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(54) **Stretchable bag**

Dehnbarer Beutel

Sac étirable

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(56) References cited:
WO-A-98/52424 **GB-A- 2 043 434**
US-A- 1 600 633 **US-A- 2 667 906**

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Description

BACKGROUND TO THE INVENTION

(a) Field of the Invention:

[0001] The present invention relates generally to a stretchable bag, more particularly to a stretchable bag adapted for receiving articles and having an opening that allows opening and closure thereof.

(b) Description of the Prior Art:

[0002] People may carry with them sundry articles when going out. And how to store the various small articles in a bag is a problem. However, as conventional bags have their particular functions and are made of materials, such as fiber or leather (genuine or imitation), that do not allow stretching, their storage capacity is very limited.

[0003] Small items, such as keys and coins, that are frequently used are inconvenient if they are just put in the pocket or in a handbag, it is desirable to have a stretchable bag to keep them in a neat manner.

[0004] Patent document GB 2 043 434 A discloses a spherical hollow purse made from a resilient material and provided with an opening, a ribbon, cord, or chain fixed to the sphere on each side of the opening and forming a means for suspending said sphere and a means for closing the opening.

SUMMARY OF INVENTION

[0005] Therefore, an object of the present invention is to provide a stretchable bag that is compact in appearance but can be stretched to hold a number of articles, and that has an opening that can be stretched to allow placement of articles and that can contract thereafter to prevent the articles from falling out.

[0006] According to the present invention, there is provided a stretchable bag, comprising an enclosed bag body formed by a bag fabric, said bag having an opening in one surface thereof to allow access to an interior receiving space, said bag fabric including an elastic layer, a surface layer adhered to said elastic layer, said elastic layer being preferably formed from foamed polybutylene gum or styrene or butadiene gum, said surface layer being preferably formed of a fabric of nylon yarns or polyester yarns, whereby said bag body has an elasticity that enables said opening to be stretched open to facilitate placement of articles into said bag body and to contract thereafter to ensure that the contents of said bag body do not fall out, whereby the bag body further includes a closure layer on a side of the bag opposite to the opening, with a closure device disposed at one end to form a double-layer receiving space. Further, preferred embodiments of the invention are disclosed in dependent claims 2 - 8.

BRIEF DESCRIPTION OF THE DRAWINGS

[0007] The foregoing and other features and advantages of the present invention will be more clearly understood from the following detailed description and the accompanying drawings, in which,

Fig. 1 is a front elevation of a bag;

Fig. 2 is a rear elevation of a bag;

Fig. 3 is a sectional view of a bag;

Fig. 4 is a perspective view of a preferred embodiment; and

Fig 5 is a perspective view of another bag.

DETAILED DESCRIPTION OF THE PRIOR ART

[0008] As shown in Figs. 1 to 3, a stretchable bag includes an enclosed bag body 1 formed by a bag fabric sewn to define an enclosed interior space for receiving articles, the bag body 1 having an opening 2 formed in a suitable position.

[0009] As mentioned above, conventional bags are generally made of fiber or leather (genuine or imitation) materials. The interior receiving space is not elastic due to the bag material and the size of which is limited to the space enclosed by the bag. The bag fabric 1 includes an elastic layer 11, a surface layer 12 adhered to an upper side of the elastic layer 11, and a bottom lining 13 attached to a lower side of the elastic layer 11.

[0010] The elastic layer 11 is formed from a foam material having stretching elasticity. Experiments show that foamed polybutylene gum or foamed styrene or butadiene gum is preferred.

[0011] The surface layer 12 and the bottom lining 13 are fibrous fabrics that match the elastic layer 11 to achieve elastic effects. Hence, they are preferably formed from nylon cloth or polyester cloth woven from nylon yarns or polyester yarns.

[0012] The surface layer 12 and the bottom lining 13 are adhered to the elastic layer 11 in a conventional way. For instance, an adhesive or glue may be applied and roller pressing may be utilized to achieve firm attachment.

