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(54) **Self-adhesive label for a receptacle with a cap and a receptacle provided with such a label.**

Selbstklebendes Etikett für einen Behälter mit einer Kappe und Behälter mit einem solchen Etikett

Étiquette auto-adhésive pour couvercle avec un bouchon et un couvercle pourvus d'une telle étiquette

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Description

[0001] The present invention relates to a self-adhesive label that is intended to be placed around the periphery of a receptacle with a cap such as an aerosol can or similar.

[0002] It is known that such receptacles, such as aerosol cans, are provided with a label along their periphery that is printed with the trademark and other details of the product, such as composition, directions for use and similar.

[0003] In addition such known receptacles can also be provided with a separate cap seal in the form of a shrink-wrap that is placed around the cap and shrunk around it, an edge of which is secured to the receptacle, whereby this edge can be torn off along a perforated tear line that extends around the receptacle, all such that when removing the cap the cap seal tears off along this tear line, such that in the shop a person is assured that a receptacle with an unbroken seal has not already been used.

[0004] A disadvantage of such receptacles is that the label and the cap seal have to be affixed in two separate production stages, and printed if need be.

[0005] Moreover, for the label and the cap seal, different materials are often used, which implies that a separate stock of each product must be kept. The document DE 20.2008.008156 describes such a label made out of two materials, of which one is shrinkable.

[0006] The document EP 1.044.698 describes a label which is made out of one not-shrinkable material, whereby the cap portion is separated from the receptacle portion by means of a perforated tear line.

[0007] The purpose of the present invention is to provide a solution to at least one of the aforementioned and other disadvantages.

[0008] To this end the invention concerns a self-adhesive label intended to be placed around the periphery of a receptacle with a mounted cap, characterised in that the label comprises a section that is intended to be placed around the body of the receptacle and comprises a section adjoining to it that is intended to be placed around the cap and over the free edge of the cap as a cap seal, and which are separated from one another by a tear weakening, whereby the section that is intended to be placed around the body of the receptacle is provided with an adhesive on at least a part of the back, in order to stick the label to the body with overlapping side edges, while the section that is intended as a cap seal is not adhesive on the back, for example by not providing this back with adhesive or is provided with adhesive but which is then neutralised, whereby the entire label is manufactured from a material that is shrinkable, whereby only the aforementioned section is intended to be shrunken and whereby the label is provided with a number of layers on at least a part of the section that are at least partially detachable from one another and which are entirely or partially attached to one another with a self-adhering adhesive.

[0009] An advantage is that the placing of such a label to the receptacle with cap can be done in a single movement, followed by the shrinking of the cap seal, for example by local heating.

[0010] The label is manufactured from a single shrinkable material and only requires the storage and purchase of one single film material, which after printing can be placed as a whole.

[0011] Preferably can the number of layers that are at least partially detachable from one another be printed on both the inside and the outside, and are the number of layers for example attached to one another along an edge.

[0012] This provides extra possibilities and space for printing the label and for providing the legally required information alongside other information.

[0013] Preferably the layers are manufactured from a plastic that is such that when the layers are in contact with one another, they attract one another, such that after opening out they can be pressed tightly against the receptacle and remain pressed to be able to be opened out again if desired.

[0014] Before being placed, the label is preferably flat.

[0015] The invention also relates to a receptacle with a cap that is provided with a label according to the invention that is placed as a sleeve around the body of the receptacle and around the cap, and of which the section that is intended as a cap seal is placed around and over the edges of the cap by shrinking this section, for example by local heating, and whereby the tear weakening between the section that is intended to be placed around the body of the receptacle and the section that is intended to be the cap seal extends around the receptacle at the level of the separation between the body of the receptacle and the cap.

[0016] The invention also relates to a method for placing a label around a receptacle with a cap, and this method consists of providing a label as described above of which the section that is intended to be placed around the cap has a height that is greater than the height of the cap; placing the label around the receptacle and around the mounted cap, with the tear weakening at the level of the separation between the body of the receptacle and the cap, and at least locally heating the label at the free edge of the cap in order to shrink the label over this free edge of the cap.

[0017] This method is simple and cost-efficient.

[0018] With the intention of better showing the characteristics of the invention, a few preferred embodiments of a label according to the invention and a receptacle equipped with it are described hereinafter by way of an example, without any limiting nature, with reference to the accompanying drawings, wherein:

figure 1 schematically shows a perspective view of a label according to the invention;

figure 2 shows a view according to arrow F2 of figure 1 of the back of the label, but with a detached part;

figure 3 shows a receptacle with a cap in the form of an aerosol can during the placing of a label according to the invention;
figure 4 shows the receptacle of figure 3 after placing the label;
figure 5 shows the receptacle of 4 after the cap has been removed.

