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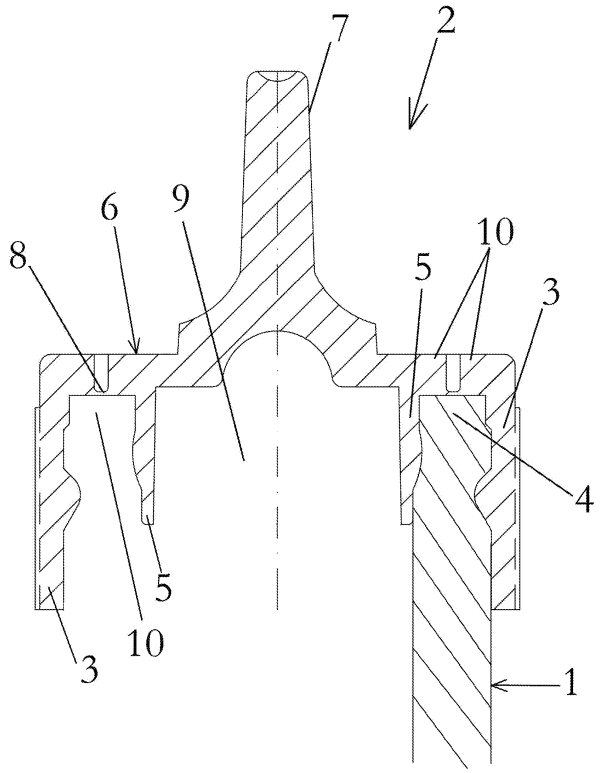
(54) Sealing cap

(57) Sealing cap (2) for containers (1), which comprises an exterior perimetral part (3) that is fixed from the exterior to the mouth (4) of the container (1), an interior perimetral part (5) that is fixed from the interior to the aforesaid mouth (4) of the container (1), an upper part (6) that includes a projecting appendage (7) for unsealing the cap (2) and a weakened attachment line (8), with the interior perimetral part (5) delimiting an internal space (9) that communicates with the interior of the container (1) and a crown (10) delimited to the exterior by the exterior perimetral part (3), characterised in that the weakened attachment line (8) is situated in the zone of the crown (10).

Fig. 1



EP 1 988 028 A1

Description

[0001] The present invention relates to a sealing cap that improves the airtightness of the container and the ease of opening of same.

BACKGROUND OF THE INVENTION

[0002] There exist a large variety of products, mainly pharmaceuticals, parapharmaceutical or dietary products, among others, that must be opened only at the time of utilisation thereof, because they would otherwise lose their properties.

[0003] Utility model ES 1 010 622 U, whose Applicant is the same as that of the present application, describes a sealing cap that fits hermetically onto the mouth of the container and that includes an appendage, attached to the rest of the cap by a weakening line, which enables the seal to be broken. Said weakening line is situated over the internal space bounded by the interior part of the seal in direct contact with the product in the container. Said location of the weakening line is not the most suitable one, due to the fact that during the manufacturing process small pores can appear in the weakening line, rendering the sealing of the container ineffective and spoiling the product it contains.

DESCRIPTION OF THE INVENTION

[0004] The objective of the present invention is to solve the disadvantages presented by the devices known in the state of the art, by providing a sealing system whereby should any pore exist in the weakening line or weakened attachment line the product contained remains properly protected.

[0005] The sealing cap for containers of the present invention comprises an exterior perimetral part that is fixed from the exterior to the mouth of the container, an interior perimetral part that is fixed from the interior to the aforesaid mouth of the container, an upper part that includes a projecting appendage for unsealing the cap and a weakened attachment line, with the interior perimetral part delimiting an internal space that communicates with the interior of the container, and a crown delimited to the exterior by the exterior perimetral part, characterised in that the weakened attachment line is situated in the zone of the crown.

[0006] The weakened attachment line is thus left situated on the crown, which is above the mouth of the container and in direct contact with the surface of the container, so that should the weakened attachment line present any pore due to manufacturing defect the product remains protected, since under no circumstances is the product left in contact with said pore.

[0007] Advantageously, the weakened attachment line includes at least one rib that attaches the exterior perimetral part and the upper part, in order to facilitate circulation of the plastic material during manufacturing.

