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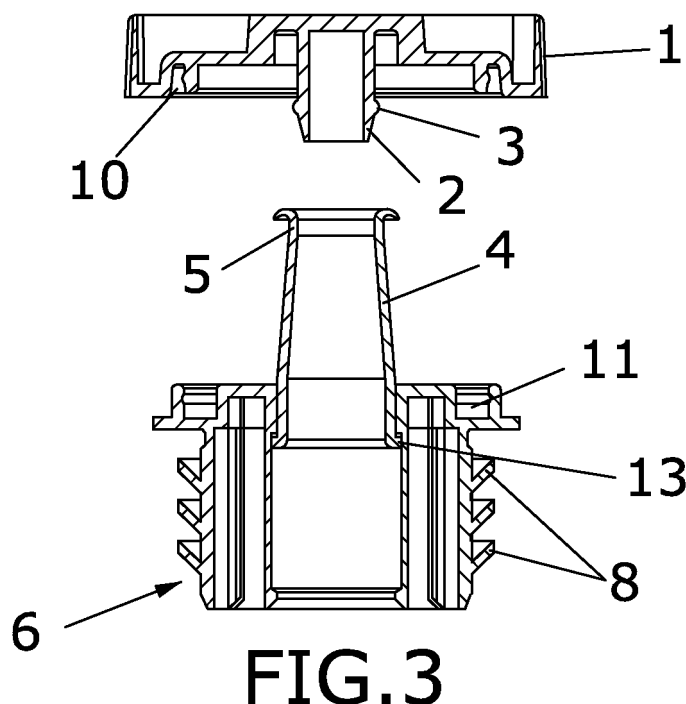
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(54) **POURING LID WITH RETRACTABLE SPOUT**

(57) Pouring cap which is provided with an upper element or closing cap of a lower element attached to a bottle neck, where this lower element is provided with at least one retractable tube with means of attachment be-

tween the upper end of the retractable tube and an elevation of a tubular ring projection on the closing cap, in this way obtaining a pouring cap which is provided with a pouring tube which in addition takes up little height and may be manufactured automatically.



Description

OBJECT OF THE INVENTION

[0001] The object of this invention is a pouring cap which has the particularity that it is provided with an integrated tube in addition to a threaded closing cap in the pouring cap arrangement.

[0002] The invention is characterised by the special configuration of the design of the parts which make up the pouring cap so that a cap is obtained which is provided with a pouring tube which is retractable, and which is covered by a threaded cap, having a reduced height.

[0003] Therefore, this invention is circumscribed within the scope of pouring caps, and in particular those which are provided with a retractable tube.

BACKGROUND OF THE INVENTION

[0004] To date, bottles especially wine bottles, have had a cork cap with two holes on which respective tubes where arranged, one of the tubes being designed for pouring whereas the other served to facilitate entry of air to the inside of the bottle.

[0005] Recently, in some oil and vinegar bottles, a pouring cap is added which comprises at least one tube for pouring the liquid, and at times another duct for the entry of air. However, this constructive solution of combining a pouring tube with a cap considerably increases the height of the pouring cap which hinders its packaging.

[0006] The applicant is aware of another cap which is provided with an extractable tube which permits reduction of the height of the pouring cap arrangement by means of incorporating a tube which is extracted by a spring which is activated when the upper cap is unscrewed.

[0007] Although this solution satisfies the requirements of pouring and reduced height, it has various disadvantages deriving from the complexity of the system which makes it complicated to assemble, as it is not possible to automatically arrange a spring and a tube against the action of a spring, thus these caps need to be assembled by hand. This means of manufacture leads to high production costs. Furthermore, said form of assembly is not permitted for hygiene reasons as it necessitates contact with bottle caps to be used for food purposes.

[0008] Therefore, this invention develops a pouring cap which is addition to having a retractable tube, and a cap with an arrangement which is reduced in height, may be manufactured automatically, without needing to be assembled manually, as occurs with the previous pouring cap described.

DESCRIPTION OF THE INVENTION

[0009] This invention of a pouring cap with retractable tube basically consists of an upper element or cap which, through screwing, closes the lower element on which a

retractable tube is fitted.

[0010] Said tube is extractable due to cooperation of the constructive characteristics of both the upper element or cap, and those of the tube, so that following unscrewing of the cap and removal, a tube is simultaneously extracted. Said extraction is limited up to a certain point. The retraction of the tube to its contained position is made simply by pushing the tube.