[0019] The self-adhesive label 1 shown in figure 1 is a flat rectangular label of one single film of heat shrinkable material, for example PET, that is divided into two connecting rectangular sections by means of a tear weakening 2 in the form of a perforated line, i.e. a first section 3 that is intended to be placed around the body 4 of a receptacle 5 with cap 6, such as an aerosol can, and a second section 7 that is intended to be placed around the cap 6 of such a receptacle 5, as shown in figure 4.

[0020] The tear weakening 2 runs parallel to the top edge 8 and bottom edge 9 of the label 1 and connects the two opposite side edges together.

[0021] A second tear weakening 11 in the form of a second perforated line extends in the second part of the label 1 from the first tear weakening to the top edge of the label.

[0022] As can be seen in figure 2, the first section 3 of the label 1 is provided on the back 12 with adhesive 13, preferably a self-adhering pressure-sensitive adhesive, that is covered with a support, for example of paper or plastic 14, and the second section 7 is not adhesive because the back 12 is either free of adhesive or the adhesive present on this back has been neutralised.

[0023] The label 1 is provided with a number of layers on a part of its surface, in this case a second label layer that is secured along an edge 16 on the front 17 of the label by adhesives or similar, whereby the layers are at least partially detachable from one another.

[0024] The material from which the layers are manufactured is preferably a plastic that is such that the layers that are in contact with one another attract one another, for example due to static charge, and can be pulled apart without too much force in order to open out the layers like the pages of a bcok.

[0025] The label 1 can be provided beforehand with printing that can extend over the entire front 17 of the label or a part of it, as well as between the layers 15, in other words on the back and/or front 20 of the layers 15.

[0026] The method for placing the pre-printed label 1 of figures 1 and 2 to a receptacle 5 with cap 6 is simple and is illustrated on the basis of figures 3 and 4.

[0027] The support 14 is removed at least along a side edge 10 of the label 1, after which the label 1 is placed with this side edge 10 over the height of the receptacle 5 with cap 6, and is stuck by the adhesive 13 on the back of the first section 3 of the label 1 to the body 4 of the receptacle, with the tear weakening 2 at the level of the separation 21 between the body 4 of the receptacle 5 and the cap 6, in this case at the level of the bottom edge 22 of the cap 6.

[0028] Then the label 1 is wrapped around the receptacle 5 with cap 6 and stuck to the body 4 of the receptacle 5, for example with overlapping side edges 10.

[0029] The label 1 is dimensioned such that the height A of the first section 3 is approximately equal to or somewhat less than the height C of the body 4 of the receptacle, at least of the visible part of the body 4, while the height B of the second section 7 is greater than the height D of the cap, all such at the height A+B of the label 1 is greater than the height C+D of the receptacle 5 with cap 6 and that the top edge 8 of the second section 7 of the affixed label 1 protrudes above the top edge of the cap 6 by a certain height R.

[0030] Then the label 1 is heated at least at the location of the top edge 8 protruding above the top of the cap in order to make the material of the label 1 shrink, whereby this edge 8 bends as it were over the top free edge 23 of the cap 6 and thus ensures a seal of the cap 6 that cannot be removed without damaging the label 1, as shown in figure 4.

[0031] In order to remove the cap 6, it is sufficient to turn the cap 6 with respect to the body 4 of the receptacle 5, as shown by the arrows P and P' in figure 4.

[0032] As a result the seal protection is broken along the tear weakening 2, as shown in figure 5.

[0033] Alternatively it can of course first be started by detaching the label 1 at the top edge 8 along the tear weakening 11, and then by tearing off the second section along the tear weakening 2.

[0034] Then, if desired, the second section 7 of the label 1 still present on the cap 6 is removed from the cap 6 by tearing this section 7 along the tear weakening 11 of this second section 7, as illustrated by arrow Q in figure 5.

[0035] It is clear that the label 1 can also be entirely or partially transparent.

[0036] Although a cylindrical receptacle 5 with cap 6 is shown here with a cap 6 whose diameter is practically equal to that of the body 4 of the receptacle 5, it is not excluded applying a label 1 according to the invention to other forms of receptacles 5 with cap 6, whereby the body 4 and the cap 6 are not necessarily cylindrical and do not necessarily have the same diameter.

[0037] For the rest, the shape of the label 1 does not necessarily need to be rectangular.

[0038] The adhesive 13 on the first section 3 of the label 1 does not necessarily need to be applied over the entire area of this section 3, but can for example be limited to an adhesive edge along the periphery of the section 3 or a number of parallel strips.