[0008] The weakened attachment line of the sealing cap is usually of very fine thickness, which hinders circulation of the plastic material through the mould during manufacturing, which is generally carried out by injection. In order to improve said circulation, provision has been made for the weakened attachment line to include at least one rib with a section larger than the rest of the weakened attachment line.

BRIEF DESCRIPTION OF THE DRAWINGS

[0009] In order to facilitate the description of the matters outlined above some drawings are appended that show, schematically and solely by way of non-restrictive example, a practical case of embodiment of a sealing cap of the present invention, in which:

Figure 1 is a sectioned elevation view of a container with a sealing cap at the right-hand side of the figure, and of only the cap at the left-hand side;
Figure 2 is a plan view of a sealing cap.

DESCRIPTION OF A PREFERRED EMBODIMENT

[0010] As Figure 1 shows, the container 1 is closed at its upper part by a sealing cap 2 that is made up of an exterior perimetral part 3 attached under pressure to the mouth 4 of the container 1, an interior perimetral part 5 also attached under pressure to the interior of the mouth 4 of the container 1, an upper part 6 that includes an appendage 7 and that is also attached by means of a weakened attachment line 8 to the exterior perimetral part 3.

[0011] The interior perimetral part 5 together with the lower face of the upper part 6 delimit a common internal space 9 with the interior space of the container 1. Owing to this common internal space 9, any pore there might be in the cap 2 brings the product contained in the container 1 into communication with the exterior. In order to preclude this risk, the weakened attachment line 8, which due to its low thickness is the only zone in which the pores can communicate the interior with the exterior of the cap, is situated in the zone of the crown 10 delimited by the interior perimetral part 5 and the exterior perimetral part 3.

[0012] In this way there exists no risk of the internal space (9) of the container (1) coming into communication with the exterior.

[0013] Figure 2 shows the upper part of the sealing cap 2 and the upper zone 6 that is attached to the exterior perimetral part 3 by the weakened attachment line 8. It also shows two ribs 11 to facilitate circulation of the fluid material during the manufacturing process. The ribs 11 are arranged symmetrically.

[0014] Despite the fact that a specific embodiment of the present invention has been described and shown, it is obvious that an expert in the field will be able to introduce variants and modifications, or replace the details

by others that are technically equivalent, without departing from the sphere of protection defined by the enclosed claims.

Claims

1. Sealing cap (2) for containers (1), which comprises an exterior perimetral part (3) that is fixed from the exterior to the mouth (4) of the container (1), an interior perimetral part (5) that is fixed from the interior to the aforesaid mouth (4) of the container (1), an upper part (6) that includes a projecting appendage (7) for unsealing the cap (2) and a weakened attachment line (8), with the interior perimetral part (5) delimiting an internal space (9) that communicates with the interior of the container (1), and a crown (10) delimited to the exterior by the perimetral part (3), **characterised in that** the weakened attachment line (8) is situated in the zone of the crown (10).

2. Sealing cap, according to the preceding claim, **characterised in that** the weakened attachment line (8) includes at least one rib (11) that attaches the exterior perimetral part (3) and the upper part (6) in order to facilitate circulation of the plastic material during manufacturing.

