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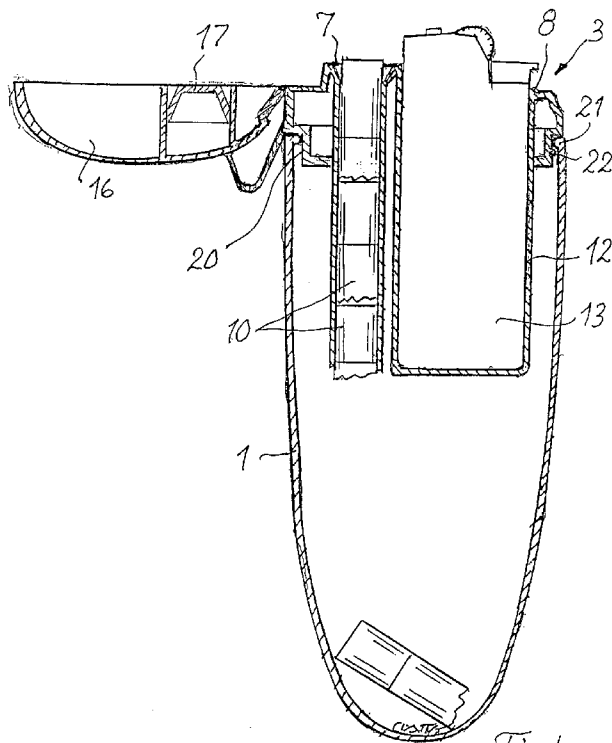
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[Continued on next page]

(54) Title: PORTABLE CIGARETTE ASHES CONTAINER WITH CIGARETTE LIGHTER



(57) Abstract: The invention relates to a portable cigarette ashes container, comprising a receptacle (1) and a top portion (3) detachable from the receptacle, and having a top side (6) in which a circular aperture (7) to the interior of the receptacle and a further aperture (8) to an upwards open pocket (12) situated in the receptacle are situated, in which pocket a gas container (13) of a cigarette lighter is received. The pocket (12) is, according to the invention, freely situated in the receptacle (1) with an edge around the pocket opening tightly secured to the edge of said further aperture (8) in the top portion (3), in addition to which a tubular passage (9) having a length longer than the length of a cigarette butt and the same diameter as the cigarette butt is tightly secured to the edge of the circular aperture (7). Further, there is a cap (16) that is hingedly connected to the top side of the top portion (3), which cap is provided with an interior closure member (17), which with the cap in closed position tightly closes the opening (7) of the passage (9) in the top side (6) of the top portion.

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PORTABLE CIGARETTE ASHES CONTAINER WITH CIGARETTE LIGHTER.

The present invention relates to a portable cigarette ashes container, comprising a receptacle and a top portion, detachable from the receptacle, and having a top side in which a circular aperture to the interior of the receptacle and a further aperture to an upwards open pocket
5 situated in the receptacle are situated, in which pocket a gas container of a cigarette lighter with lighter device belonging to it protruding above the top side is received.

A container of this type is priorly known from US 5,673,709. This container comprises an open receptacle, which by a partition wall is
10 divided into a chamber for ashes and cigarette butts, and a chamber for the gas container of a cigarette lighter, and a circular lid, which is arranged to be screwed to the open end of the receptacle. The lid is provided partly with an feeding-in aperture for inserting and dropping cigarette butts into an intended space, and partly with an aperture
15 for reaching the lighter device of the cigarette lighter. In order to prevent ashes from falling out through the feeding-in aperture this aperture is provided with a spring-loaded flap on the under side of the lid. A container of this type is impaired by several disadvantages which makes it unsuitable for the intended purpose. Due to the fact
20 that the lid has to be screwed on the receptacle the edge of the partition wall and the lighter device have to be located low enough to permit the flap to pass by without scraping against the partition wall or the lighter device. This results in the fact that if the container is inclined or is held upside-down, ashes will fall out through the
25 aperture above the cigarette lighter. This applies also if the lid is pushed onto the receptacle and is locked by a snap-in closure. It is difficult to adjust the aperture in relation to the cigarette lighter in order to minimize the interspace, which, anyhow, cannot be completely eliminated. This is especially embarrassing because the lid has to
30 be removed and replaced each time the container has to be emptied, which often is carried out in dull light.

The object of the invention is to achieve a portable container of the type mentioned by way of introduction, which is improved such, that the above mentioned inconveniences are eliminated in a simple
35 and efficient way. It is especially important that the container can have a shape that permits keeping of the container without inconvenience

in a pocket or handbag. It is also important that the container is almost hermetic sealed, and that the container can be easily opened and closed.