[0039] The tear weakening 11 in the second section 7 can be omitted if necessary.

[0040] The present invention is by no means limited to the embodiments described as an example and shown in the drawings, but a label according to the invention and a receptacle with a cap provided with it can be realised in all kinds of variants, without departing from the scope of the invention.

Claims

1. Self-adhesive label intended to be placed around the periphery of a receptacle (5) with a cap (6) such as an aerosol can or similar, whereby the label (1) comprises a section (3) that is intended to be placed around the body (4) of the receptacle (5) and comprises a section (7) adjoining to it that is intended to be placed around the cap (6) and over the free edge (23) of the cap (6) as a cap seal, and which are separated from one another by a tear weakening (2), whereby the section (3) that is intended to be placed around the body (4) of the receptacle (5) is provided with an adhesive (13) on at least a part of the back (12), in order to stick the label (1) to the body (4) with overlapping side edges (10), while the section (7) that is intended as a cap seal is not adhesive on the back (12), **characterised in that** the entire label (1) is manufactured from a material that is shrinkable, whereby only the aforementioned section (7) is intended to be shrunken and whereby the label (1) is provided with a number of layers (15) on at least a part of the section (3) that are at least partially detachable from one another and which are entirely or partially attached to one another with a self-adhering adhesive.

2. Label according to claim 1, **characterised in that** the number of layers (15) can be or are provided with printing (18) on both the back (19) and the front (20).

3. Label according to claim 1 or 2, **characterised in that** the layers (15) are attached to one another along an edge (16) .

4. Label according to any one of the previous claims, **characterised in that** the layers (15) are manufactured from a plastic that is such that the layers that are in contact with one another attract one another.

5. Label according to any one of the previous claims, **characterised in that** it is flat.

6. Label according to any one of the previous claims, **characterised in that** the section (7) that is intended as a cap seal has a height (B) that is greater than the height (D) of the cap (6).

7. Label according to any one of the previous claims, **characterised in that** the section (7) that is intended as a cap seal has a tear weakening (11) that extends over the height (B) of this section (7).

8. Label according to any one of the previous claims, **characterised in that** the shrinkable material is a material that is shrinkable by heating.

9. Label according to any one of the previous claims, **characterised in that** the adhesive (13) is a self-adhering adhesive and that this adhesive is covered by a support (14) .

10. Receptacle with a cap that is provided with a label (1) according to any one of the claims 1 to 9 and which is placed as a sleeve around the body (4) of the receptacle (5) and around the cap (6), and of which the section (7) that is intended as a cap seal is placed around and over the free edge (23) of the cap (6) by shrinking this section, for example by local heating, and whereby the tear weakening (2) between the section (3) that is intended to be placed around the body (4) of the receptacle (5) and the section (7) that is intended to be the cap seal extends around the receptacle (5) at the level of the separation (21) between the body (4) of the receptacle (5) and the cap (6) .

11. Receptacle according to claim 10, **characterised in that** the body (4) of the receptacle (5) and the cap (6) are cylindrical and have approximately the same diameter.

12. Receptacle according to claim 10 or 11, **characterised in that** the section (7) that is intended as a cap seal is not adhesive on the back because no adhesive is provided on this back, or adhesive is provided but which has been neutralised.

13. Method for placing a label around a receptacle with a cap, **characterised in that** this method consists of providing a label (1) according to any one of the claims 1 to 9 of which the section (7) that is intended to be placed around the cap (6) has a height (B) that is greater than the height (D) of the cap (6); placing the label (1) around the body (4) of the receptacle (5) and around the mounted cap (6), with the tear weakening (2) at the level of the separation (21) between the receptacle (5) and the cap (6), and at least locally heating the label (1) at the free edge (23) of the cap (6) in order to shrink the label (1) over this free edge (23) of the cap (6).

Patentansprüche

1. Selbstklebendes Etikett, das zum Anbringen um den Umfang eines Behälters (5) mit einem Deckel (6), wie etwa einer Sprühdose oder dergleichen, bestimmt ist, wobei das Etikett (1) einen Abschnitt (3) umfasst, der zur Anbringung um den Körper (4) des Behälters (5) bestimmt ist, und einen daran anschließenden Abschnitt (7) umfasst, der zur Anbringung um den Deckel (6) und über den freien Rand (23) des Deckels (6) als Deckelversiegelung gedacht ist, und die durch eine Abreißschwachstelle (2) voneinander getrennt sind, wobei der zur Anbringung um

