forces the air from that chamber through the noisemaker into the other chamber thereby vibrationally driving the reed to produce an audible noise. The covering member may be sealed to a preformed backing member to define an applique unit which may be attached to any desired article or the covering member may be sealed directly to the desired article which then serves as the backing member.

**10 Claims, 5 Drawing Figures**



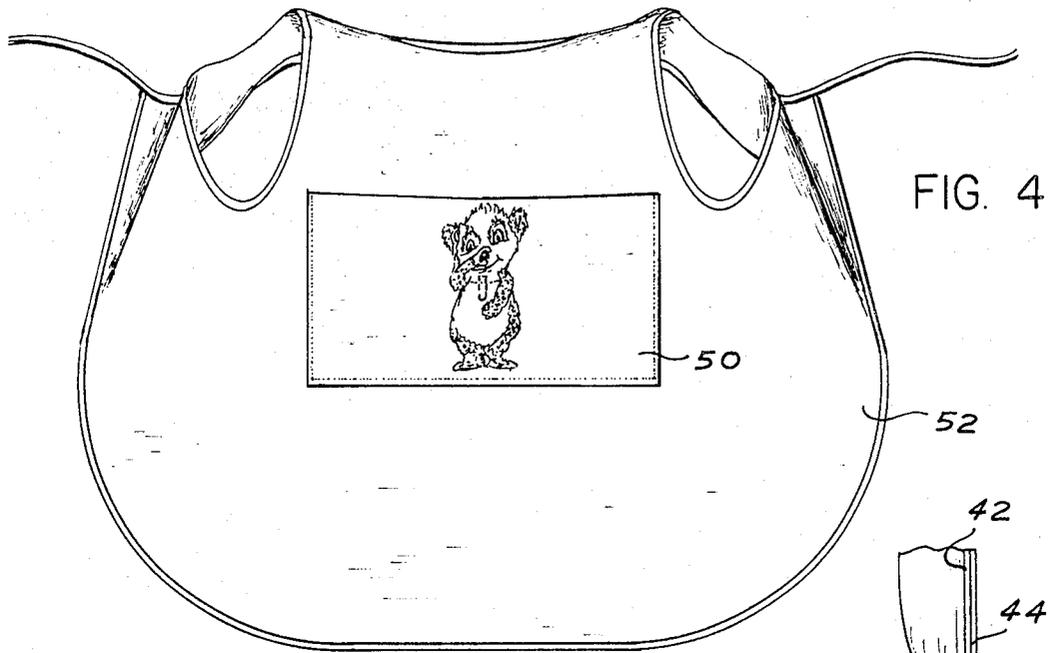


FIG. 4

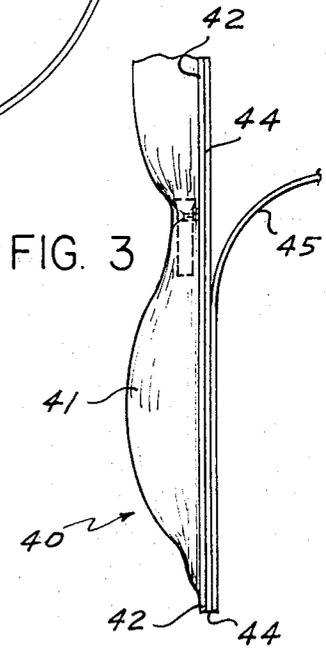


FIG. 3

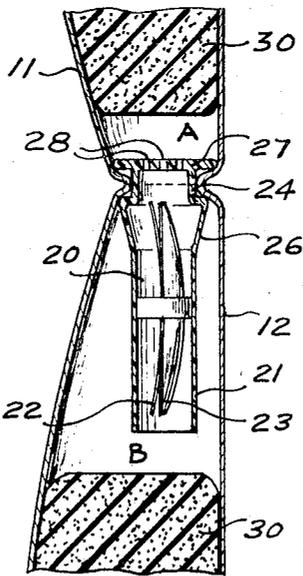
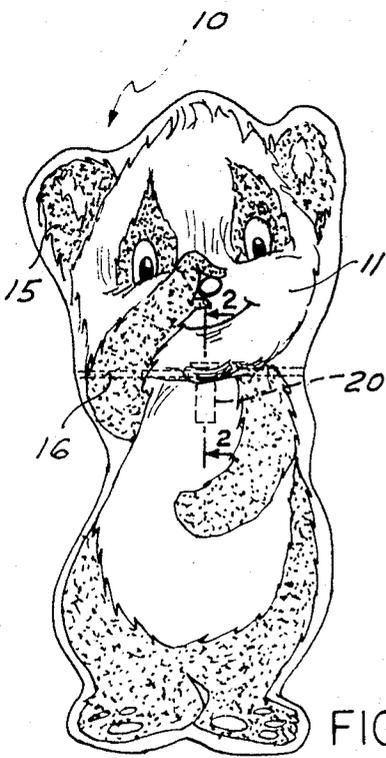


FIG. 2

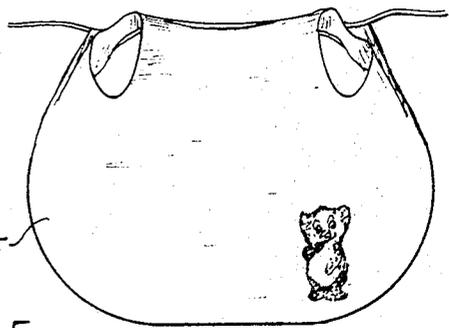


FIG. 5

## DECORATIVE APPLIQUE HAVING AIR-ACTUATED NOISEMAKER

The present invention relates to appliques for attachment to articles and more particularly, to appliques attachable to children's garments and which emit an audible sound in response to depression of the applique.

