The present invention discloses an encasement for completely enclosing an object comprising a material for preventing the passage of particulate matter, a window for viewing the object inside, and an enclosable means for enclosing the object inside the encasement. The present invention also discloses an encasement for completely enclosing an object comprising a see-through material, which enables the viewing of the object inside while preventing the passage of particulate matter, and an enclosable means for enclosing the object inside the encasement. In addition, the present invention discloses an encasement for completely enclosing an object comprising a stretchable material, which conforms to the shape of the object inside while preventing the passage of particulate matter, and an enclosable means for enclosing the object inside the encasement.
ENCASEMENT THAT PREVENTS ALLERGIC REACTIONS

CROSS REFERENCE TO RELATED APPLICATION

This application claims priority of U.S. Provisional Patent Application No. 60/418,464 by Emilio Satumo, MD, filed Oct. 15, 2002, titled AN ENCASEMENT THAT PREVENTS ALLERGIC REACTIONS, which is incorporated herein by reference.

BACKGROUND OF THE INVENTION

As many as 50 million people, in the United States suffer from allergic disease. These allergic diseases are the sixth leading cause of chronic disease in the United States. In 1993, it was estimated that total cost associated with allergic rhinitis in the United States was $3.4 billion, of which $2.3 billion represents medications and $1.1 billion represents physician billing. Asthma affects more than 15 million people in the United States and is the most common serious chronic disease of childhood, affecting nearly five million children.

It is has been shown that asthma attacks can be brought on by exposure to certain types of particulate matter, such as dust mites. The most compelling evidence for the role of dust mites in asthma comes from studies of allergen avoidance, either through environmental control in the home or the removal of mite-allergic patients from their homes. Several studies have demonstrated a striking association between asthma development and mite sensitivity, indicating that allergen avoidance early in life could prevent the development of asthma in some patients. Extensive evidence also exists to support a relationship between ongoing mite exposure and disease activity. Similar studies have suggested that exposure to high concentrations of indoor allergens is associated with higher rates of asthma in children or an earlier age of disease onset. One study found the relative risk of asthma at age 11 to be 4.8 times greater if the child was exposed to high levels of dust mites in infancy. Thus, reducing environmental triggers at home, like house dust mite, can help in the control of asthma symptoms. Parents with allergies or asthma can make the recommended environmental changes and use the preventative strategies to help reduce or delay the occurrence of allergies and asthma in their children.

People spend more time in their bedroom than any other room. Therefore, most allergists prefer to direct people to conduct the most intense allergy proofing towards the bedroom. The most common indoor allergen that triggers symptoms is the house dust mite, a microscopic insect related to spiders that has a strong attraction to us, as it eats our dander (dead skin flakes). The part that causes allergic symptoms is actually the mite’s fecal particles, which are about the size and shape of a microscopic grain of pollen. Unlike pollen, however, these particles are heavy, and are only airborne for an hour or so after dusting and vacuuming. Dust mites like to burrow into pillows, mattresses, feathered bedding, stuffed animals, rugs and upholstered furniture. They are most concentrated in our bedding. To combat their allergens, dust mite proof encasings can be used on the mattress, pillows, box springs and feather comforters, but other items such as stuffed animals must be removed.

The removal of children’s beloved stuffed animals from their bedrooms can be difficult on the child as well as on the parent having to make such an important decision to safe guard the child’s health. A need exists to develop a device, which would allow these children to keep their stuffed animals and toys in their bedrooms without negatively affecting their health.

SUMMARY OF INVENTION

The present invention discloses an encasement for completely enclosing an object, such as a toy stuffed animal, that may cause an allergic reaction. The encasement comprises a cover defining an inner space, such as a sack. The encasement comprises a material, which prevents the passage of particulate matter, including dust and dust mites, a window for viewing the object, and an enclosable means for enclosing the object inside the encasement. In another embodiment, the encasement of the present invention comprises a see-through material, which allows the object to be viewed and prevents the passage of particulate matter and an enclosable means for enclosing the object inside the encasement. In yet another embodiment, the encasement of the present invention comprises a stretchable material, which conforms to the shape of the object while preventing the passage of particulate matter and an enclosable means for enclosing the object inside the encasement.

BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates the method of enclosing a stuffed animal into the encasement of the present invention.

FIG. 2 depicts one embodiment of the encasement of the present invention.

FIG. 3 illustrates another embodiment of the encasement of the present invention.

FIG. 4 shows yet another embodiment of the encasement of the present invention.

FIG. 5 shows a different embodiment of the present invention wherein the material used is see-through, stretchable or both.

DETAILED DESCRIPTION OF INVENTION

The present invention discloses an encasement, shown in FIGS. 1-4, for completely enclosing an object 4 comprising a material 1 for preventing the passage of particulate matter, a window 2 for viewing the object inside, and an enclosable means 3 for enclosing the object inside the encasement.

