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(54) **ANTIFILLING POURER FOR BOTTLE**

(57) The invention concerns an antifilling pourer for bottle, to be applied on the neck of bottle, provided with a shaped spout (3), which doses the contents thereof in an optimal way, and with a one-way valve which prevents refilling, composed of an outer annular body, inside which a plastic or glass sphere (5) is floating, which, while pouring (tilted bottle), is retained against an upper cap, provided with openings for discharging the liquid and, conversely, in rest conditions (vertical bottle), said sphere abuts on the lower base, obstructing the hole for the passage of fluid from the bottle to the pourer. Such an antifilling pourer (10) is characterized in that it consists of an annular outer body (1), which is inserted by pressure and retained on the hole of the neck of the bottle, and of an inner cylindrical body (2), arranged coaxial with the body (1), open at the two ends and provided with an upper dripless spout (3) and a cage (4) which contains the sphere (5), with anti-refilling function, said two bodies (1, 2) being mutually retained by a circumferential tearing strip (20) positioned between the inner side wall (11) of the body (1) and the outer side wall of the body (2).

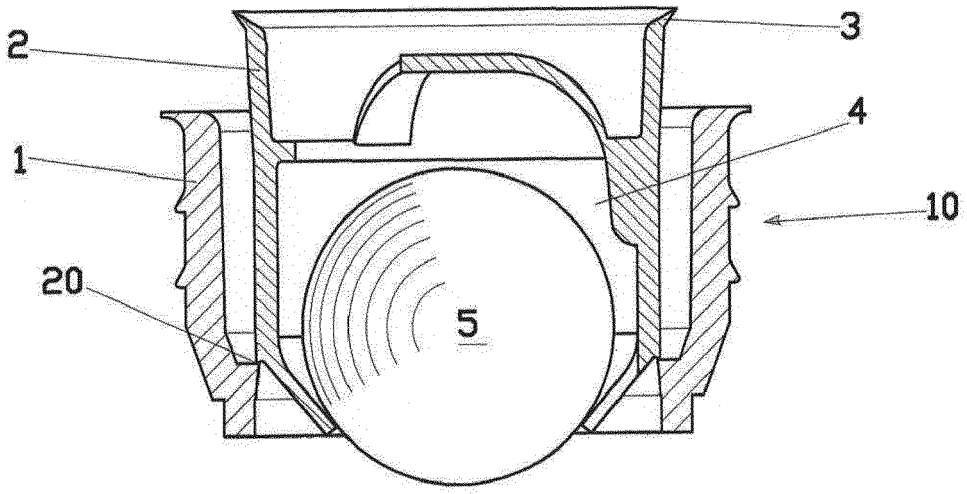

FIG.3

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Description

[0001] The finding concerns an antifilling pourer for bottle, according to the general part of claim 1.

[0002] Among the various types of closures to be applied to the neck of the bottle, a well-known one is the below-cap closure identified with the term "pourer", equipped with a shaped spout that doses the content in an optimal manner and, in particular, for food use (oil, vinegar, vodka and the like), also equipped with a so-called "anti-refilling" device, consisting of a one-way valve, which prevents unauthorised refilling of the bottle.

[0003] Usually, the antifilling pourer is made up of a hollow cylindrical body, inside which a plastic or glass sphere is floating, which, while pouring (tilted bottle), is retained against an upper cap, provided with openings for discharging the liquid and, conversely, in rest conditions (vertical bottle), said sphere abuts on the lower base, obstructing the hole for the passage of fluid from the bottle to the pourer; as an example, we cite the antifilling pouring caps described in patent documents no. VI2013A000062 and no. VI2014A000305.

[0004] Moreover, also to satisfy law 161/2014 which establishes that "in retail and catering, olive oil must be presented in containers provided with a suitable closure device, so that the content cannot be modified without the package being opened or altered and provided with a protection system that does not allow its re-use after the original content indicated on the label has run out", caps are on the market that are provided with antirefilling and anti-tampering devices which, after they have been violated, are very clearly damaged.

[0005] As an example we cite patent documents EP2008942 A1, WO2013113435A1 and WO2010125595A1 which, although achieving the tasks of anti-refilling and anti-tampering, have the drawback of being made up of a considerable number of parts, which requires a complex manufacturing operation and makes them complicated to use.

[0006] Other documents of the state of the art are WO 2009/047626A2, WO 97/33805A1 E WO 2004/103846A1.

[0007] The purpose of the present finding is to make a pourer for bottle provided with anti-refilling and anti-tampering devices that does not have the drawbacks of similar known products.

[0008] The characteristics of the finding will become clearer through the description of a possible embodiment thereof, given as a non-limiting example, with the help of the attached drawings, where:

- fig. 1 (table I) represents a perspective view of the pourer according to the finding;
- fig. 2 represents a vertical section view of the pourer according to fig. 1;
- fig. 3 represents a detailed view of fig. 2;
- figs. 5, 6 (table II) represent the pourer inserted in the bottle and subjected to partial and total tampering, respectively.