A great many devices have been devised for amusing and holding the interest of children so that they do not unnecessarily occupy the attention of adults. Much time and effort has gone into finding a device which is simple in construction and inexpensive to manufacture yet which holds the fascination of youngsters for long periods of time.

This task is particularly troublesome during the feeding of youngsters and innumerable techniques have been developed by parents to divert the youngster's attention from the fact that he is eating thereby simplifying and expediting the feeding process. For example, colorful toys and mobiles are frequently used by parents to preoccupy the child's mind with ideas other than eating. Some parents try playing children's music or even pretend that the spoonful of food is an airplane trying to land in the child's mouth. Aside from keeping the child amused during mealtime, it is also desirable to provide a device to occupy the child's pastime.

It is therefore a primary object of the present invention to provide an applique which emits an audible sound in response to depression of the applique and which is decoratively designed to appeal to children.

It is another object of the present invention to provide an applique which emits an audible sound and which may be readily attached to various types of articles.

It is a still further object of the present invention to provide an applique having a self-contained noisemaker and which is simple in construction yet has sufficient strength to withstand rugged handling by children.

It is yet another object of the present invention to provide an applique having a self-contained noisemaker and which may be attached to the shirt or pants of the child or any other desired article so that the child may actuate the noisemaker while he is in the playpen, crib or at other times.

The above and other objects of the present invention are carried out by an applique composed of a layer of thermoplastic material bonded to a backing member to form two air chambers between the thermoplastic layer and the backing member. The two chambers communicate with one another and an air-actuated noisemaker is disposed intermediate the two chambers and depression of either one of the chambers forces the air contained therein to flow through the noisemaker into the other chamber thereby actuating the noisemaker to produce an audible sound. The thermoplastic layer may be bonded to a preformed backing member to define an applique unit which may be attached to any desired article or alternatively, the thermoplastic layer may be bonded directly on the desired article which then serves as the backing member.

Having in mind the above and other objects that will be evident from an understanding of the disclosure, the present invention comprises the combination and arrangement of parts illustrated in the presently preferred embodiments of the invention which are hereinafter set forth in sufficient detail to enable those persons skilled in the art to clearly understand the function, operation,

construction and advantages of them when read in conjunction with the accompanying drawings, wherein like reference characters denote like parts in the various views, and wherein:

FIG. 1 is a front plan view of an applique according to the present invention;

FIG. 2 is an enlarged view, partly in section, taken along the like 2-2 in FIG. 1;

FIG. 3 is a side view of another variation of the applique according to the invention;

FIG. 4 is a front view of a child's bib having the applique of the present invention attached to a pocket of the bib; and

FIG. 5 is a front view of a child's bib embodying the applique of the present invention.

As most clearly seen in FIGS. 1 and 2, the applique 10 of the present invention has the configuration of a bear cub and it is understood that any desired figure or design may be employed in lieu of the bear cub configuration. The scale used in FIG. 1 is a true scale representation of one embodiment of the invention and it is also understood that the applique may have any desired size.

The applique 10 comprises a flexible covering member 11 composed of thermoplastic material superposed on a backing member 12. The covering member 11 is decorated as a bear cub on its exposed front face and is attached around its periphery to the backing member 12. In this embodiment, the backing member 12 comprises a preformed backing strip having a shape similar to that of the decorative covering member 11 and the applique 10 thus constitutes a single unit which may be affixed to the desired article.

The thermoplastic covering member 11 is attached to the backing member 12 by applying heat around the periphery of the covering layer to form a peripheral seam 15 which fluidtightly seals the covering member to the backing member. In addition, a seam 16 is made along approximately the mid portion of the applique to divide the space existing between the covering member 11 and the backing member 12 into a pair of spaced-apart air chambers A and B. Each air chamber is flexibly contractible and expansible due to the flexibility of the covering member 11 and as seen in FIGS. 1 and 2, the air chamber A is positioned beneath the head area of the bear cub and the other air chamber B is positioned beneath the remaining body area of the bear cub.

An air-actuated noisemaker 20 is disposed between the pair of air chambers and is in fluid communication with each chamber. The noisemaker 20 is preferably attached to the applique during attachment of the decorative covering member 11 to the backing member 12 and such is accomplished during formation of the seam 16. As seen in FIG. 1, the seam 16 extends around a peripheral portion of the noisemaker 20 and effectively fastens the noisemaker to the applique.