The present invention also discloses an encasement, shown in FIG. 5, for completely enclosing an object 3 comprising a see-through material 1 for viewing the object and for preventing the passage of particulate matter and an enclosable means 2 for enclosing the object inside the encasement.

The encasement of the present invention is made of material 1 (see FIGS. 1-4) that is a material with a construction that prevents the passage of particulate matter. Suitable materials include washable tightly woven fabrics made of cotton, polyester, plastic, polypropylene and are incorporated into commercially available products for covering pillows, mattresses, box springs and comforters, which are...
marketed to allergy sufferers. It is understood that some of these fabrics may be see-through as defined herein. Such material include tightly woven yarns with 200 thread count or higher (lower thread counts may also work if they have a tight enough weave to prevent the passage of particulate matter) used in commercially available encasements with the product names Cotton-Guard Ultra, SatinSoft Supreme, SatinSoft Classic, SofTEK and Aller-Ease Cotton. In addition, such materials include 100% cotton and cotton/polyester blends of various ratios such as 60%/40%, 25%/75% and 50%/50%. Such materials also include laminated (such as 100% polyester interlock knit laminated to a 1 mil microporous polyurethane membrane), and multi-layer fabrics. Some of the fabrics identified above are available from and used in products available from the National Allergy Supply, Inc. (Duluth, Ga.), American Textile Company (Pittsburgh, Pa.), Allergy Solutions, Inc. (Chadds Ford, Pa.) and the American Allergy Supply (Houston Tex.).

The encaement of the present invention includes an enclosable means 3 (see FIGS. 1-4) and 2 (see FIG. 5) that provides an opening in the encaement to place object 4 or 2 respectively) and allows it to be closed or sealed inside the encaement while not allowing particulate matter to escape through the encaesable means. Suitable enclosable means include metal and plastic zippers. Other suitable enclosable means include Velcro®, buttons, snap closures and enclosable means such as those used in ZIPLOC® plastic bags. If buttons or snap closure are used they should be spaced closely together as to provide a tight seal to prevent escape of particulate matter.

An encasement was produced using an Aller-Ease cotton pillow cover purchased from Linens’n Things. A five-inch by five and a quarter inch opening was cut out of one side of the pillowcase using standard fabric scissors. Then a clear plastic window was created by cutting out a square from a plastic cover from a bedding sheet, which was purchased from Linens’n Things. The window measured slightly bigger than the opening in the pillow cover. The plastic window was then placed over the opening and sewed into place using a standard sewing machine.

The invention has been described in connection with the preferred embodiments. These embodiments, however, are merely for example and the invention is not restricted thereto. It will be understood by those skilled in the art, that other variations and modifications can easily be made within the scope of the invention as defined by the appended claims.

What is claimed is:
1) An encasement for enclosing an object that may cause an allergic reaction, comprising:
   a) a material, wherein the material prevents the passage of particulate matter;
   b) at least one window, wherein the object can be viewed inside the encasement; and
   c) at least one enclosure means, wherein the object can be enclosed inside the enclosure,
   wherein the encasement defines an inner space wherein the object can be placed, enclosed and viewed, but wherein particulate matter that may emanate from the object is prevented from escaping the encasement and possibly causing an allergic reaction.

2) The encasement as defined in claim 1, wherein the material is made of stretchable material.

3) The encasement as defined in claim 1, wherein the material is made of disposable non-woven material.

4) The encasement as defined in claim 1, wherein the window is made of clear plastic.

5) An encasement for enclosing an object that may cause an allergic reaction, comprising:
   a) a see-through material, wherein the material prevents the passage of particulate matter,
b) at least one enclosable means, wherein the object can be enclosed inside the encasement,

wherein the encasement defines an inner space wherein the object can be placed, enclosed and viewed, but wherein particulate matter that may emanate from the object is prevented from escaping the encasement and possibly causing an allergic reaction.

6) The encasement as defined in claim 5, wherein the see-through material is made of a stretchable material.

7) The encasement as defined in claim 5, wherein the see-through material is made of a disposable non-woven material.

8) An encasement for enclosing an object that may cause an allergic reaction, comprising:

a) a stretchable material, wherein the material prevents the passage of particulate matter;

b) at least one enclosable means, wherein the object can be enclosed inside the encasement,

wherein the encasement defines an inner space wherein the object can be placed, enclosed and conforms to the shape of the object, but wherein particulate matter that may emanate from the object is prevented from escaping the encasement and possibly causing an allergic reaction.

9) A method of preventing an allergic reaction, comprising the steps of:

a) placing an object that may cause an allergic reaction into the encasement of claim 1, 5 and 8;

b) closing the encasement, wherein particulate matter that may emanate from the object is prevented from escaping the encasement, preventing the occurrence of allergies and asthma.

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