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(54) CAPSULE FOR BOTTLES

(57) The present invention relates to a frustoconical laminate capsule 100 for necks of containers comprising a controlled opening tear, a blind upper base 110 and an open lower base 120 for the access of a cork established in the neck of a container, the capsule being characterized in that it comprises a first tearing strip 130 adjacent to the blind upper base comprising a length 205 smaller than the perimeter of the frustoconical laminate capsule, a second tearing strip 140 spaced apart from the blind upper base comprising a length equivalent to the perimeter of the laminate capsule, and a notch 150 comprising an upper end 155 and a lower end 160, wherein the notch is demarcated by the first tearing strip at its upper end and by the second tearing strip at its lower end, wherein pulling the notch causes the first strip and the second strip to tear, allowing the removal of the blind upper base and the ripping strip, forming a single part and being taken out in one go.

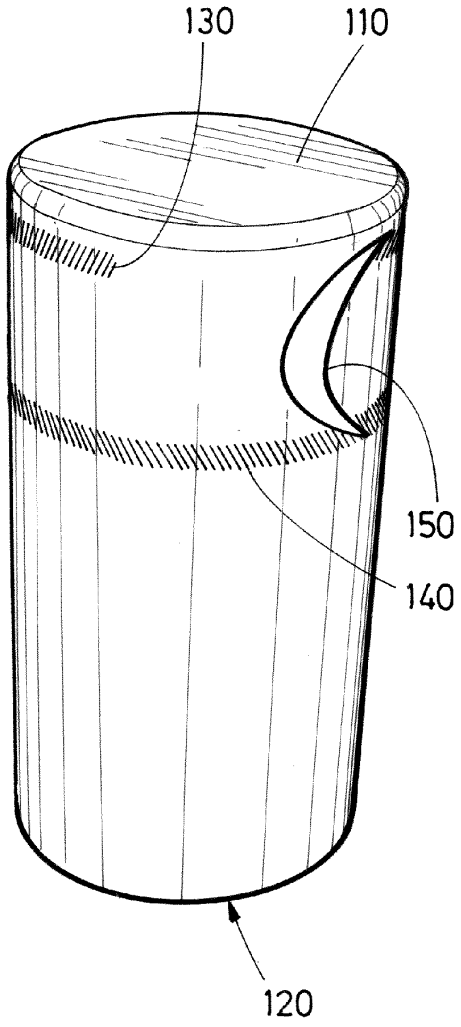

FIG.1B

EP 3 766 798 A1

Description

Object of the Invention

[0001] The present invention belongs to the field of laminate capsules suitable for necks of beverage containers.

[0002] The object of the present invention relates to a capsule with an upper cap and an open lower base comprising two tearing strips that can be actuated by means of a notch, and wherein pulling the notch causes said strips to tear and the upper cap to be removed.

Background of the Invention

[0003] Deep-drawn capsules and glued capsules, i.e., capsules consisting of two parts, for necks of containers with a cork existing on the market have different configurations with tearing strips and/or notches for the removal of the upper portion of said capsules. A poor distribution of the tearing strips or a poorly designed notch may lead, during the actuation of said notch, to the tearing strips not being effectively broken, or to the notch being ripped away, or to the upper portion of the deep-drawn capsule not detaching completely from the rest of the capsule, with said upper portion therefore remaining on the cork of the container, generating possible sharp edges and segments which may cut and/or constitute a nuisance to a user while handling the cork.

[0004] For this reason, a deep-drawn capsule which solves the mentioned drawbacks is required. The present invention relates to meeting this demand, among others.

Description of the Invention

[0005] The present invention relates to a frustoconical laminate capsule for necks of containers comprising a controlled opening tear. The capsule comprises a blind upper base and an open lower base for the access of the neck of a container. The capsule is characterized in that it comprises a first tearing strip adjacent to the blind upper base. This first tearing strip comprises a length smaller than the perimeter of the frustoconical laminate capsule. The first tearing strip is an incomplete tearing strip with respect to the perimeter or outline of the frustoconical laminate capsule.