[0013] The opening 2 on one side of the bag body 1 may be a slit that is linear or that has the shape of a cross, star, circle, etc. In the first preferred embodiment of the present invention, the opening 2 is cross-shaped. Certainly, the opening 2 may also be partially hollowed out.

[0014] Furthermore, in order to enhance the visual effects, one side of the bag may be provided with an ornamental layer 14. The ornamental layer 14 may be formed by adhering stickers or using transfer printing, printing, or other conventional methods. The shape of the bag can further be dictated by the shape of the decoration on the ornamental layer 14. In the first bag the bag is in the shape of a hippopotamus. Certainly, the bag can have any desired ornamental shape.

[0015] Referring to Fig. 4, which shows the preferred embodiment of the present invention, the present invention is adapted for use on wallets. In this embodiment, the bag is additionally provided with a closure layer 4 at the end opposite to the opening 2. One end of the closure 4 is provided with a closing device 3. In this way, the bag of the present invention confines two receiving spaces for receiving articles. As for the ornamental layer 14, it can be provided on an outer surface of the closure layer 4. The closing device 3 may be a conventional zipper or hook-and-loop tapes or other equivalent means.

[0016] In practice, the present invention may have various changes. For instances, the opening 2 and the ornamental layer 14 can be formed on the same surface or opposite surfaces of the bag. When they are formed on the same surface, the opening 2 is disposed at a specific portion of the ornament on the ornamental layer 14, for instance, at the mouth portion of an animal ornament, to achieve a funny visual effect. Conversely, when they are disposed on opposite surfaces, the design of the ornament can be kept intact.

[0017] Reference is made to Fig. 5, which shows another bag. This bag is adapted for use in a stationery bag, such as a pencil bag. In this bag, the closure device 3 is provided on the opening 2. Therefore, in use, the closure device 3 allows or closes access to the interior of the bag for placement or removal of articles. Through actual practice, the bag of the present invention has a tensile strength at least over 8kg/cm, and a stretchability as high as over 500%. Therefore, the fabric bag 1 can have a larger receiving capacity in use.

[0018] As the bag body 1 of the present invention has excellent elasticity, the opening 2 can be very small in size. The opening 2 can be stretched to allow easy access to the interior of the fabric bag 1. After placement of articles, the opening 2 will resume its original size to prevent the contents of the bag from falling out. Furthermore, the bag of the present invention is resistant to water, light in weight, resistant to stretching, and durable. In addition, the present invention is inexpensive to manufacture.

[0019] Although the present invention has been illustrated and described with reference to the preferred embodiment thereof, it should be understood that it is in no way limited to the details of such embodiment but is capable of numerous modifications within the scope of the appended claims.

Claims

1. A stretchable bag, comprising an enclosed bag body (1) formed by a bag fabric, said bag having an opening (2) in one surface thereof to allow access to an interior receiving space, said bag fabric including an elastic layer (11), a surface layer (12) adhered to said elastic layer (11), said elastic layer (11) being preferably formed from foamed polybutylene

gum or styrene or butadiene gum, said surface layer (12) being preferably formed of a fabric of nylon yarns or polyester yarns, whereby said bag body (1) has an elasticity that enables said opening (2) to be stretched open to facilitate placement of articles into said bag body (1) and to contract thereafter to ensure that the contents of said bag body (1) do not fall out, **characterised in that** the bag body further includes a closure layer (4) on a side of the bag opposite to the opening (2), with a closure device (3) disposed at one end to form a double-layer receiving space.

2. A stretchable bag as defined in Claim 1, wherein said opening (2) is a slit that is linear or cross-shaped.
3. A stretchable bag as defined in Claim 1, wherein said opening (2) is hollowed out.
4. A stretchable bag as defined in Claim 1, wherein at least one external surface of said bag has an ornamental layer (14).
5. A stretchable bag as defined in Claim 4, wherein said opening (2) and said ornamental layer (14) are disposed on the same side of said bag body (1).
6. A stretchable bag as defined in Claim 1 wherein a closure device (3) is provided on said opening (2).
7. A stretchable bag as defined in Claim 1 wherein said closure device (3) is preferably a zipper.
8. A stretchable bag as defined in Claim 6 wherein a closure device (3) is provided on said opening (2).