den Körper (4) des Behälters (5) bestimmte Abschnitt (3) an mindestens einem Teil der Rückseite (12) mit einem Klebstoff (13) versehen ist, um das Etikett (1) mit überlappenden Seitenkanten (10) auf den Körper (4) zu kleben, während der als Deckelversiegelung gedachte Abschnitt auf der Rückseite (12) nicht klebend ist, **dadurch gekennzeichnet, dass** das gesamte Etikett (1) aus einem Material hergestellt ist, das schrumpfbar ist, wobei nur der vorgenannte Abschnitt (7) dazu bestimmt ist, geschrumpft zu werden, und wobei das Etikett (1) an mindestens einem Teil des Abschnitts (3) mit einer Anzahl von Lagen (15) versehen ist, die mindestens teilweise voneinander lösbar sind und die vollständig oder teilweise mit einem selbstklebenden Klebstoff aneinander befestigt sind.

2. Etikett nach Anspruch 1, **dadurch gekennzeichnet, dass** die Anzahl von Lagen (15) sowohl auf der Rückseite (19) als auch der Vorderseite (20) mit einem Aufdruck (18) versehen werden können oder sind.

3. Etikett nach Anspruch 1 oder 2, **dadurch gekennzeichnet, dass** die Lagen (15) entlang einem Rand (16) aneinander befestigt sind.

4. Etikett nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** die Lagen (15) aus einem Kunststoff hergestellt sind, der derart ist, dass die Lagen, die in Kontakt miteinander sind, einander anziehen.

5. Etikett nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** es flach ist.

6. Etikett nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Abschnitt (7), der als Deckelversiegelung gedacht ist, eine Höhe (B) aufweist, die größer als die Höhe (D) des Deckels (6) ist.

7. Etikett nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Abschnitt (7), der als Deckelversiegelung gedacht ist, eine Abreißschwachstelle (11) aufweist, die sich über die Höhe (B) dieses Abschnitts (7) erstreckt.

8. Etikett nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** das schrumpfbare Material ein Material ist, das durch Erwärmen schrumpfbar ist.

9. Etikett nach einem der vorhergehenden Ansprüche, **dadurch gekennzeichnet, dass** der Klebstoff (13) ein selbstklebender Klebstoff ist und dass dieser Klebstoff mit einem Träger (14) bedeckt ist.

10. Behälter mit einem Deckel, der mit einem Etikett (1) nach einem der Ansprüche 1 bis 9 versehen ist und das wie eine Hülse um den Körper (4) des Behälters (5) und um den Deckel (6) angebracht ist, und wovon der als Deckelversiegelung gedachte Abschnitt (7) um und über den freien Rand (23) des Deckels (6) angebracht ist, indem dieser Abschnitt, beispielsweise durch örtliches Erwärmen, geschrumpft ist, und wobei die Abreißschwachstelle (2) zwischen dem zur Anbringung um den Körper (4) des Behälters (5) bestimmten Abschnitt (3) und dem als Deckelversiegelung gedachten Abschnitt (7) sich in Höhe der Trennung (21) zwischen dem Körper (4) des Behälters (5) und dem Deckel (6) erstreckt.

11. Behälter nach Anspruch 10, **dadurch gekennzeichnet, dass** der Körper (4) des Behälters (5) und der Deckel (6) zylindrisch sind und ungefähr denselben Durchmesser aufweisen.

12. Behälter nach Anspruch 10 oder 11, **dadurch gekennzeichnet, dass** der als Deckelversiegelung gedachte Abschnitt (7) auf der Rückseite nicht klebend ist, da auf dieser Rückseite kein Klebstoff angebracht ist oder Klebstoff angebracht ist, dieser jedoch neutralisiert wurde.

13. Verfahren zum Anbringen eines Etiketts um einen Behälter mit einem Deckel, **dadurch gekennzeichnet, dass** dieses Verfahren aus dem Bereitstellen eines Etiketts (1) nach einem der Ansprüche 1 bis 9, wovon der zur Anbringung um den Deckel (6) bestimmte Abschnitt (7) eine Höhe (B) aufweist, die größer als die Höhe (D) des Deckels (6) ist; dem Anbringen des Etiketts (1) um den Körper (4) des Behälters (5) und um den montierten Deckel (6), mit der Abreißschwachstelle (2) in Höhe der Trennung (21) zwischen dem Behälter (5) und dem Deckel (6), und dem mindestens örtlichen Erwärmen des Etiketts (1) an dem freien Rand (23) des Deckels (6), um das Etikett (1) über diesen freien Rand (23) des Deckels (6) zu schrumpfen, besteht.