This is achieved, according to the invention, in that the portable
5 container is characterized by the subject matter mentioned in the following claim 1.

With such a portable container for ashes with a built-in cigarette lighter for lighting a cigarette available a smoker always knows where to get rid of the glowing butt, namely by pushing the butt with the
10 glow foremost down into the tubular passage. The mouth end or mouthpiece of the cigarette forms a plug that relatively quick chokes the glow, because the top portion is integrated with the pocket for the cigarette lighter and has a cap that in closed position closes the tubular passage, and consequently forms an airtight seal of the space enclosing the
15 ashes and the cigarette butts. When the next butt or a following butt is pushed down into the passage the lowest butt falls down in the receptacle, which when required can be removed for emptying.

The invention is more clearly described in the following with reference to the attached drawings which schematically show by way
20 of example two embodiments of a portable container according to the invention. Figure 1 is a longitudinal sectional view of the top portion with a cap belonging to it and the receptacle, Figure 2 is a perspective view of the top portion, the cap and the upper part of a protruding conventional cigarette lighter, Figures 3 and 4 are each the same view
25 as Fig.1 but showing a preferred embodiment of the invention during a compressing of the top portion and the receptacle, and after the compressing, respectively, Figure 5 is a perspective view of the top portion in Fig.3 and 4, and Figures 6a,b,c,d are views of the container according to the invention as seen from four different directions with
30 open cap and closed cap, respectively.

Figure 1 discloses a receptacle 1 with an opening 2 which is closed by a top portion 3. The top portion has a side wall 4 with an edge which follows the edge of the receptacle 1 at its opening 2, where the two edges are detachably connected to each other by a conventional
35 snap-in locking device 5. The top portion is further designed with a top side 6 with a circular aperture 7 and an oval aperture 8. A passage 9 with a diameter essentially equal to the diameter of a cigarette extends from the aperture 7. The passage leads to the interior of the

receptacle 1 and has a length essentially equal to three cigarette butts 10, which have been inserted into the passage through the aperture 7. A butt 11 inserted just before the lowest butt 10 has dropped down from the passage 9 and rests on the bottom of the receptacle 1.

5 The top side 6 of the top portion also has a pocket 12 extending from the aperture 8 with the same interior shape as the gas container 13 of a conventional cigarette lighter which is pushed down into the pocket 12 with its lighter device 14 accessible at the upper side of the cigarette lighter, and with a discharge hole 15 for the gas directed
10 up from the upper side of the top portion.

A cap 16 hingedly connected to the top portion 3 has an interior closure member 17, which closes the aperture 7 to the passage 9, when the cap is swung in over the top portion 3.

Figure 2 discloses the top portion 3 with the cap 16 and the gas
15 container 13 (not shown) of a conventional cigarette lighter inserted into the pocket 12, and its lighter device 14 protruding from the upper side of the top portion 3.

The preferred embodiment, that is shown in Fig.3 and Fig.4, differs from the embodiment shown in Fig.1 and Fig.2 by the conventional snap-
20 in locking device shown in Fig.1 and Fig.2 being replaced by a more efficient snap-in locking device, including that the top portion 3 has been designed with a downwards directed collar 20 with essentially the same exterior shape as the shape of the interior wall of the opening 2 of the receptacle 1, which consists of a ridge 21 which extends around
25 the interior wall of the edge of the opening 2. The collar 20 has an exterior ridge 22, designed such that at pushing together the top portion 3 and the receptacle 1, the ridge 21 displaces outwards under spring action as much as the ridge 21 can slide over the ridge 22 and lock the opening of the receptacle 1 tightly against the top portion 3.

30 This function is possible without the need of an impractically strong force, partly due to the opening having an oval, flattened shape, partly due to the fact that the ridge 22 at one end 23 of the collar 20 has a maximum height, which decreases at both sides of the collar in the direction towards the other end 24 of the collar, as shown in Fig.5.

35 This means that if the end 24 of the top portion 3 is pushed upwards the ridge 21 can slide over the beginning of the ridge 22 of the collar at both sides of the collar 20 and after that along the ridge 22 until the top portion 3 is separated from the receptacle 1 and vice versa.