Fig. 1

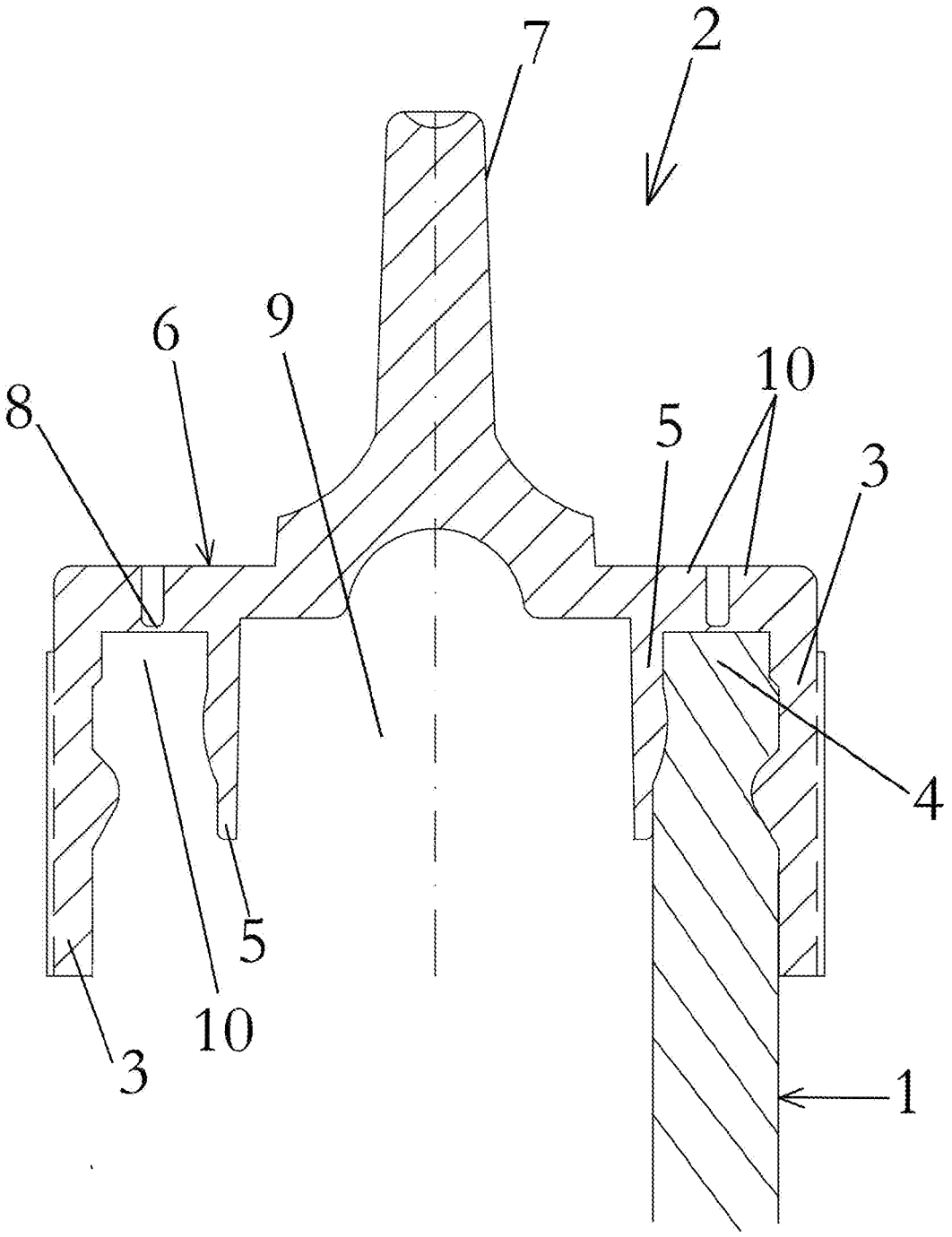
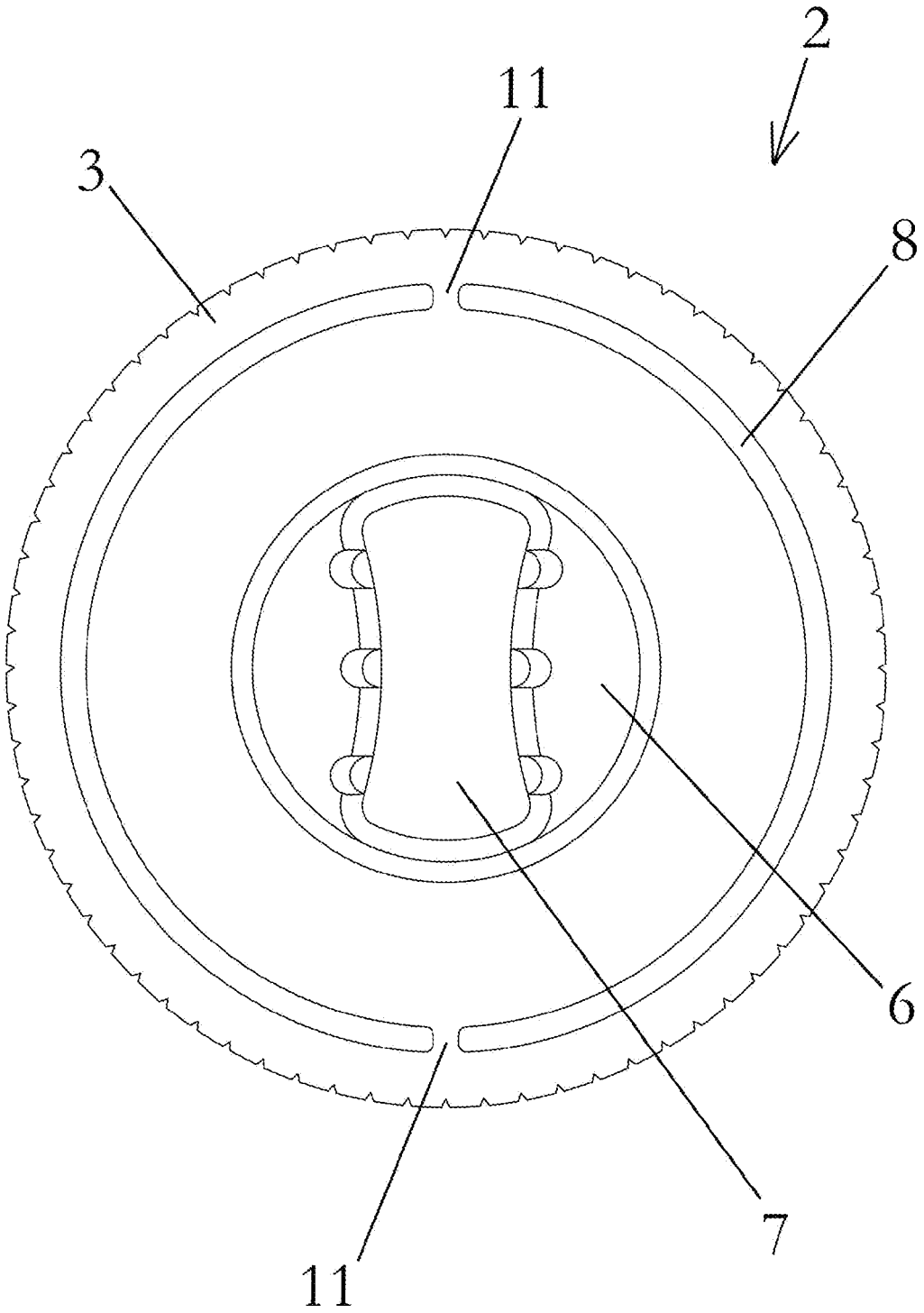