Patentansprüche

1. Dehnbare Tasche, die einen abgeschlossenen Taschenkörper (1) aus Taschenstoff aufweist, wobei die Tasche auf einer Seite eine Öffnung (2) aufweist, um Zugang zu einem inneren Aufnahmeraum zu gewähren, und der Taschenstoff eine elastische Lage (11), vorzugsweise aus geschäumtem Polybutylen- oder Styrol- oder Butadienkauschuk, und einer auf diese elastische Lage (11) aufgetragenen Oberflächenlage (12), vorzugsweise aus einem Gewebe aus Nylon- oder Polyestergeräten, enthält, wodurch der Taschenkörper (1) eine Elastizität aufweist, die es ermöglicht, dass die Öffnung (2) zum Einstecken von Gegenständen in den Taschenkörper (1) aufgeweitet wird und sich danach wieder zusammenzieht, um zu gewährleisten, dass der Inhalt des Taschenkörpers (1) nicht herausfällt, **dadurch gekennzeichnet, dass** der Taschenkörper weiterhin auf einer der Öffnung (2) gegenüberliegenden

Taschenseite eine Schlusslage (4) mit einer an einem Ende angeordneten Schließvorrichtung (3) aufweist, so dass ein zweilagiger Aufnahme­raum entsteht.

2. Dehnbare Tasche nach Anspruch 1, bei der die Öffnung (2) ein linearer oder kreuzförmiger Schlitz ist.

3. Dehnbare Tasche nach Anspruch 1, bei der die Öffnung (2) ausgehöhlt ist.

4. Dehnbare Tasche nach Anspruch 1, bei der mindestens eine Taschenaußenfläche eine Zierlage (14) aufweist.

5. Dehnbare Tasche nach Anspruch 4, bei der die Öffnung (2) und die Zierlage (14) auf der gleichen Seite des Taschenkörpers (1) angeordnet sind.

6. Dehnbare Tasche nach Anspruch 1, bei der an der Öffnung (2) eine Schließvorrichtung (3) angebracht ist.

7. Dehnbare Tasche nach Anspruch 1, bei der die Schließvorrichtung (3) vorzugsweise ein Reißverschluss ist.

8. Dehnbare Tasche nach Anspruch 6, bei der an der Öffnung (2) eine Schließvorrichtung (3) angebracht ist.

ladite ouverture (2) est une fente qui est linéaire ou en forme de croix.

3. Sac étirable selon la revendication 1, dans lequel ladite ouverture (2) est creuse.

4. Sac étirable selon la revendication 1, dans lequel au moins une face externe du sac présente une couche ornementale (14).

5. Sac étirable selon la revendication 4, dans lequel ladite ouverture (2) et ladite couche ornementale (14) sont disposées sur le même côté dudit corps de sac (1).

6. Sac étirable selon la revendication 1, dans lequel un mécanisme de fermeture (3) est prévu sur ladite ouverture (2).

7. Sac étirable selon la revendication 1, dans lequel ledit mécanisme de fermeture (3) est de préférence une fermeture à glissière.

8. Sac étirable selon la revendication 6, dans lequel un mécanisme de fermeture (3) est prévu sur ladite ouverture (2).

Revendications

1. Sac étirable comprenant un corps de sac intégré (1) formé par un tissu de sac, ledit sac ayant une ouverture (2) sur une face pour permettre l'accès à un espace intérieur de réception, ledit tissu de sac comportant une couche élastique (11), une couche surfacique (12) adhérente à ladite couche élastique (11), ladite couche élastique (11) étant de préférence formée à partir de mousse de gomme de polybutylène ou gomme de butadiène ou styrène, ladite couche surfacique (12) étant de préférence formée d'un tissu de fils de nylon ou de fils de polyester, ledit corps de sac (1) ayant une élasticité qui permet à ladite ouverture (2) d'être ouverte de façon étirée pour faciliter le placement d'articles dans ledit corps de sac (1) et de se contracter à la suite pour faire en sorte que le contenu dudit corps de sac (1) ne tombe pas, **caractérisé en ce que** ledit corps de sac comporte en outre une couche une fermeture (4) sur un côté du sac opposé à l'ouverture (2), avec un mécanisme de fermeture (3) disposé à une extrémité pour former un espace de réception double couche.

