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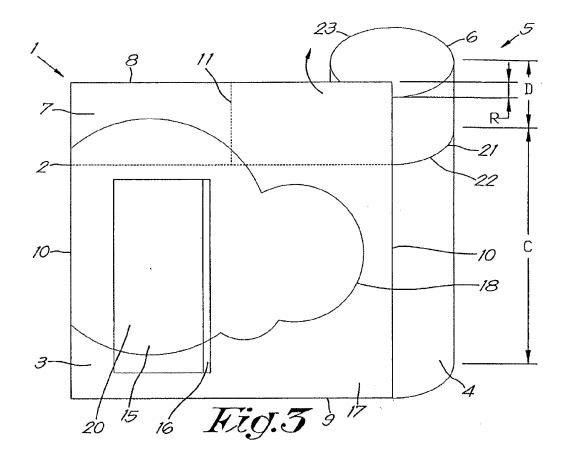
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## (54) Self-adhesive label for a receptacle with a cap and a receptacle provided with such a label.

(57) Self-adhesive label that comprises a section (3) to be placed around the receptacle (5) and comprises a section (7) to be placed around the cap (6) as a cap seal, and which are separated from one another by a tear weakening (2), whereby the section (3) to be placed

around 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 receptacle, while the section (7) that is intended as a cap seal is not adhesive on the back (12), and whereby at least this section (7) of the label (1) is manufactured from a material that is shrinkable.



#### 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.

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[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 shrinkwrap 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.

[0006] The purpose of the present invention is to provide a solution to at least one of the aforementioned and other disadvantages.

[0007] 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 at least this section of the label is manufactured from a material that is shrinkable and whereby the label is provided with a number of layers on at least a part of its surface that are at least partially detachable from one another and which are entirely or partially attached to one another with a self-adhering ad-

[0008] 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.

[0009] The label can be 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.

[0010] 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.

[0011] This provides extra possibilities and space for printing the label and for providing the legally required information alongside other information.

[0012] 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.

[0013] Before being placed, the label is preferably flat. [0014] 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.

[0015] 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.

[0016] This method is simple and cost-efficient.

[0017] 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.

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[0018] 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.

**[0019]** 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.

**[0020]** 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.

**[0021]** 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.

**[0022]** 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.

**[0023]** 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.

[0024] 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. [0025] 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.

[0026] 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.

**[0027]** 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.

[0028] 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.

[0029] 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.

**[0030]** 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.

**[0031]** As a result the seal protection is broken along the tear weakening 2, as shown in figure 5.

**[0032]** 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.

[0033] 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.

[0034] It is clear that the label 1 can also be entirely or partially transparent.

[0035] 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.

**[0036]** For the rest, the shape of the label 1 does not necessarily need to be rectangular.

**[0037]** 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.

[0038] The tear weakening 11 in the second section 7 can be omitted if necessary.

**[0039]** 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, **characterised in that** the label (1) comprises a section (3) that is intended to

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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), whereby at least this section (7) of the label (1) is manufactured from a material that is shrinkable, and whereby the label (1) is provided with a number of layers (15) on aL least a part of its surface that are at least partially detachable from one another and which are entirely or partially attached to one another with a self-adhering adhesive.

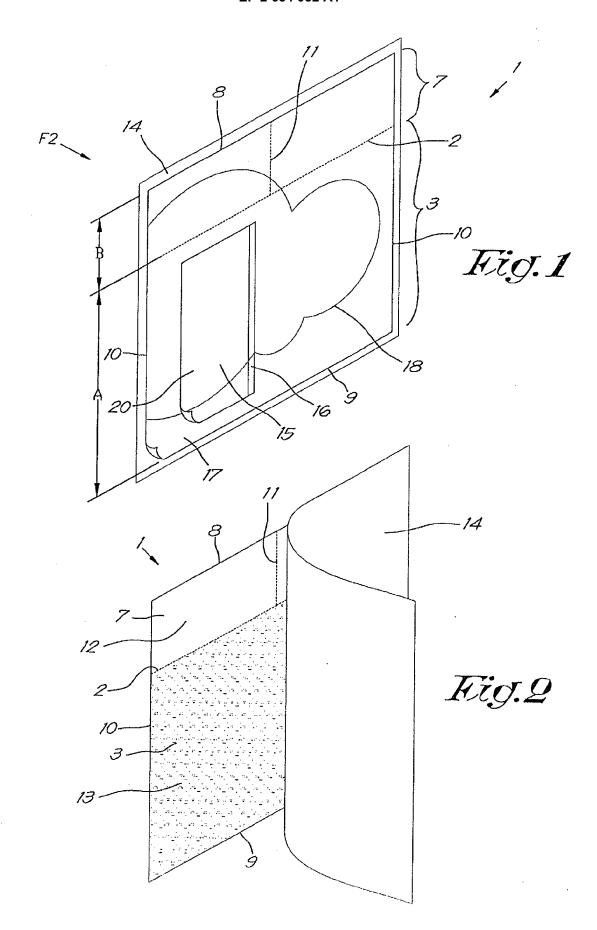
- 2. Label according to claim 1, **characterised in that** the number of layers (15) can be or are provided with printing (18) on both the back (19) and the front (20).
- 3. Label according to claim 1 or 2, **characterised in that** the layers (15) are attached to one another along an edge (16).
- 4. 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).
- Receptacle with a cap that is provided with a label
   according to any one of the claims 1 to 9 and which is placed as a sleeve around the body (4) of