[0011] In order to ensure that the retractable tube and the closing cap are linked and that it is possible to extract the tube, there is a ring projection on the cap of tubular section which is provided close to its free end with a ring elevation, whereas on the upper end of the retractable tube close to the end and in the lower part of the tube there is a hollow or recess into which the ring projection of the closing cap fits.

[0012] The upper element or closing cap is required to have means of coupling and attachment to the bottle neck. Said means of coupling between the upper element or the closing cap may be made directly through complementary and antagonistic means of screwing, arranged both on the upper element and the lower element which is affixed to the bottle or indirectly through a metal capsule.

[0013] When the coupling between the upper element or closing cap and the lower element is made through a metal capsule, the upper element or closing cap fits on the base of a metal capsule, which close to its interior end is provided with a thread on its inner face which screws onto a thread arranged to this effect on the external edge of the upper end of the bottle, thus obtaining a coupling of both parts and achieving closure with the retracted tube and providing the arrangement with minimum height.

[0014] The metal capsule would be used in those cases in which it is essential to ensure that the content remains intact ensuring that it has not been modified in any way between manufacture and the moment of opening. The means for sealing and ensuring inviolability could be any of those known in the state of the art, such as discontinuous perforation, segregated tape, etc.

[0015] When the upper element or closing cap screws directly onto the lower element, both parts are provided with ring grooves which are threaded in their interior in a facing manner, so that the closing cap is threaded on the lower element of the arrangement, presenting the arrangement wrapped in a thermo-retractable capsule and/or metal capsule.

[0016] Furthermore, on the external surface of the lower element, and in particular on the part which fits in the neck of the bottle, a series of flaps are arranged, inclined in such a way that insertion and retention is obtained in the neck of the bottle.

[0017] The arrangement of these inclined flaps permits adjustment to the bottle necks with not very precise measures, however, as an alternative solution to the inclined flaps on the external surface of the lower element, a series of ring projections of resilient materials may be

arranged, thus permitting improved grip.

[0018] In addition, the pouring cap arrangement may be provided with a direct connection between the lower part of the same and the exterior in order to permit the entry of air to the interior of the bottle while at the same time emptying it.

[0019] As a complementary solution to the arrangement of a single retractable tube, the arrangement of a series of telescopic retractable tubes is also possible, which would permit greater length of tube in the event that this were necessary.

DESCRIPTION OF THE FIGURES

[0020] In order to complete the description below, and to assist in obtaining a better comprehension of its characteristics, the present descriptive report is accompanied by a set of plans with figures representing in an illustrative but not restrictive way the most significant details of the invention.

Figure 1 shows an upright view of the elements which make up the pouring cap arrangement which is the object of the invention.

Figure 2 shows a ground view of the previous arrangement.

Figure 3 shows a vertical cross section front view of the arrangement in figure 1.

Figure 4, shows a perspective representation of the object of the invention.

Figure 5, shows a mixed representation of the front view of the pouring cap, part of which is in cross section, and shows another means for the arrangement to grip the interior of the bottle neck.

PREFERRED EMBODIMENT OF THE INVENTION

[0021] In the light of the figures below a preferred embodiment of the proposed invention is described.

[0022] Figure 1 shows the pouring cap which is the object of the invention which is formed by an upper element or closing cap (1) and a lower element (6).

[0023] Fitted in the interior of the lower element (6) is a retractable tube (4), which as shown in figure 1, is found in a maximum extraction position.

[0024] In order to achieve extraction of the retractable tube (4) both the closing cap (1) and the lower element are provided with the means for cooperation, thus in the closing cap (1) on its lower face as seen frontally, there is a ring projection with tubular section (2), which, close to its free end is provided with an external projection (3). This external projection (3) would fit in a circular recess (5) close to the upper end of the retractable tube (4), where said circular recess (5) is made on the inner face

of the retractable tube (4).

[0025] The form in which the closing cap (1) is attached to the lower element (6) may be the contrary, that is, the elevation (3) of the ring projection (2) is arranged on the interior part, whereas the circular recess (5) is made on external face of the retractable tube (4).

[0026] Thus due to the clipping or attachment produced by the fitting of the external element (3) in the circular recess (5) when the closing cap (1) is raised the retractable tube is extracted, permitting separation of the closing cap (1) from the retractable tube (4).

[0027] Extraction of the retractable tube (4) is not total and is restricted by a lower edge (13) with which the retractable tube is provided (4). Instead of providing a single retractable tube, various may be used, in which case they would be deployed in a telescopic manner with each section being linked to the next.