Owing to these circumstances, the hinge 25 of the cap 16, Figs. 6a-d, is designed like a shoulder against which one can easily use a thumb to press this end of the top portion 3 upwards for separating the top portion 3 from the receptacle 1. At the other end of the top portion 3 there is a small recess 26 beneath the cap 16. The device according to the invention can, for obvious reasons, be operated easily with only one hand such that the cap 16 is opened by a push with a thumb against the cap 16 at the recess 26, and such that the top portion 3 with closed cap 16, as mentioned before, is separated from the receptacle 1 by a push upwards against the hinge 25. This hinge is of a type that has a resilient spring link 25a adapted to either keep the cap 16 in closed or open position.

The invention is of course not restricted to the embodiments here shown and described by way of example but can be modified in different ways within the scope of the invention defined by the patent claims. Thus, the ridges 21 and 22 may for instance change places without influence on the locking function.

C L A I M S

1. A portable cigarette ashes container comprising a receptacle (1) and a top portion (3), detachable from the receptacle, and having a top side (6) in which a circular aperture (7) to the interior of the receptacle and a further aperture (8) to an upwards open pocket (12) situated in the receptacle are situated, in which pocket a gas container (13) of a cigarette lighter with lighter device (14) belonging to it protruding above the top side is received, **characterized** in that the pocket (12) has a cross section adapted to the shape of the gas container (13) and is freely located in the receptacle (1) with an edge around the pocket opening, tightly secured to the edge of said further aperture (8) in the top portion, in addition to which a tubular passage (9) made out of heat resistant material and having a length longer than the length of a normal cigarette butt (10) and the same internal diameter as the circular aperture (7) in the top portion is tightly secured with one end to the edge of said circular aperture (7) having essentially the same diameter as the diameter of a cigarette butt (10), and in that a cap (16) is hingedly connected to the top side of the top portion (3), which cap is provided with an interior closure member (17) which with the cap in closed position is pressed against the aperture (7) of the passage (9) in the top side (6) of the top portion.

2. A device according to claim 1, **characterized** in that the opening (2) of the receptacle (1) has an edge portion with a ridge (21) extending along the interior of the edge portion, which ridge is adapted to be pushed onto a collar (20) of the top portion (3), having a shape adapted to the shape of said opening (2), against and past an exterior ridge (22) on the collar, which exterior ridge extends along a major part of each side of the collar (20), in addition to which the ridges (21,22) of the receptacle and/or the collar have declining height in the direction towards one end of the collar, where the top portion has an exterior thumb push surface (25,25a) facilitating a pushing up of this end of the top portion (3) from the receptacle (1) at the opening of the device.

3. A device according to claim 2, **characterized** in that a cap (16) covering the aperture (7) for inserting the cigarette butts and the cigarette lighter end (14,15) protruding up from the pocket (12)

is hingedly connected by a hinge (25) integrated with the thumb push surface (25,25a).

4. A device according to claim 2 or 3, **characterized** in that the aperture (7) of the top portion for inserting cigarette butts
5 is closed by a closure member (17) inside the cap (16) when the cap (16) is in the position covering the top portion (3).

5. A device according to any of claims 1-4, **characterized** in that the receptacle (1) and the top portion (3) consist of a spool-shaped unit with an oval cross-section.

10 6. A device according to any of claims 2-5, **characterized** in that the edge portion of the receptacle (1) and ridge (21) belonging to said edge are resilient outwards under the action of pressure from the ridge (22) of the collar (20).

