



(12) **EUROPEAN PATENT APPLICATION**
published in accordance with Art. 158(3) EPC

(43) Date of publication:
15.06.2005 Bulletin 2005/24

(51) Int Cl.7: **B65D 17/00**, B65D 41/62,
B65D 51/20

(21) Application number: **03787820.4**

(86) International application number:
PCT/ES2003/000406

(22) Date of filing: **04.08.2003**

(87) International publication number:
WO 2004/016513 (26.02.2004 Gazette 2004/09)

(84) Designated Contracting States:
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR
HU IE IT LI LU MC NL PT RO SE SI SK TR
Designated Extension States:
AL LT LV MK

(72) Inventor: **Del Val Catala, Sebastian**
08034 Barcelona (ES)

(30) Priority: **08.08.2002 ES 200202027 U**

(74) Representative: **Gislon, Gabriele**
Torner, Juncosa i Associats, S.L.
c/ Bruc, 21
08010 Barcelona (ES)

(71) Applicant: **Del Val Catala, Sebastian**
08034 Barcelona (ES)

(54) **HYGIENIC/PROTECTIVE LAMINAR COVER FOR DRINK CANS**

(57) It consists of a laminar portion (10) with a harmless adhesive coating on at least part of one of its faces, which is applied over the upper end (12) of the can (11), fitted with a ring-pull opener (13) that breaks a fin that is bent inside the can (11) and remains joined to the said ring-pull (13). The laminar portion (10) includes a pull appendage (17) together with a strip (15) that is connected to a band (16) having an adhesive coating, prepared for being joined around a portion of the body of the can (11). By pulling on the said appendage (17) the said laminar portion (10) can be removed, the strip (15) can rotate about its own plane and the laminar portion (10) is able to be stuck by its adhesive face to the side wall of the can (11).

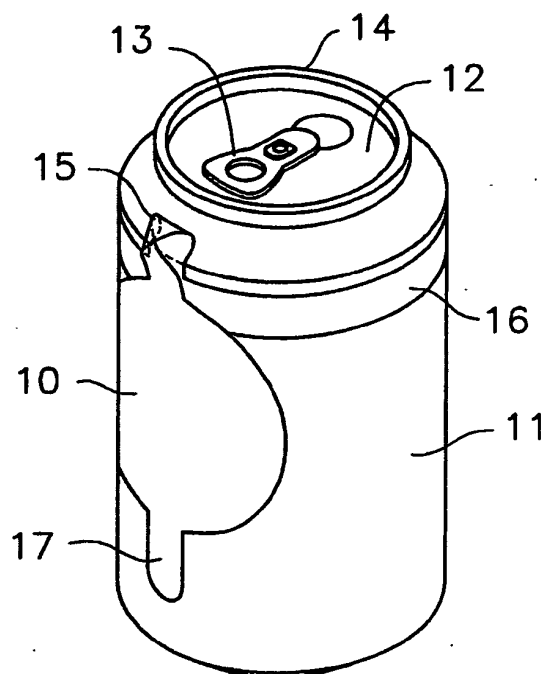


Fig. 4

Description

Field of the technique

[0001] This invention refers to a laminar cover for cans or metal containers for drinks, where the upper end includes an opening device that generally consists of ring-pull that breaks a fin so that when the can is opened, the said fin is bent inside the can.

[0002] The main function of the cover included in this invention is to maintain the entire surface area occupied by the can opening device and the surrounding area insulated from any external agent, for which purpose it covers the upper end of the said can and preferably all those parts that could come into contact with the actual contents of the can when it is consumed, whether directly from the metal container or by pouring the contents into a glass.

[0003] The cover of this invention also has the property of being recyclable together with the actual can because it is fitted with the means for maintaining it joined to the actual metal container or can after being removed from the end so that it does not cause any difficulty in consuming the drink or pouring it into a glass or similar utensil.

Technical background

[0004] Cans containing drinks have a problem whereby the upper end containing the cited opening device and the ring-pull are exposed to all types of dirt, which easily accumulates next to the small edge that surrounds the upper end, with particles of the said dirt or dust being deposited both above and underneath the ring-pull and on the fin that is torn open when the ring is pulled. All this means that the said accumulated particles around the upper end of the can are able to come into direct contact with the user during consumption or enter the drink.

[0005] In order to resolve this problem, several solutions are known in the state of the technique that are based on a protective cover that is placed over the said upper end of the can.

[0006] Utility model No 9503009 describes a protective and/or opening device for cans containing drinks consisting of a laminar stuck to the upper end covering a minimum of the area where the can ring pull and tearable fin are located and fitted with an adhesive tab that projects out from the general outline to form a pulling device.

[0007] Utility model No 9503163 refers to a can containing a drink, with a central section of a cover over the upper end of the can that is moulded to the outline of the of the edge or pull ring that joins the said end to the body of the can, the periphery of which is joined to the said cover by means of a harmless adhesive or other means of securing, with this section acting as a frontal tab to facilitate the opening of this cover.