2. Sac étirable selon la revendication 1, dans lequel

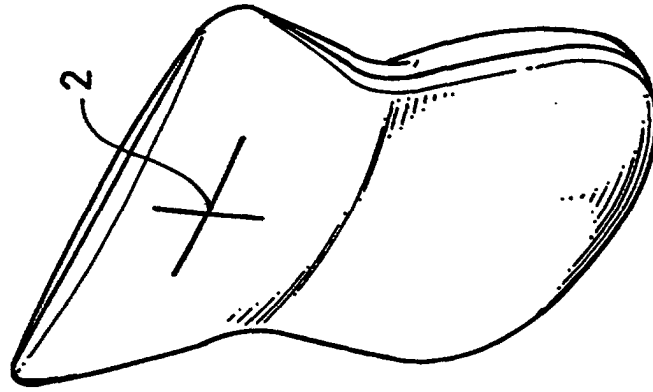


FIG. 2

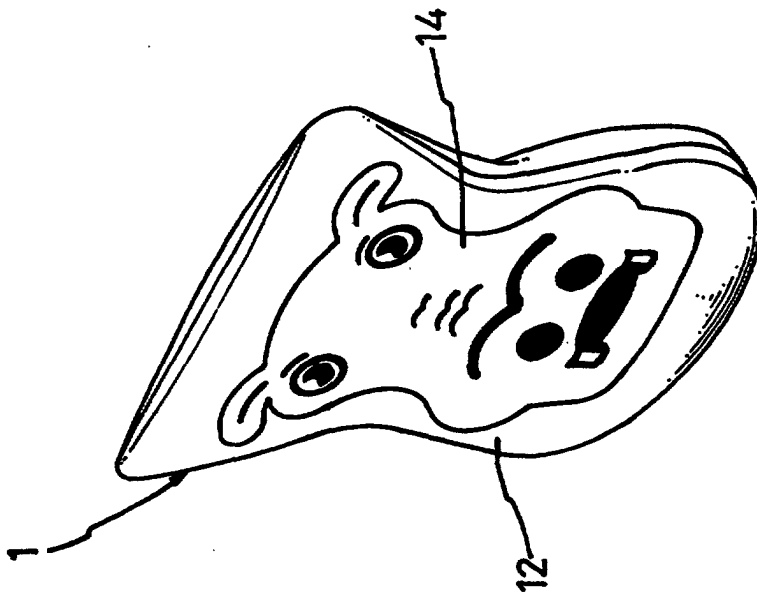


FIG. 1