Revendications

1. Étiquette autoadhésive destinée à venir se placer autour de la périphérie d'un récipient (5) muni d'un capuchon (6), tel qu'une bombe aérosol ou analogue, dans laquelle l'étiquette (1) comprend une portion (3) qui est destinée à venir se placer autour du corps (4) du récipient (5) et comprend une portion (7) adjacente à la première citée qui est destinée à venir se placer autour du capuchon (6) et par-dessus le bord libre (23) du capuchon (6) à titre de joint du capuchon, et qui sont séparées les unes des autres par un affaiblissement à déchirer (2), dans laquelle la portion (3) qui est destinée à venir se placer autour

du corps (4) du récipient (5) est munie d'un adhésif (13) sur au moins une partie du dos (12), dans le but de coller l'étiquette (1) au corps (4) avec des bords latéraux chevauchants (10), tandis que la portion (7) qui est destinée à faire office de joint du capuchon n'est pas adhésive au dos (12), **caractérisée en ce que** l'étiquette (1) dans son ensemble est fabriquée à partir d'une matière qui est rétractable, uniquement la portion (7) susmentionnée étant destinée à être rétractée et l'étiquette (1) étant munie de plusieurs couches (15) sur au moins une partie de la portion (3), qui peuvent être détachées les unes des autres au moins en partie et qui sont attachées entièrement ou en partie les unes aux autres avec un adhésif auto-adhésif.

2. Étiquette selon la revendication 1, **caractérisée en ce que** lesdites plusieurs couches (15) peuvent être munies ou sont munies d'une impression (18) à la fois sur le dos (19) et sur la face avant (20).

3. Étiquette selon la revendication 1 ou 2, **caractérisée en ce que** les couches (15) sont attachées les unes aux autres le long d'un bord (16).

4. Étiquette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** les couches (15) sont fabriquées à partir d'une matière plastique qui est telle que les couches qui entrent en contact les unes avec les autres s'attirent les unes avec les autres.

5. Étiquette selon l'une quelconque des revendications précédentes, **caractérisée en ce qu'**elle est de forme plate.

6. Étiquette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** la portion (7) qui est destinée à faire office de joint du capuchon possède une hauteur (B) qui est supérieure à la hauteur (D) du capuchon (6).

7. Étiquette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** la portion (7) qui est destinée à faire office de joint du capuchon possède un affaiblissement à déchirer (11) qui s'étend sur la hauteur (B) de cette portion (7).

8. Étiquette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** la matière rétractable est une matière qui est thermorétractable.

9. Étiquette selon l'une quelconque des revendications précédentes, **caractérisée en ce que** l'adhésif (13) est un adhésif auto-adhésif et **en ce que** cet adhésif est recouvert d'un support (14).

10. Récipient comprenant un capuchon qui est muni d'une étiquette (1) selon l'une quelconque des revendications 1 à 9 et qui est placée sous la forme d'un manchon autour du corps (4) du récipient (5) et autour du capuchon (6), et dont la portion (7) qui est destinée à faire office de joint du capuchon est placée autour du bord libre (23) du capuchon (6) et par-dessus ledit bord, par rétraction de cette portion, par exemple via un chauffage local, et dans lequel l'affaiblissement à déchirer (2) entre la portion (3) qui est destinée à venir se placer autour du corps (4) du récipient (5) et la portion (7) qui est destinée à faire office de joint du capuchon s'étend autour du récipient (5) au niveau de la séparation (21) entre le corps (4) du récipient (5) et le capuchon (6).

11. Récipient selon la revendication 10, **caractérisé en ce que** le corps (4) du récipient (5) et le capuchon (6) sont cylindriques et possèdent approximativement le même diamètre.

12. Récipient selon la revendication 10 ou 11, **caractérisé en ce que** la portion (7) qui est destinée à faire office de joint du capuchon n'est pas adhésive au dos étant donné qu'aucun adhésif n'est prévu sur ce dos, ou bien un adhésif est prévu, mais qui a été neutralisé.

13. Procédé pour placer une étiquette autour d'un récipient comprenant un capuchon, **caractérisé en ce que** ce procédé consiste à : procurer une étiquette (1) selon l'une quelconque des revendications 1 à 9, dont la portion (7) qui est destinée à faire office de joint du capuchon possède une hauteur (B) qui est supérieure à la hauteur (D) du capuchon (6) ; placer l'étiquette (1) autour du corps (4) du récipient (5) et autour du capuchon monté (6), l'affaiblissement à déchirer (2) étant situé au niveau de la séparation (21) entre le récipient (5) le capuchon (6) ; et chauffer au moins localement l'étiquette (1) au bord libre (23) du capuchon (6) dans le but de rétracter l'étiquette (1) par-dessus ce bord libre (23) du capuchon (6).