[0028] Furthermore, in one possible embodiment and in order to close the closing cap (1) directly on the lower element, the closing cap (1) is provided in its lower face with a ring groove (10) and one of the inner faces of the groove is threaded, thus it would screw onto the thread made on a ring groove (11) made on the lower element (6).

[0029] Another possible form of embodiment for obtaining coupling of the upper element or closing cap (1) on the lower element (6) may be made through a metal capsule, in which case the upper element or closing cap (1) is fitted on the base of said metal capsule, which is provided in the area of its lower end and its inner face with a thread complementary to another thread arranged on the external face of the upper end of the bottle neck. Due to said complementary thread, the retraction of the tube (4) would be achieved and coupling of the upper part or closing cap (1) on the lower element (6) in a position of containment of the tube with minimum height of the arrangement.

[0030] In order to permit gripping of the lower element (6) on the bottle neck, on the lower element on its external face a series of inclined flaps (8) are arranged, oriented in such a way that they facilitate insertion of the lower element in the bottle neck and thus not its extraction.

[0031] The arrangement of said flaps (8) permits adjustment to those bottle necks which are not provided with precise dimensions.

[0032] As an alternative solution to gripping of the lower element (6) to the bottle neck, a series of ring discs (9) made from resilient material may be arranged on the external part of the lower element (6) as shown in figure 5, and which permit improved gripping and which are used when the dimensions of the bottle neck are more precise.

[0033] Figure 4 shows now the lower element (6) has been provided with a duct or tubular connection (7) which permits connection from the interior of the bottle with the exterior.

[0034] The essential nature of this invention is not altered by any variations in materials, form, size and ar-

rangement of its component elements, which are described in a non-restrictive manner, with this being sufficient to proceed to its reproduction by an expert.

Claims

1. Pouring cap with extractable tube which comprises an upper element or closing cap (1) which by means of screwing closes a lower element on which at least one retractable tube is fitted, and in which the lower element (6) is provided with means for attachment to the interior of the bottle neck, where at least one retractable tube (4) is arranged on the lower element (6) and which is **characterised in that** the closing cap (1) has a ring projection with tubular section (2) on its lower face, which is provided close to its free end with an elevation (3), whereas on the at least one retractable tube, (4) close to its upper end there is a circular recess (5). 5

2. Pouring cap with extractable tube according to claim 1, **characterised in that** the elevation (3) is external to the ring projection with tubular section (2), whereas the circular recess is arranged on the inner face of the retractable tube. 10

3. Pouring cap with extractable tube according to claim 1, **characterised in that** the elevation (3) is internal to the ring projection with tubular section (2), whereas the circular recess (5) is arranged on the external face of the extractable tube. 15

4. Pouring tube with extractable tube according to any of claims 1-3, **characterised in that** the means of attachment of the lower element (6) to the interior of the bottle neck consists of a series of ring flaps arranged on the external face of the lower element. 20

5. Pouring cap with extractable tube according to any of claims 1-3, **characterised in that** the means of attachment of the lower element (6) to the interior of the bottle neck consists of a series of ring discs arranged on the external part of the lower element and made with resilient material. 25

6. Pouring cap with extractable tube according to any of claims 1-3, **characterised in that** in the event that it is provided with more than one retractable tube (4), these shall be deployed in a telescopic manner. 30

7. Pouring cap with extractable tube according to any of claims 1-3, **characterised in that** in order to close the closing cap (1) on the lower element (6), the closing cap (1) is provided in its lower face with a ring groove (10) and one of the inner faces of the groove is threaded, thus it would screw onto the thread made on a ring groove (11) made on the lower element (6). 35

8. Pouring cap with extractable tube, according to any of claims 1-3 **characterised in that** in order to close the closing cap (1) on the lower element (6) the closing cap (1) is fitted on the base of a metal capsule which in the area of its lower end is provided with a thread complementary to another thread arranged on the external face of the upper end of the bottle neck. 40

9. Pouring cap with extractable tube according to any of the previous claims, **characterised in that** it is provided with at least one tubular connection (7) which permits connection of the interior of the bottle with the exterior. 45