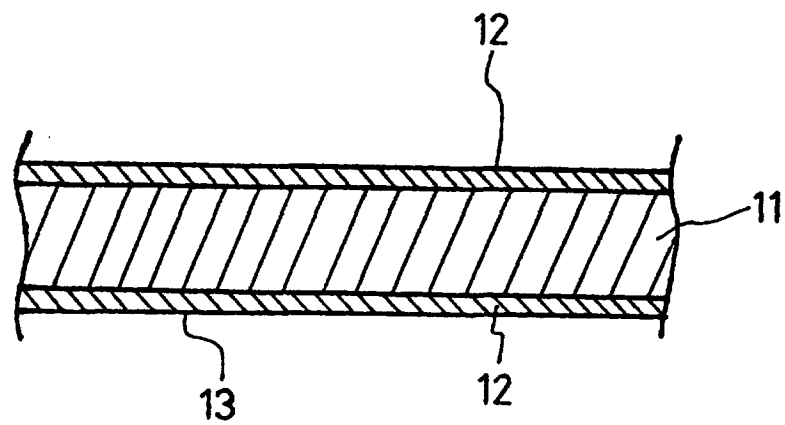


FIG. 3

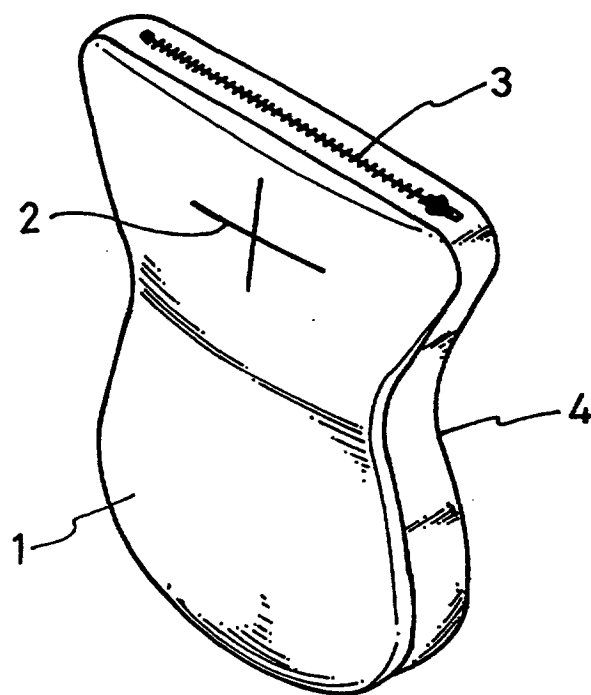


FIG. 4

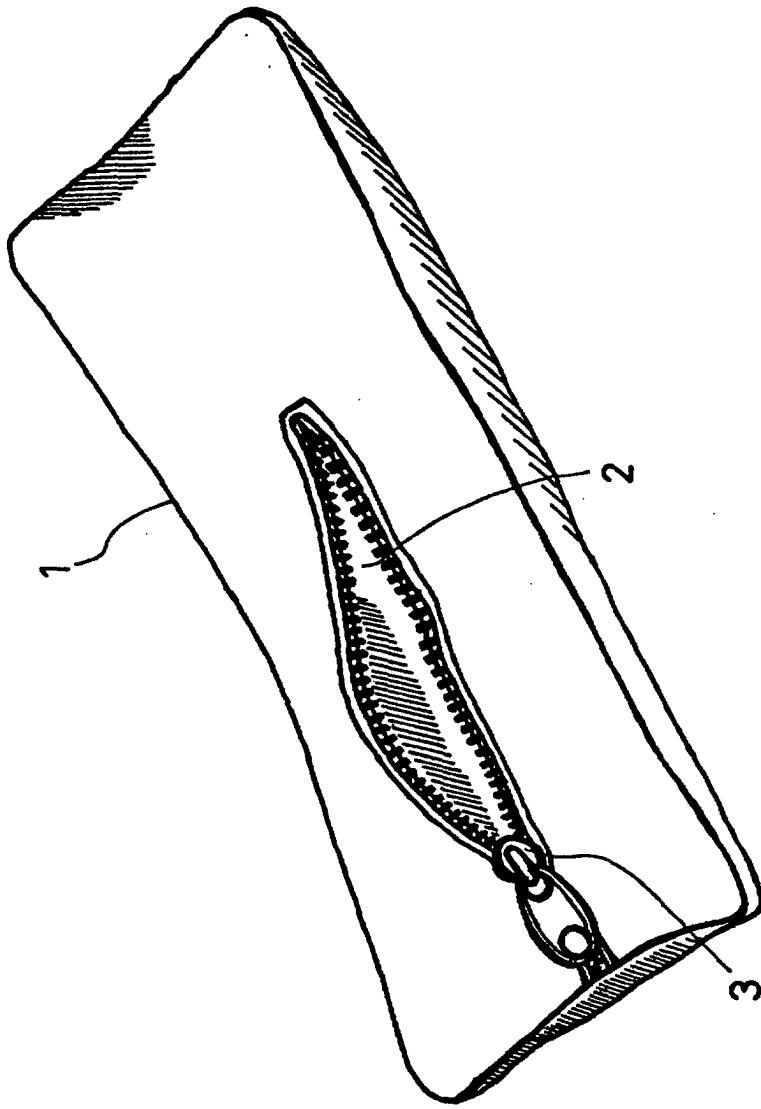


FIG. 5