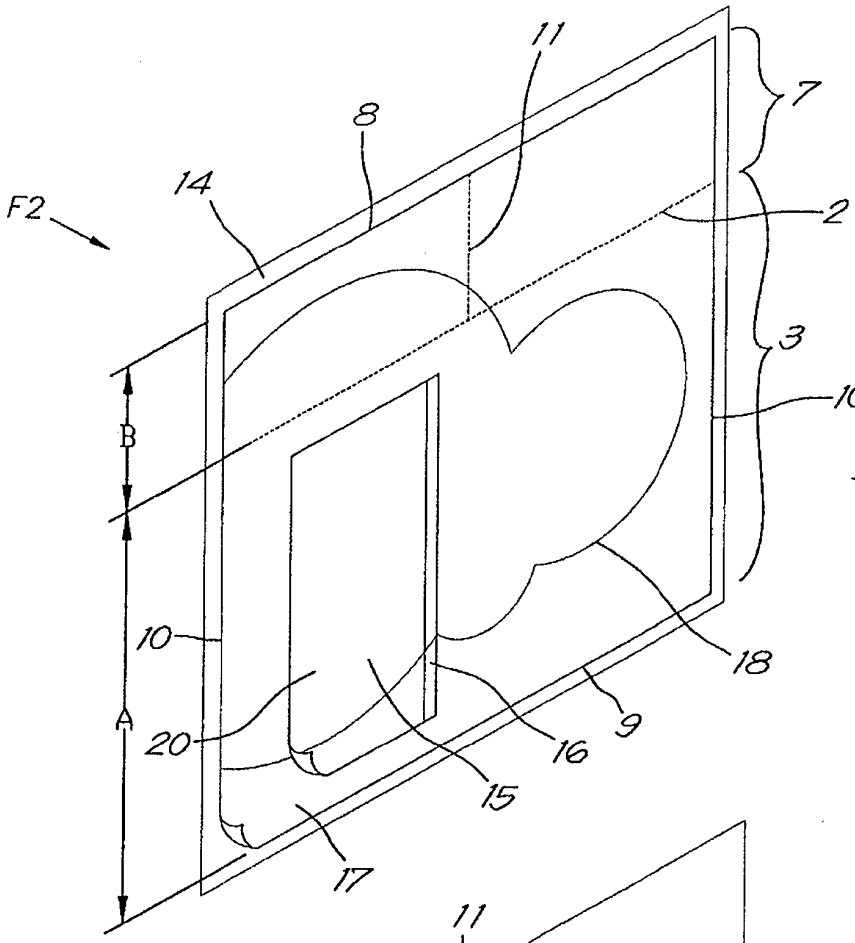


Fig. 1

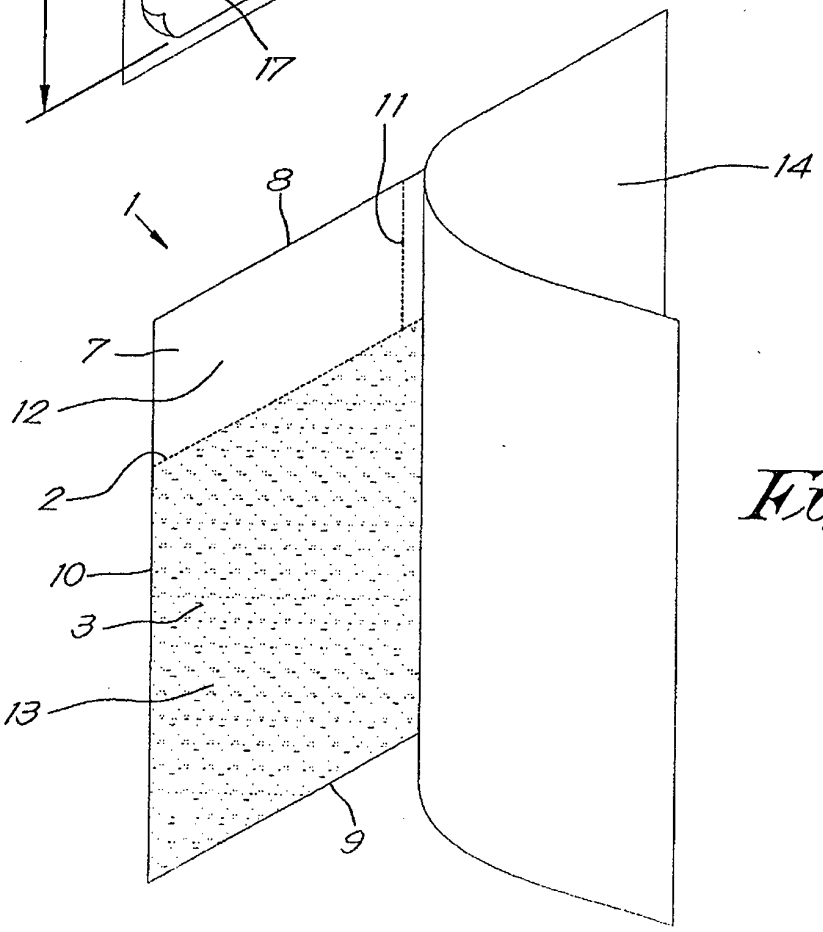


Fig. 2

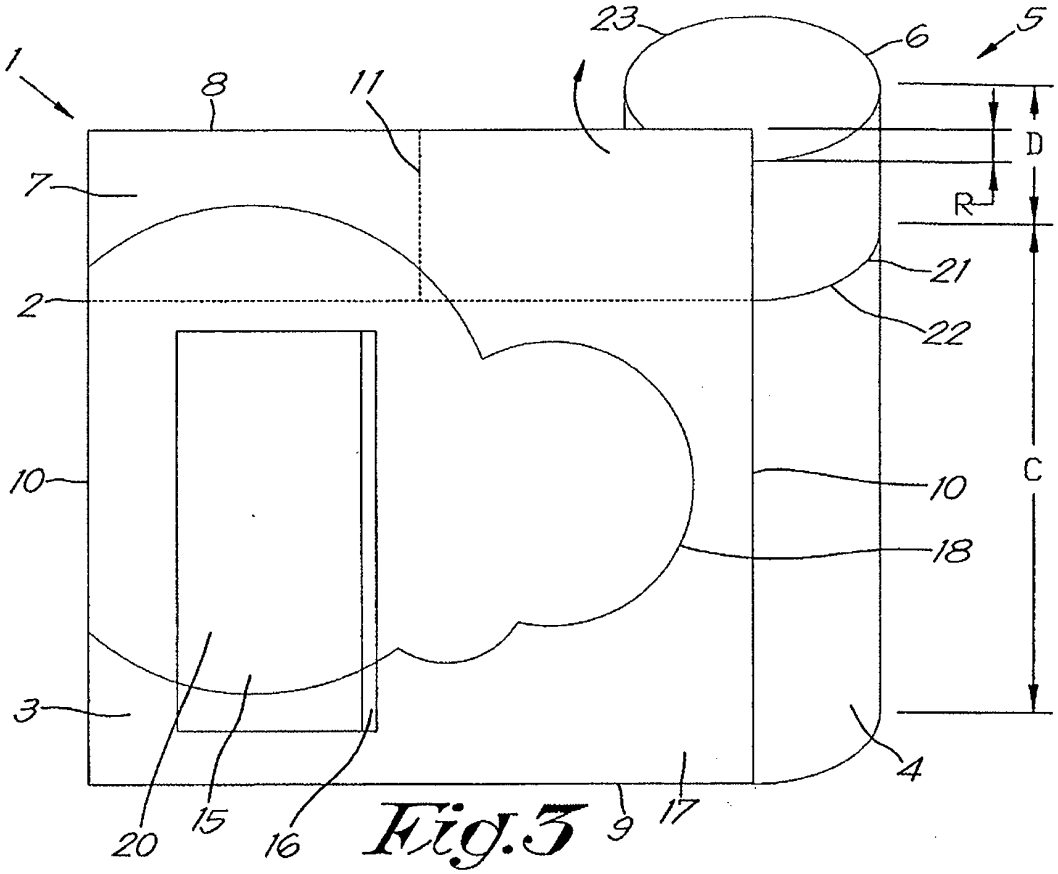

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Fig.3