[0006] Furthermore, the laminate capsule comprises a second tearing strip located at a greater distance from the blind upper base than the first tearing strip. The second tearing strip comprises a length equivalent to the perimeter of the laminate capsule. The capsule also comprises in its upper portion a notch. In some embodiments, the notch can be symmetrical. The notch is demarcated by the first tearing strip at its upper end and by the second tearing strip at its lower end. The tearing strips may or may not be parallel to one another. Therefore, pulling the notch causes the first strip to tear, though not entirely, and the second tearing strip to tear entirely, which allows removing the blind upper base of the laminate capsule and the tearing strips in one go.

[0007] The frustoconical laminate capsule for necks of containers allows complete removal of the blind upper base or cap for any type of container corks, for example cylindrical corks, frustoconical corks, corks with a capsule or "t-cork", etc., thereby preventing the problems mentioned in the state of the art, such as for example, the ripping of the notch or the generation of sharp edges or segments in the cap of the capsule due to improper removal of said cap, which may remain on the cork of the container. These sharp edges or segments may possibly cut a user using the cap of the container.

[0008] In some examples, the perimeter or outline of the frustoconical laminate capsule is 100 millimeters. In some examples, the first incomplete tearing strip comprises, in comparison with the outline of the laminate capsule, a length between 70% and 95% of the perimeter or outline of the frustoconical laminate capsule.

[0009] In some examples, the first incomplete tearing strip and the second tearing strip comprise ripping strips with a continuous or discontinuous cut. The containers can preferably be glass containers and can preferably contain alcoholic beverages such as wines and spirits.

Description of the Drawings

[0010] To complement the description being made and for the purpose of helping to better understand the features of the invention according to a preferred practical embodiment thereof, a set of drawings is attached as an integral part of said description in which the following is depicted in an illustrative and non-limiting manner:

Figures 1A and 1B show a preferred embodiment of a frustoconical laminate capsule for necks of containers according to the present invention.

Figure 2 shows the removal of the upper cap of the frustoconical laminate capsule of Figure 1 according to the present invention.

Preferred Embodiment of the Invention

[0011] Figures 1A and 1B show a preferred embodiment of a frustoconical laminate capsule (100) for necks of containers comprising a controlled opening tear. The capsule comprises a blind upper base or cap (110) and an open lower base (120) for the access of the neck of a container. The capsule (100) is characterized in that it comprises a first incomplete tearing strip (130), which is in a location adjacent to the blind upper base or cap (110). This first incomplete tearing strip (130) comprises a length smaller than the perimeter of the frustoconical laminate capsule indicated with reference number (105) and is located at a distance of less than 15 mm from the blind cap. In the embodiment of the drawings, the perimeter of the frustoconical laminate capsule (100) is 100 millimeters. In other embodiments, the perimeter of the capsule

may vary.

[0012] In another possible configuration, the first incomplete tearing strip (130) comprises a length smaller than the perimeter of the frustoconical laminate capsule indicated with reference number (105) and is located at a distance of less than 5 mm from the blind cap.

[0013] Furthermore, the frustoconical laminate capsule (100) comprises a second tearing strip (140) which is arranged at a greater distance from the blind upper base (110) than the first tearing strip (140) and has a length equivalent to the perimeter (105) of the laminate capsule (100), i.e., 100 millimeters. The possibility of said tearing strips (130, 140) being parallel to one another is contemplated. The capsule (100) also comprises a notch (150) with an upper end (155) and a lower end (160). The notch (150) is demarcated by the first tearing strip (130) at its upper end (155) and by the second tearing strip (140) at its lower end (160). Pulling the notch (150) causes the first incomplete strip (130) and the second strip (140) to tear and allows the removal of the upper portion of the capsule comprising the blind upper base or cap (110) as seen in Figure 2. In other embodiments, the notch (150) may comprise configurations that are different from the v-shaped design shown in Figures 1 and 2.

[0014] In a possible preferred embodiment, the width of the second tearing strip (140) is defined between 4 mm and 30 mm, and more preferably between 5 mm and 15 mm.