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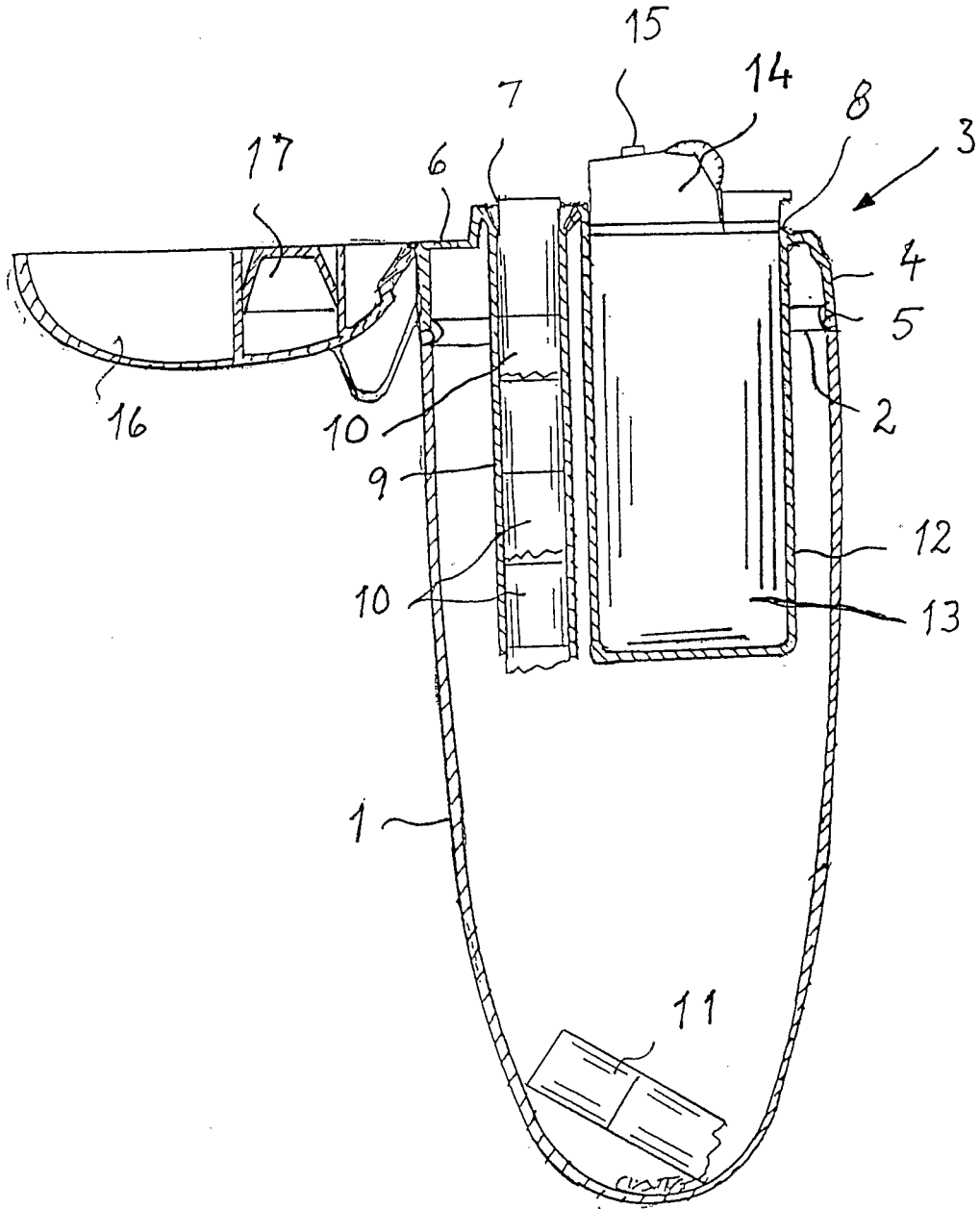