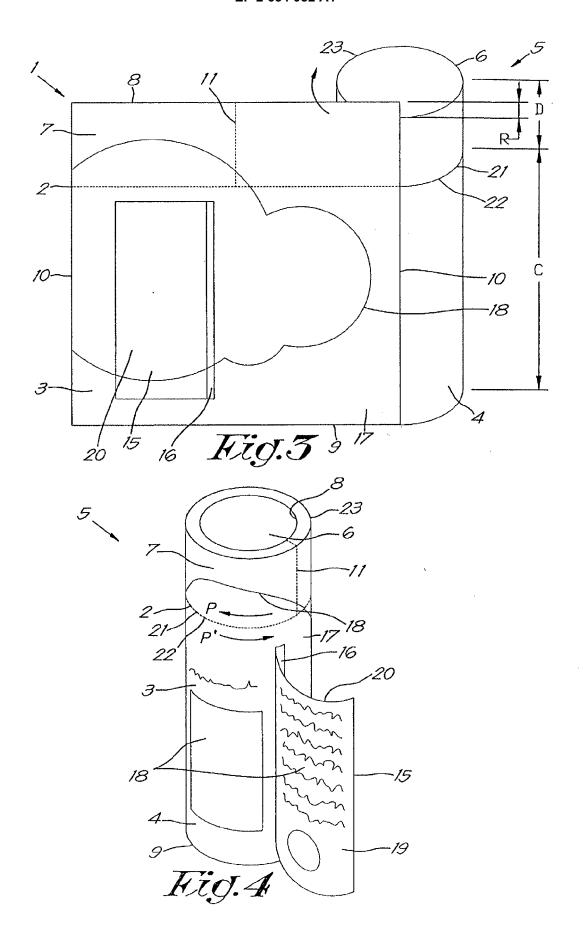
the receptacle (5) and around the cap (6), and of which the section (7) that is intended as a cap seal is placed around and over the free edge (23) of the cap (6) by shrinking this section, for example by local heating, and whereby the tear weakening (2) between the section (3) that is intended to be 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).

- 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).

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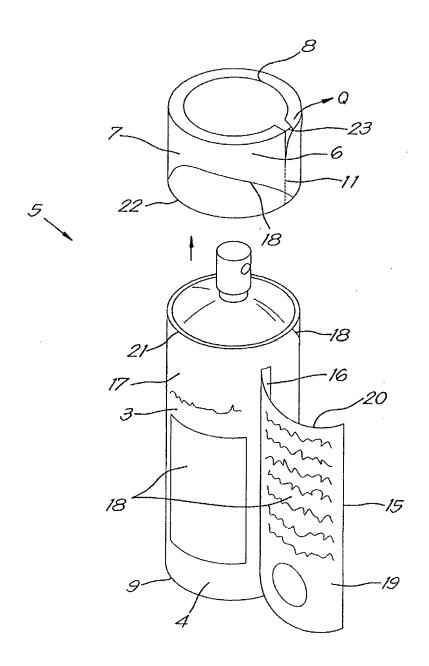


Fig.5



# **EUROPEAN SEARCH REPORT**

Application Number EP 13 07 5028

DOCUMENTS CONSIDERED TO BE RELEVANT					
Category	Citation of document with ir of relevant passa	idication, where appropriate, ages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)	
Х				G09F3/02 G09F3/04	
A	WO 00/48161 A2 (STE [US]) 17 August 200 * figure 3 *	PHEN KEY DESIGN LLC 0 (2000-08-17)	7	G09F3/10 G09F3/03 G09F3/00	
4	US 2008/075955 A1 ( 27 March 2008 (2008 * the whole documen		1-13		
A	US 2010/307947 A1 (AL) 9 December 2010 * figures 1-5,7-14,		1,3		
				TECHNICAL FIELDS SEARCHED (IPC)	
				G09F	
	The present search report has been drawn up for all claims				
Place of search  Date of completion of the search			<u> </u>	Examiner	
The Hague		16 July 2013	l	moor, Kristoffel	
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X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same category A: technological background O: non-written disclosure P: intermediate document		E : earlier paten after the filing D : document oil L : document oit & : member of th	T: theory or principle underlying the invention E: earlier patent document, but published on, or after the filing date D: document oited in the application L: document oited for other reasons  a: member of the same patent family, corresponding document		

## ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

EP 13 07 5028

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16-07-2013

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