Fig. 2



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EUROPEAN SEARCH REPORT

Application Number
EP 08 15 5559

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
X Y	DE 24 24 591 A1 (PFEFFERKORN & CO) 4 December 1975 (1975-12-04) * page 2, paragraph 5; figures *	1 2	INV. B65D41/46 B65D47/36 B65D41/48
Y	FR 2 530 224 A (ALMA BOUCHAGE BONDE [FR]) 20 January 1984 (1984-01-20) * abstract; figures *	2	
X	DE 75 17 310 U (PLASTICGUSS GMBH [DE]) 25 September 1975 (1975-09-25) * page 3, last paragraph - page 4, paragraph 1; figures *	1	
A	FR 2 613 327 A (CAPSULES METALLIQ MANUF BOUCHA [FR]) 7 October 1988 (1988-10-07) * the whole document *	1,2	

TECHNICAL FIELDS SEARCHED (IPC)

B65D

The present search report has been drawn up for all claims

Place of search	Date of completion of the search	Examiner
The Hague	13 August 2008	Gino, Christophe

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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A : technological background
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E : earlier patent document, but published on, or after the filing date
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2

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 08 15 5559

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report. The members are as contained in the European Patent Office EDP file on
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13-08-2008

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FR 2613327 A	07-10-1988	NONE	

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For more details about this annex : see Official Journal of the European Patent Office, No. 12/82

REFERENCES CITED IN THE DESCRIPTION

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