[0009] As can be seen in figures 1 and 2, the pourer, wholly indicated with reference numeral 10, consists of an annular outer body 1, which is inserted by pressure and retained on the hole of the neck of the bottle, and of an inner cylindrical body 2, coaxial with the body 1, open at the two ends and provided with an upper dripless spout 3 and with a cage 4, which contains the sphere 5, with anti-refilling function.

[0010] The novelty characteristic of the finding consists of the fact that the two bodies 1 and 2 are held together through a circumferential tearing strip 20 positioned between the inner side wall 11 of the body 1 and the outer side wall 12 of the body 2.

[0011] In particular, the tearing strip 20 is positioned in the lower part of the two bodies 1 and 2 and has a section of reduced thickness, for example with a size of a few tens of mm, in any case such as to allow the two bodies 1 and 2 to be retained together in normal conditions and, at the same time, to have minimum resistance to breaking, so as to be able to be broken easily and completely, following even a very weak tampering action, such as slight tearing caused by a dishonest person, to detach the body 2 from the body 1, which remains locked in the neck of the bottle (figs. 5, 6). The shape and size of the pourer can be various, provided that they are encompassed by the inventive concept defined by the following claims, without for this reason departing from the scope of the patent.

Claims

1. ANTIFILLING POURER FOR BOTTLE, to be applied on the neck of said bottle, provided with a shaped spout (3), which doses the contents thereof in an optimal way, and with a one-way valve which prevents refilling, composed of an outer annular body, inside which a plastic or glass sphere (5) is floating, which, while pouring (tilted bottle), is retained against an upper cap, provided with openings for discharging the liquid and, conversely, in rest conditions (vertical bottle), said sphere abuts on the lower base, obstructing the hole for the passage of fluid from the bottle to the pourer, said antifilling pourer (10) being **characterized in that** it consists of an annular outer body (1), which is inserted by pressure and retained on the hole of the neck of the bottle, and of an inner cylindrical body (2), arranged coaxial with the body (1), open at the two ends and provided with an upper dripless spout (3) and a cage (4) which contains the sphere (5), with anti-refilling function, said two bodies (1, 2) being mutually retained by a circumferential tearing strip (20) positioned between the inner side wall (11) of the body (1) and the outer side wall (12) of the body (2).

2. ANTIFILLING POURER FOR BOTTLE, according to claim 1, **characterized in that** the circumferential tearing strip (20) is positioned in the lower part of the two bodies (1,2).

3. ANTIFILLING POURER FOR BOTTLE, according to the preceding claims, **characterized in that** the tearing strip (20) has a section of reduced thickness such as to still allow, under normal conditions, retention of the two bodies (1, 2) and, at the same time, having a minimum breaking strength, so as to easily and completely break following an even very weak breaking action.