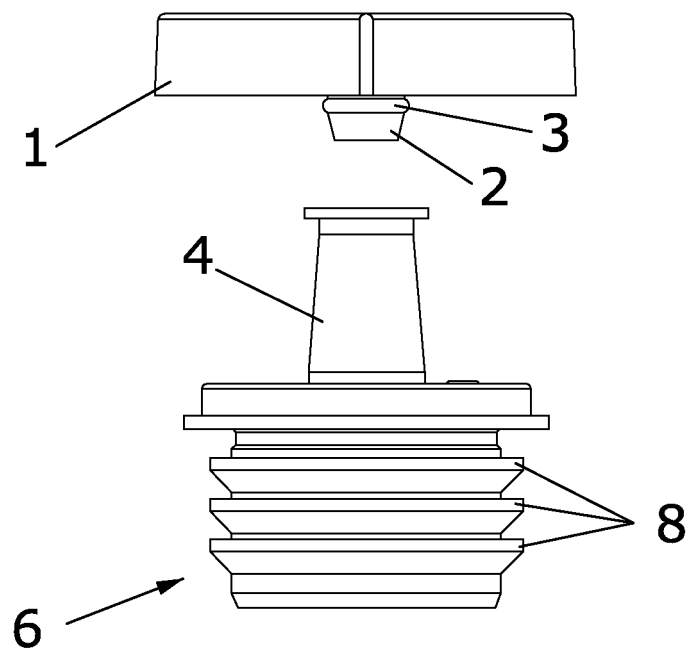


FIG.1

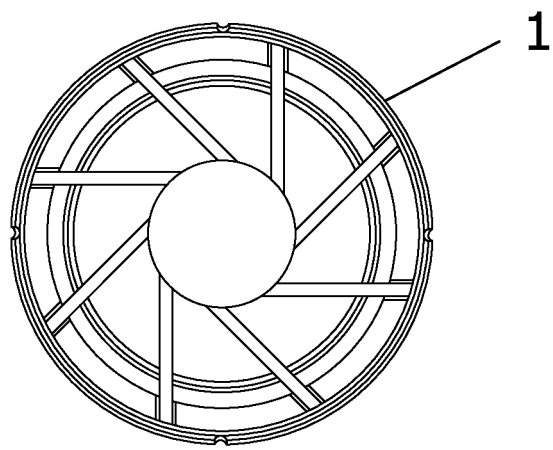


FIG.2

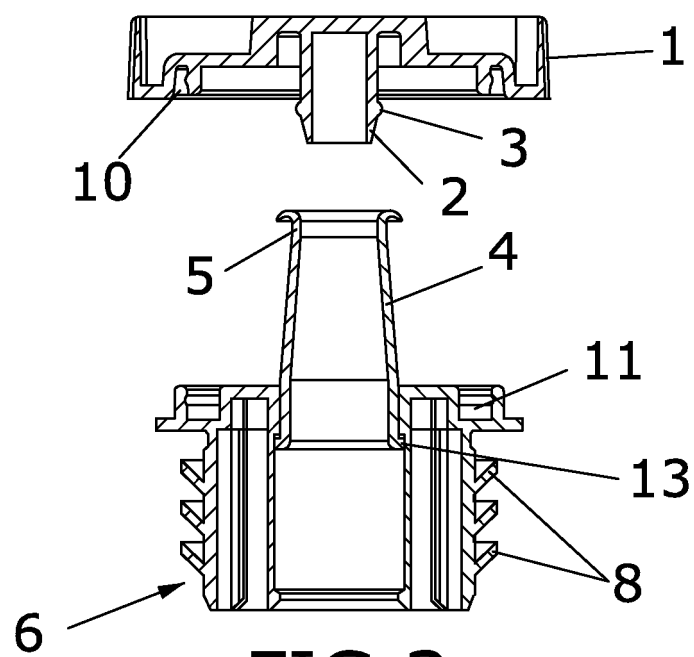


FIG.3

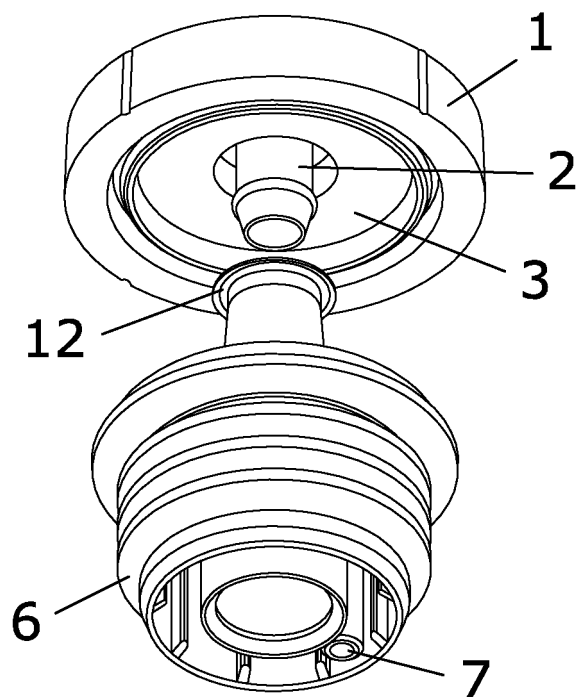


FIG.4

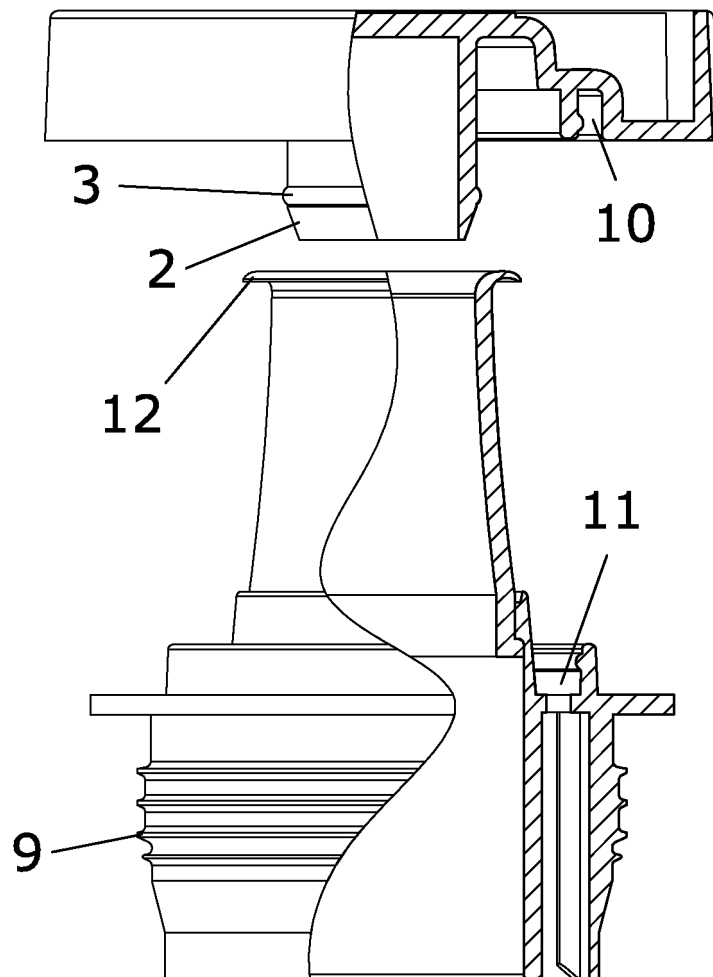


FIG.5

INTERNATIONAL SEARCH REPORT

International application No
PCT/ES2009/070498

A. CLASSIFICATION OF SUBJECT MATTER INV. B65D47/06		
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) B65D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	FR 2 875 485 A1 (ARC CREATION DESIGN ET PVL SAR [FR]) 24 March 2006 (2006-03-24)	1-2,4-5,
Y	page 3, line 13 - page 7, line 7; figures 1,2	8-9
	-----	6
X	FR 2 799 739 A1 (PECHINEY EMBALLAGE ALIMENTAIRE [FR]) 20 April 2001 (2001-04-20)	1,3-5,8
	page 4, line 4 - page 5, line 2; figures 3,5	

A	EP 0 224 863 A2 (BERG JACOB GMBH CO KG) 10 June 1987 (1987-06-10)	7
	figures 1,2	

Y	US 1 595 231 A (DRYER EDWIN H) 10 August 1926 (1926-08-10)	6
	the whole document	

☐ Further documents are listed in the continuation of Box C. ☒ See patent family annex.		
* Special categories of cited documents : "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. "&" document member of the same patent family		
Date of the actual completion of the international search 3 March 2010		Date of mailing of the international search report 10/03/2010
Name and mailing address of the ISA/ European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016		Authorized officer Newell, Philip

INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No

PCT/ES2009/070498

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
FR 2875485	A1	24-03-2006	AT 440041 T 15-09-2009
		CN 101061043 A 24-10-2007	
		EP 1831082 A1 12-09-2007	
		WO 2006032784 A1 30-03-2006	
FR 2799739	A1	20-04-2001	AU 7797300 A 23-04-2001
		WO 0126990 A1 19-04-2001	
EP 0224863	A2	10-06-1987	DE 3542769 A1 11-06-1987
US 1595231	A	10-08-1926	NONE