Fig. 1

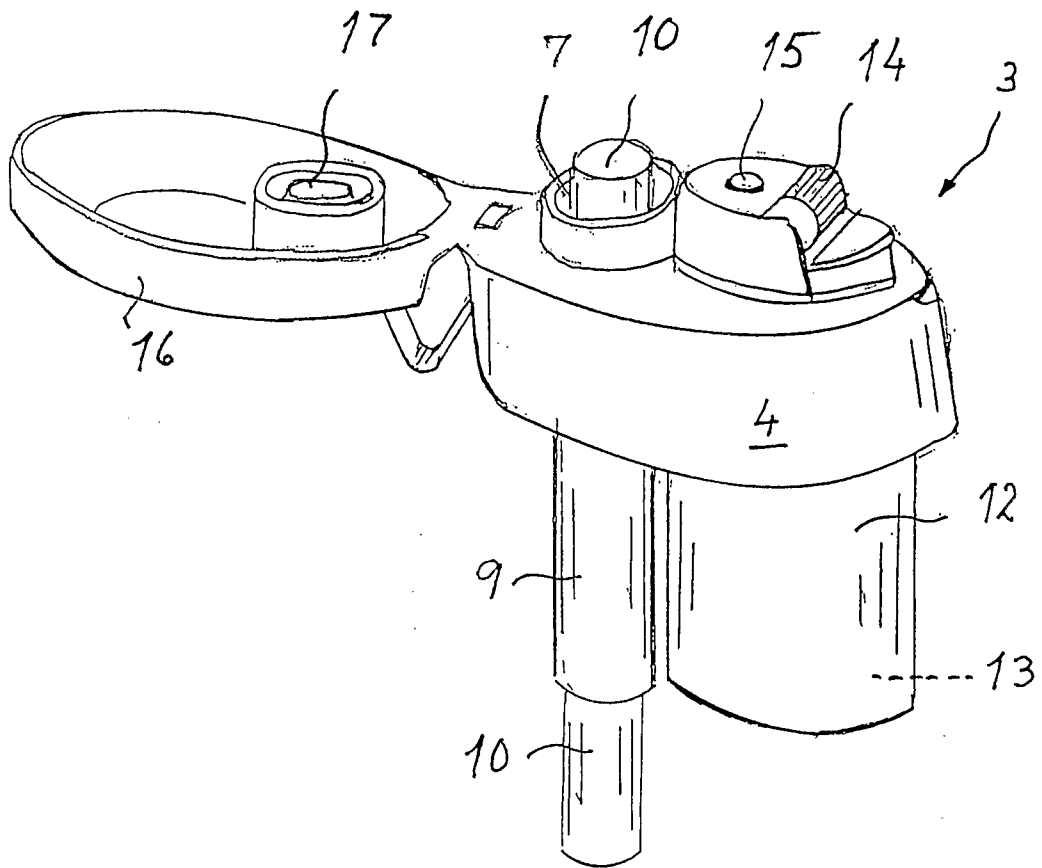


Fig. 2

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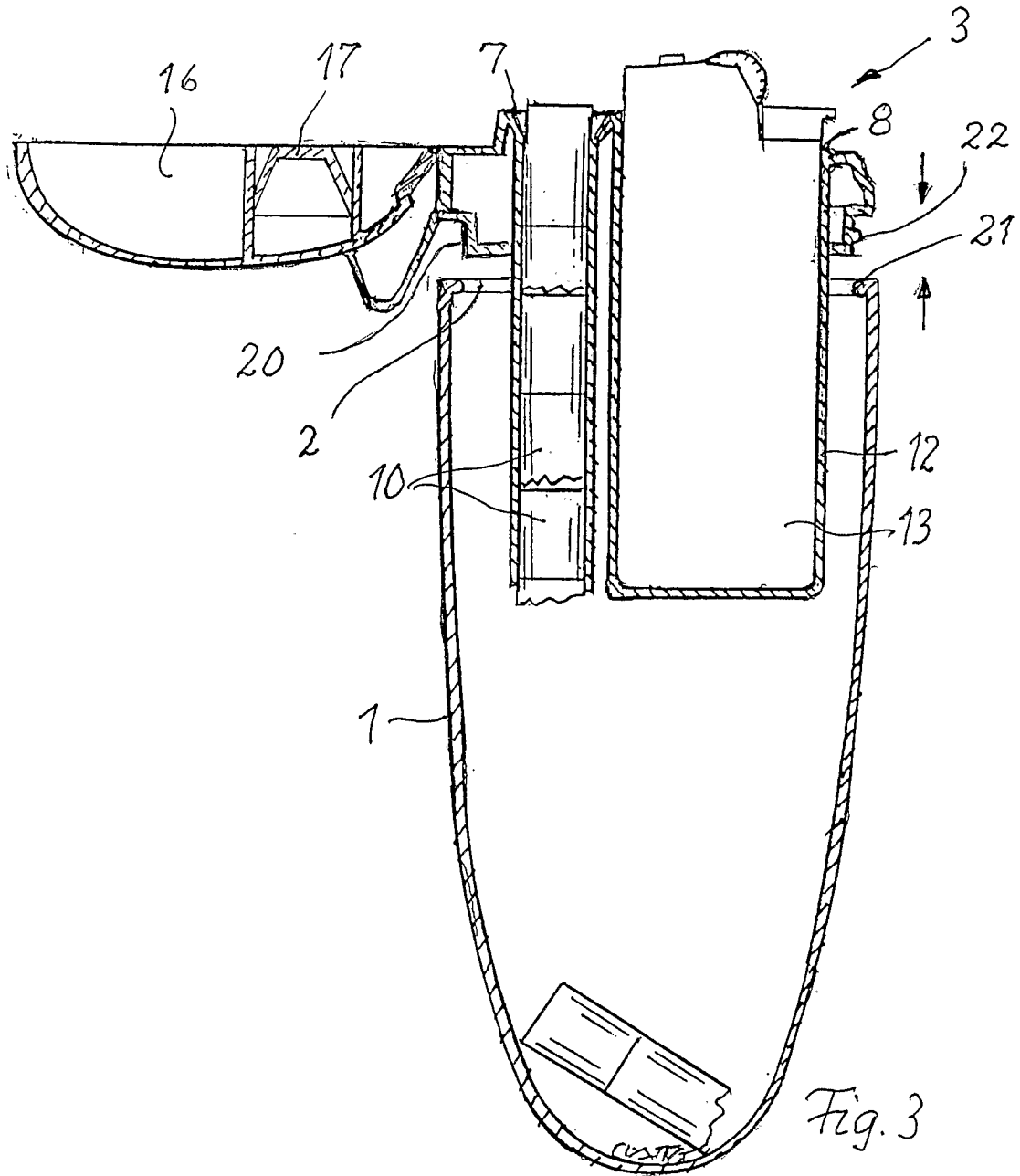