The details of the noisemaker 20 are best seen in FIG. 2. The noisemaker or sound-emitting means comprises a hollow tubular housing 21 having mounted therein a vibratory reed 22 and a stationary member 23. The vibratory reed 22 responds to air flow between the chambers A and B and coacts with the stationary member 23 to vibrate at a sufficient frequency and at a sufficient amplitude to emit an audible noise or sound. A groove 24 is formed between an outwardly flared portion 26 and an end portion 27 of the noise-

maker 20 and the seam 16 extends in the groove 24 and coats therewith to connect the noisemaker to the applique. The end portion 27 includes therein a series of apertures 28 for communicating the air chamber A with the air chamber B through the interior of the noisemaker 20. If desired, a set of resilient spacers or shaping elements 30 may be placed in the chambers A and B to maintain the contractible air chambers in their expanded condition and to assist in returning the chambers to their expanded condition after their contraction or depression.

In the embodiment shown in FIG. 3, the applique 40 comprises a single unit and includes attaching means for attaching the applique to the desired article. In this embodiment, a decorative covering layer 41 is affixed directly onto a backing member 42 and attaching means is connected to the exterior face of the backing member. The attaching means comprises a sheet 44 provided on its outer face with a coating of adhesive and a protective strip 45 is removably adhered to the sheet 44 by means of the adhesive. In order to attach the applique 40 to the desired article, the protective strip 45 is first peeled off of the sheet 44 to expose the adhesive and the applique is then pressed firmly against the desired article.

FIG. 4 discloses the use of the applique as a decorative feature provided directly on the pocket 50 of a child's apron 52. FIG. 5 shows another variation of the applique of the present invention and shows an embodiment wherein the applique is affixed directly to the outer surface of an apron 55. In each of these embodiments, the article itself serves as the backing member whereas in the embodiments of FIGS. 1-3, a separate backing member was used.

During use of the applique and assuming that same is affixed to an apron pocket such as shown in FIG. 4, the child or other person desiring to actuate the noisemaker simply depresses the bear cub at any location other than at the seam 16. Supposing that the bear cub is depressed at the head area, the corresponding chamber A will be contracted and the air in the chamber A will be forcibly expelled through the apertures 28 and through the interior of the tubular housing 21 and then into the chamber B. During passage of the air from the chamber A into the chamber B, the vibratory reed 22 will be vibrationally driven by the air flow and cause an audible sound or noise to be emitted.

When the depression of the head area ceases, the compressed air in the chamber B will return back through noisemaker 20 into the chamber A until the pressure level within each chamber is equal. In a similar manner, if the body area of the bear cub is depressed, the chamber B will be contracted to force the air in the chamber B through the noisemaker 20 into the chamber A thereby actuating the noisemaker.

The invention has been described with reference to several preferred embodiments and it is understood that obvious changes and modifications may be made thereto and the present invention is intended to cover all such obvious modifications falling within the spirit and scope of the invention as defined in the appended claims.

I claim:

1. A decorative applique capable of emitting an audible sound comprising:

a backing member;  
a flexible and decorative covering member superposed on said backing member;  
the backing member and the covering member both of an air impervious character;  
sealing means fluidtightly sealing together said covering and backing members to define therebetween a pair of flexibly contractible air chambers in fluid communication with each other and each containing therein air whereby flexible contraction of one chamber faces air to flow therefrom into the other chamber;

and sound-emitting means disposed between said pair of chambers for emitting an audible sound in response to the flow of air from said one chamber into said other chamber.

2. A decorative applique according to claim 1; including a resilient shaping element disposed in each said chamber imparting a predetermined shape to said flexible covering member and maintaining each said chamber in a contractible state.

3. A decorative applique according to claim 1; wherein said flexible covering member has on the exterior thereof a decorative representation of an animal having a head overlying said one chamber and a body overlying said another chamber; whereby depression of said head effects air flow from said one chamber to actuate said sound-emitting means.

4. A decorative applique according to claim 1; wherein said sound-emitting means includes a vibratory reed mounted intermediate said pair of chambers and vibrationally driven to emit an audible sound in response to the flow of air from said one chamber into said other chamber.

5. A decorative applique according to claim 1; wherein said flexible covering member is composed of thermoplastic material.

6. A decorative applique according to claim 5; wherein said sealing means comprises a heat-formed seam extending around a marginal peripheral portion of the thermoplastic covering member effectively binding and sealing same to said backing member.

7. A decorative applique according to claim 1; wherein said backing member comprises a child's garment.

8. A decorative applique according to claim 1; wherein said backing member comprises a strip of backing material having generally the same shape as that of said flexible covering member.

9. A decorative applique according to claim 8; including attaching means connected to said strip of backing material for attaching the applique to a desired article.

10. A decorative applique according to claim 9; wherein said attaching means includes an adhesive material connected to said strip of backing material for adhesively attaching the applique to the desired article; and a protective strip removably disposed over said adhesive material and removable therefrom to expose said adhesive material.

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