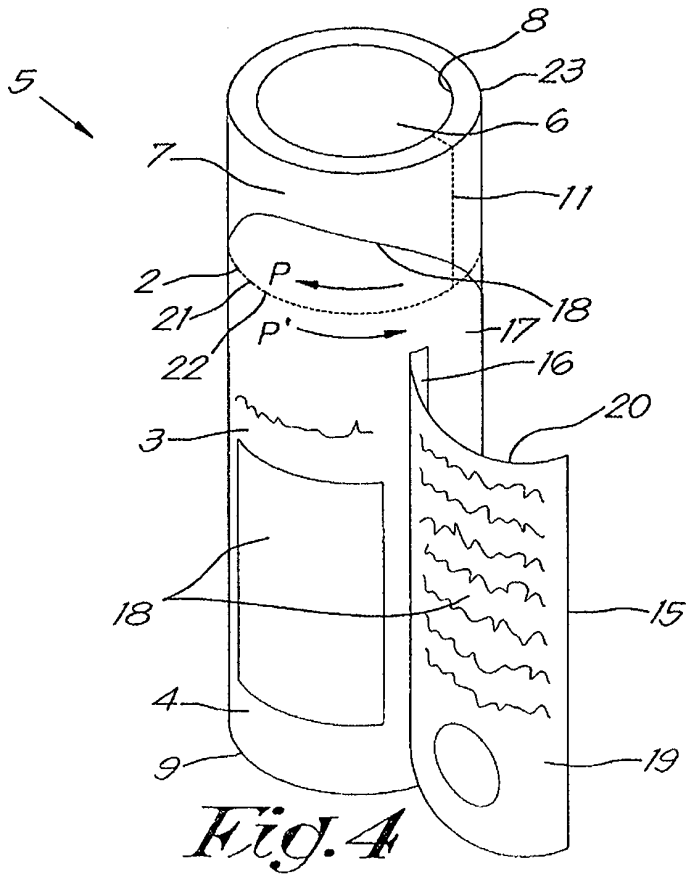

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Fig.4

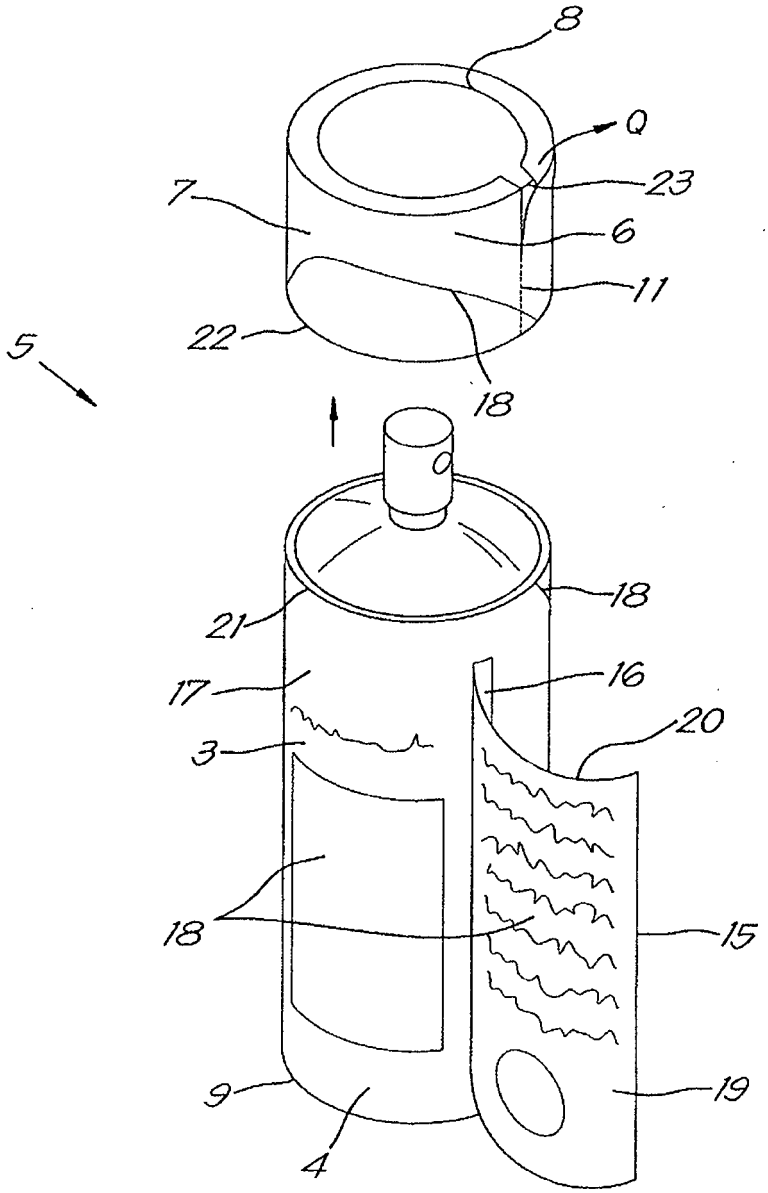


Fig.5

REFERENCES CITED IN THE DESCRIPTION

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Patent documents cited in the description

- DE 202008008156 **[0005]**
- EP 1044698 A **[0006]**