Fig. 3

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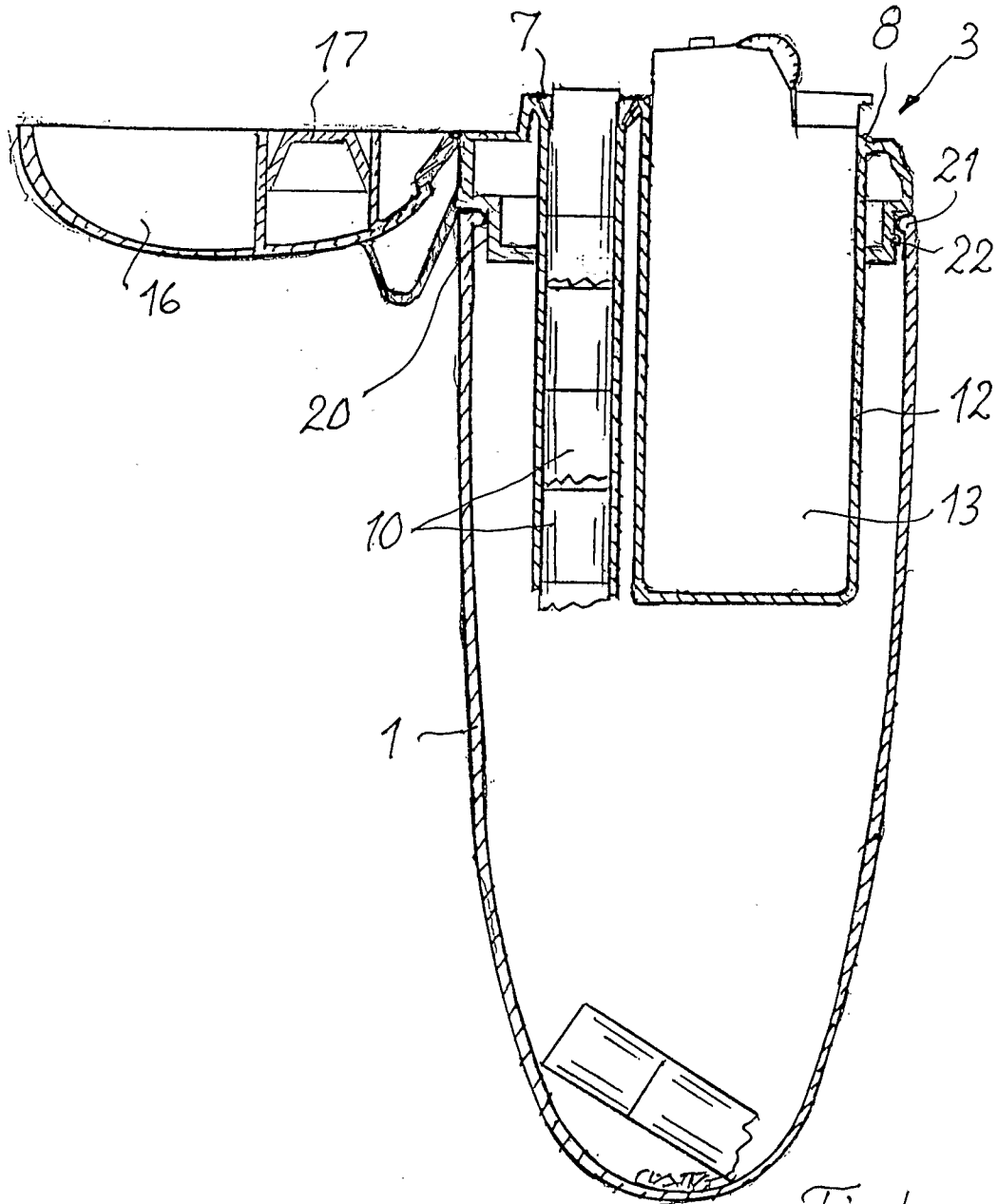