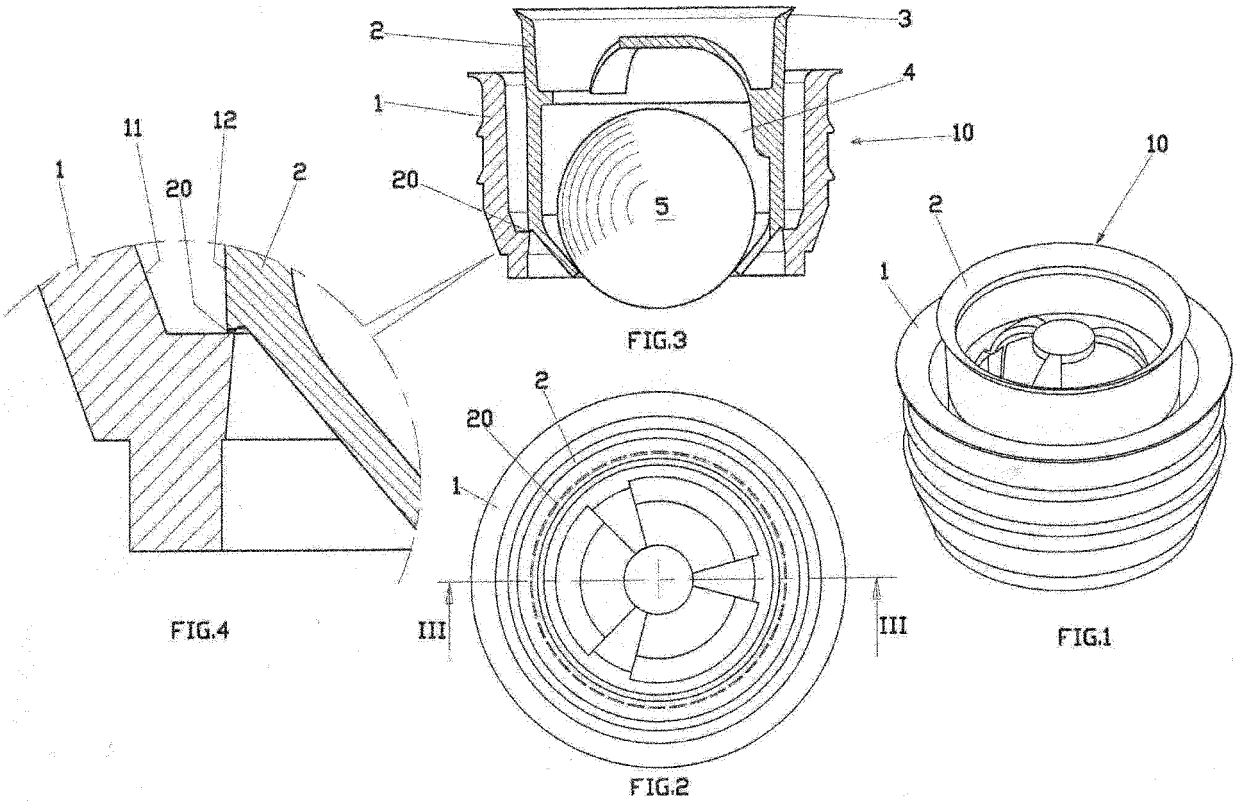

FIG.4

FIG.3

FIG.1

FIG.2

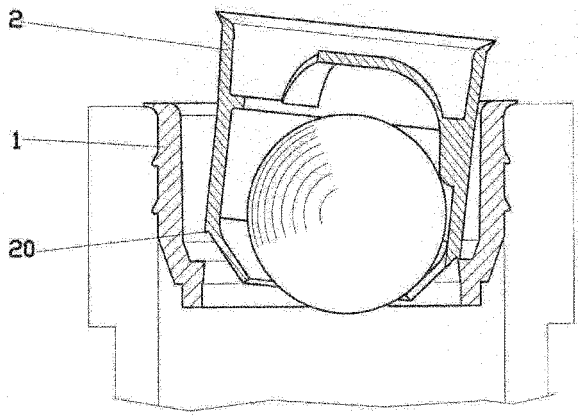

FIG.5

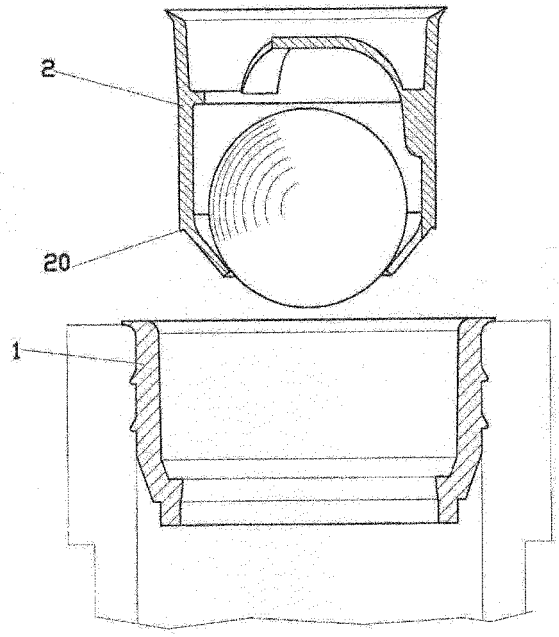

FIG.6

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EUROPEAN SEARCH REPORT

Application Number
EP 16 16 8251

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
A	WO 2009/047626 A2 (FABIANO NICOLA [IT]) 16 April 2009 (2009-04-16) * page 9, line 17 - page 10, line 17; figure 1 *	1-3	INV. B65D49/04
A	WO 97/33805 A1 (ALPLAST SPA [IT]; TORCHIO GIACINTO [IT]) 18 September 1997 (1997-09-18) * page 9, paragraph 2 - page 10; figures 1-3 *	1,3	
A	WO 2004/103846 A1 (MONTGOMERY DANIEL & SON LTD [GB]; THOMSON DAVID WILLIAM [GB]; JOHNSON) 2 December 2004 (2004-12-02) * the whole document *	1	

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	27 September 2016	Mans-Kamerbeek, M

CATEGORY OF CITED DOCUMENTS

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
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T : theory or principle underlying the invention
E : earlier patent document, but published on, or after the filing date
D : document cited in the application
L : document cited for other reasons

& : member of the same patent family, corresponding document

EPO FORM 1503 03.82 (P04C01)

ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 16 16 8251

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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27-09-2016

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WO 2009047626 A2	16-04-2009	NONE	
WO 9733805 A1	18-09-1997	AU 2026597 A	01-10-1997
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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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Patent documents cited in the description

- WO VI2013000062 A **[0003]**
- WO VI2014000305 A **[0003]**
- EP 2008942 A1 **[0005]**
- WO 2013113435 A1 **[0005]**
- WO 2010125595 A1 **[0005]**
- WO 2009047626 A2 **[0006]**
- WO 9733805 A1 **[0006]**
- WO 2004103846 A1 **[0006]**