[0015] Figure 2 shows the frustoconical laminate capsule (100) with the blind upper base or cap (110) and an open lower base (120) for the access of a neck of a container (which is not shown in Figure 2). Figure 2 shows the effect of pulling the notch (150). Pulling the notch (150) causes the first tearing strip (130) and the second tearing strip (140) to tear, as can be seen in Figure 2. The first incomplete tearing strip (130) comprises a length (205) equivalent to 80% of the perimeter of the capsule (100), i.e., 80 millimeters. In another preferred embodiment, the first incomplete tearing strip (130) comprises a length (205) equivalent to 90% of the perimeter of the capsule (100), i.e., 90 millimeters. The length (205) of the first incomplete tearing strip (130) may vary between 70% and 95% of the perimeter of the capsule (100). In a preferred embodiment, the length (205) of the first incomplete tearing strip (130) may vary between 85% and 95% of the perimeter of the capsule (100).

[0016] Pulling the notch (150) allows removing the upper portion (210) of the frustoconical laminate capsule (100) as seen in Figure 2. The removal of the upper portion (210) of the capsule (100) causes the removal of the blind upper base or cap (110).

Claims

1. Frustoconical laminate capsule (100) for necks of containers comprising a controlled opening tear, the capsule comprising a blind upper base (110) and an open lower base (120) for the access of a cork established in the neck of a container, the capsule being **characterized in that** it comprises:

   - a first tearing strip (130) established at a distance of less than 15 mm from the blind upper base, having a length (205) smaller than the perimeter of the frustoconical laminate capsule (100),
   - a second tearing strip (140) arranged at a greater distance from the blind upper base than the first tearing strip (130), wherein the second tearing strip (140) comprises a length equivalent to the perimeter of the frustoconical laminate capsule (100); and
   - a notch (150) comprising an upper end (155) and a lower end (160), wherein the notch (150) is demarcated by the first tearing strip (130) at its upper end (155) on the left side and by the second tearing strip (140) at its lower end (160) on both the left and right sides, and wherein pulling the notch (150) causes the first tearing strip (130) and the second tearing strip (140) to tear, allowing the removal of the blind upper base in one go.

2. Frustoconical laminate capsule (100) according to claim 1, wherein the first tearing strip (130) is located at a distance of less than 5 mm from the blind upper base.

3. Frustoconical laminate capsule (100) according to claim 1 or 2, wherein the width of the second tearing strip (140) comprises between 4 and 30 millimeters and preferably between 5 and 15 mm.

4. Frustoconical laminate capsule (100) according to the preceding claims, wherein the first tearing strip (130) comprises a length between 70% and 95% of the perimeter of the frustoconical laminate capsule (100).

5. Frustoconical laminate capsule (100) according to the preceding claims, wherein the first tearing strip (130) comprises a length between 85% and 95% of the perimeter of the frustoconical laminate capsule (100).

6. Frustoconical laminate capsule (100) according to any of the preceding claims, wherein the first and second tearing strips (130, 140) comprise ripping strips with a standard parallel cut and/or continuous cut.

7. Frustoconical laminate capsule (100) according to any of the preceding claims, wherein the tearing strips (130, 140) are arranged parallel to one anoth-

er.

8. Frustoconical laminate capsule (100) according to any of the preceding claims, wherein the containers contain alcoholic beverages.