Fig. 4

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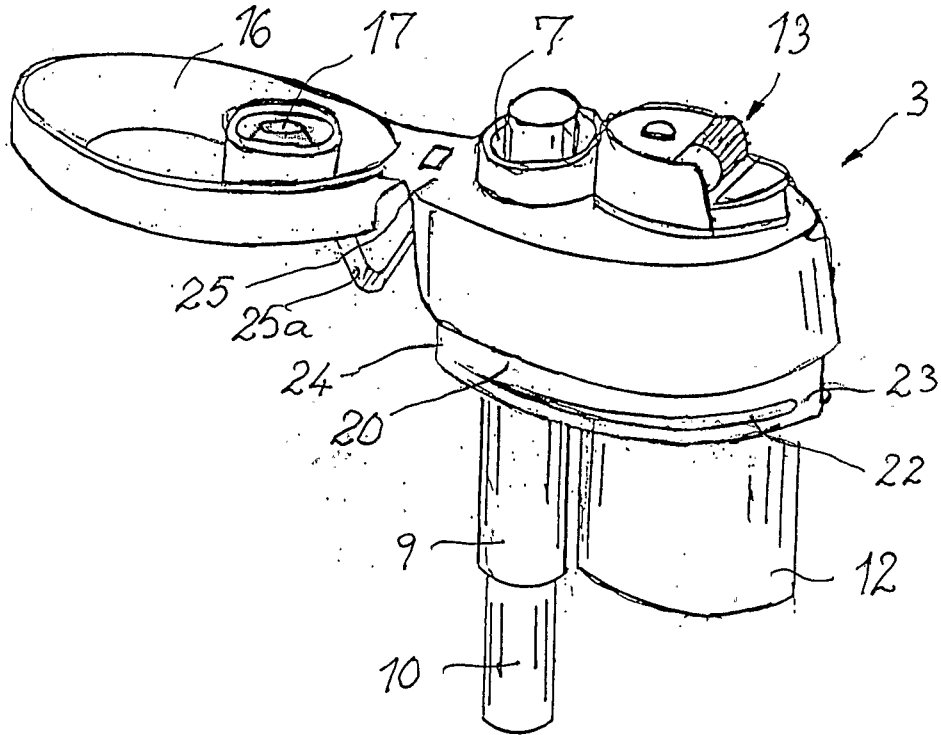
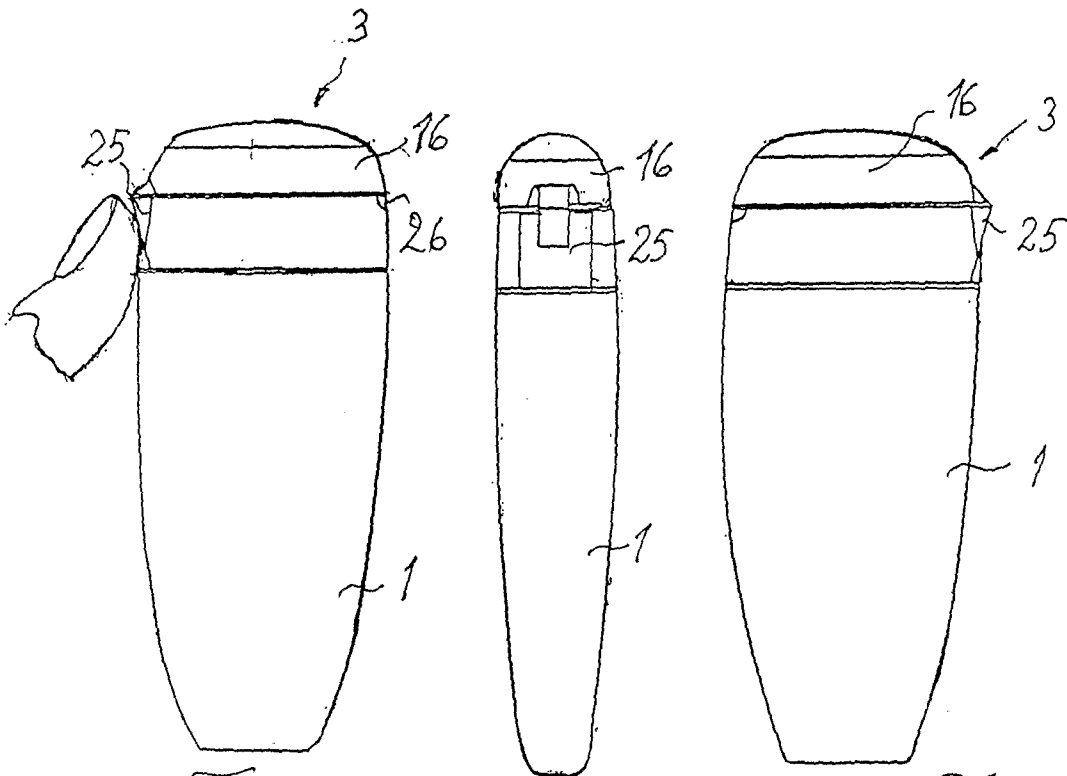
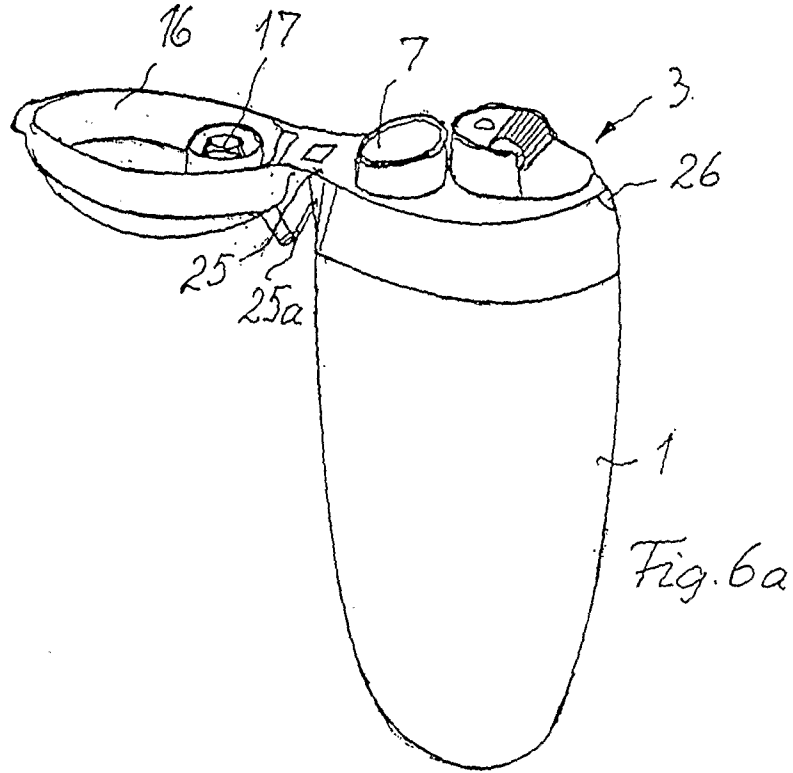


Fig. 5



INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC: see extra sheet

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC: A24F, F23Q

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

SE,DK,FI,NO classes as above

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

EPO-INTERNAL, WPI DATA, PAJ

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 5673709 A (BROTHERS, H J), 7 October 1997 (07.10.1997), column 4, line 16 - line 42, figures 8-11 --	1-6
A	US 2233324 A (PALMER, J E), 25 February 1941 (25.02.1941), page 1, column 2, line 42 - line 50, figure 4 --	1-6
A	US 4473084 A (MARSHALL, G L), 25 Sept 1984 (25.09.1984), column 2, line 50 - line 63, figure 4 --	1-6

Further documents are listed in the continuation of Box C.

See patent family annex.

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Date of the actual completion of the international search
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INTERNATIONAL SEARCH REPORT

International application No.

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C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	CN 2691283 Y (PU MINGSHEN), 13 April 2005 (13.04.2005), figures 4-5, detail 12a --	1,4
A	US 4240783 A (NEVIN, W ET AL), 23 December 1980 (23.12.1980), figures 1-7, abstract --	1-6
A	US 5605226 A (HERNLEIN, W J), 25 February 1997 (25.02.1997), abstract, figures -- -----	1-6

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Cited literature, if any, will be enclosed in paper form.

INTERNATIONAL SEARCH REPORT
Information on patent family members

26/01/2008

International application No.
PCT/SE2008/000034

US	5673709	A	07/10/1997	NONE
US	2233324	A	25/02/1941	NONE
US	4473084	A	25/09/1984	NONE
CN	2691283	Y	13/04/2005	NONE
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US	5605226	A	25/02/1997	NONE