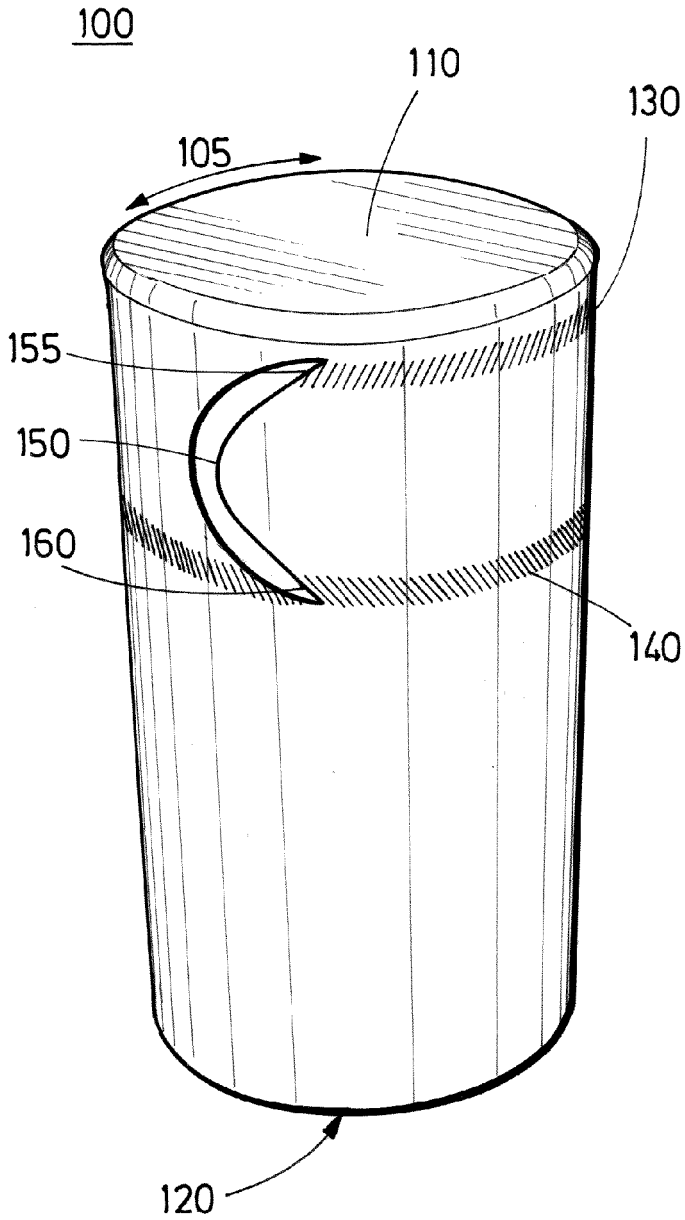

FIG.1A

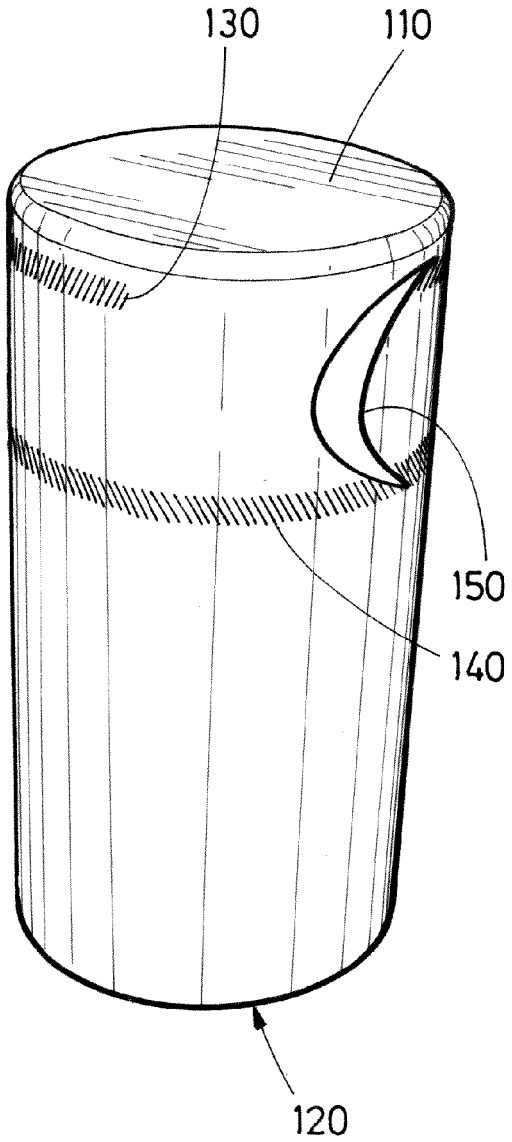

FIG.1B

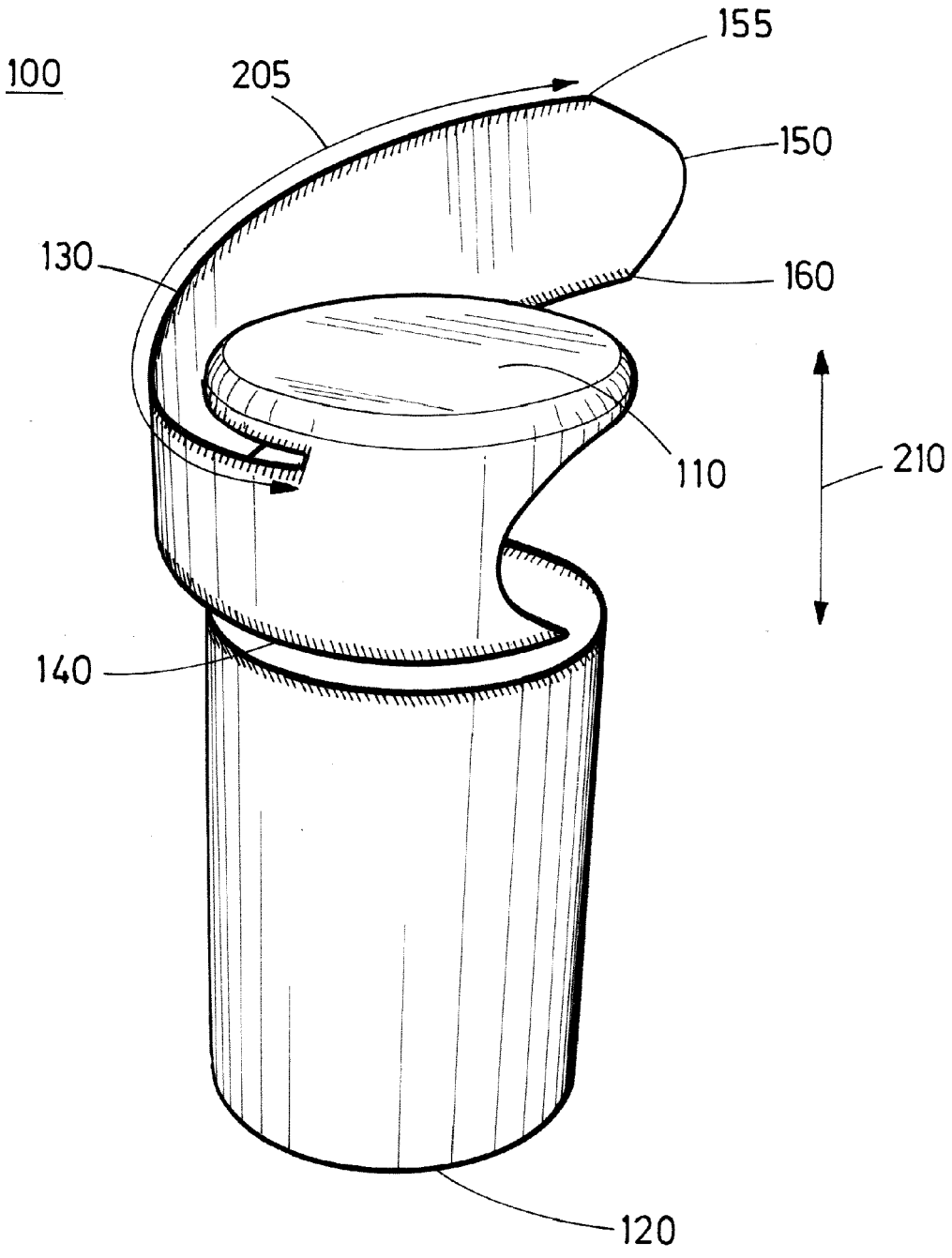

FIG.2

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EUROPEAN SEARCH REPORT

Application Number
EP 19 38 2612

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
Y	FR 2 108 783 A1 (REMY) 26 May 1972 (1972-05-26) * the whole document * -----	1-8	INV. B65D41/62
Y	FR 2 786 164 A1 (PECHINEY EMBALLAGE ALIMENTAIRE [FR]) 26 May 2000 (2000-05-26) * abstract; figures 6,11,15b * * page 2, line 3 * * page 10, lines 5-15 * -----	1-8	
Y	EP 0 615 914 A1 (SUNTORY LTD [JP]; NIPPON FOIL MFG [JP]) 21 September 1994 (1994-09-21) * abstract; figures * * page 1, line 10 * -----	1-8	
			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	31 January 2020	Serrano Galarraga, J

CATEGORY OF CITED DOCUMENTS

X : particularly relevant if taken alone
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ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO. EP 19 38 2612

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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31-01-2020

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