[0008] Utility model No 200000930 describes protective cover that is similar to that of the previous model, comprising a thin, moulded, impermeable lamina that completely covers the upper end of the can, but does not have a pull-tab for opening.

[0009] Lastly, utility model No 200101910 refers to a hygienic protective cover for cans containing drinks that consists of a supplementary cover adapted to the upper end of the can, integrating a perimeter lip that established a hermetic seal with the can to prevent direct contact of the user with any external agent that may have been deposited on the said base and the supplementary cover has a small projection on its periphery that facilitates its opening.

[0010] Although, in all this background to the state of the technique, the objective of protection is achieved, a second problem arises, because once the cited supplementary covering or cover is separated from the can, there is the risk that it may be simply thrown away onto the ground leading to an environmental contamination problem, or in any case, a separate collection of the same must be taken into account. Moreover, in the case where the cover remains attached to the can once opened (as in utility model No 9503163), this leads to a problem for the comfortable handling of the can.

Brief description of the invention

[0011] This invention provides a solution to this latest problem, since the protection cover it consists of also includes the means that make it feasible, once the can has been opened, for it to be joined to container body, on one side and then be recycled together with it.

[0012] For this reason, the proposed laminar cover is of the type that comprises a laminar portion with a harmless adhesive coating on at least part of one of its faces, where the adhesive face is applied over the upper end of the can and is characterised because the said laminar portion continues in the form of a strip that is connected orthogonally to the central part of a band with an adhesive coating that is prepared to grip and remain firmly joined to a portion of the can's body, so that when the said cover is removed, doing so by gripping the said appendage, the said strip can rotate about its own plane and the cover is able to be stuck by its adhesive face to the body of the can.

[0013] In accordance with a preferred construction, the said strip is short and the cited band completely encircles the body of the can close to the said upper end fitted with the ring-pull opener.

Brief description of the drawings

[0014] For a better understanding of the previous description, drawings are included which, merely as illustrative, non-limiting examples, represent a practical case of producing the hygienic laminar cover for cans containing drinks in accordance with this invention.

[0015] In the said drawings:

Figure 1 shows a plan view of the element that makes up the laminar cover of the invention.

Figures 2 and 3 are perspective views of the application of the cited cover for standard format cans containing drinks.

Lastly, Figure 4 shows the way in which the laminar portion that provides protection on the upper end of the can is backed onto the body of the container after it has been opened, with the prior separation of part of it.

Detailed description of a production example

[0016] According to Figure 1, the laminar cover of the invention comprises a plastic element that is resistant to pulling and tearing that is obtained from a single, die-cut sheet, in which can be seen a circular laminar portion 10, with adhesive on one of its faces that is intended to be applied to the upper end 12 of a can 11, fitted with a pull-strip 13 and a peripheral lip 14, in which the said laminar portion 10 has a width and shape that completely covers the upper end 12 of the can and moulds itself to the concave shape of the said end 12 and also covers the lip 14 of the same.

[0017] The cited laminar portion 10 is orthogonally connected by a short strip 15 to the middle part of a band 16 that has an adhesive coating that is prepared to grip and remain firmly joined to a portion of the can's body (Figures 2 to 4) so that when the said cover is removed, doing so by means of an appendage 17, without adhesive or with a very weak adhesive, the said pull-strip 15 can rotate (see Figure 4) about its own plane and the cover is able to be stuck by its adhesive face to the body of the can on its side wall.

[0018] In accordance with a preferred construction of the invention, it is intended that the band 16 completely encircles the body of the can close to the said upper end fitted with the ring-pull opener 13.

[0019] It is also intended that there is no adhesive on the inside face of the laminar portion that directly backed onto the cited ring-pull 13 in order to facilitate the task of taking hold of the ring-pull 13 once the cover has been removed.

[0020] The outer face of the cover can be printed with a publicity message or include the instructions for correct use of the same. The laminar portion 10 could alternatively include a purchase receipt for promotions providing a solution for such a purpose, since cans do not normally have any detachable elements. For this reason, a weakened line 18 is included where strip 15 joins the laminar portion 10 that will permit this section to be separated from the rest.

[0021] By employing the cover in accordance with the invention a guarantee is obtained that product has not been tampered with and that the integrity of the product inside the can is intact.

Claims

1. A hygienic-protective laminar cover for cans containing drinks, of the type that comprises a laminar portion (10) with a harmless adhesive coating on at least part of one of its faces, where the adhesive face is applied over the upper end (12) of the can (11), fitted with a ring-pull opener (13) that breaks a fin so that when the can is opened (11), the said fin is bent inside the can and remains joined to the said ring-pull (13), with the laminar portion (10) including an appendage (17) or pull tab, **characterised** because the said laminar portion (10) continues in the form of a strip (15) that is connected to a band (16) having an adhesive coating that is prepared to grip and remain firmly joined to a portion of the body of the can (11), so that when the said laminar portion (10) is removed, doing so by gripping the said appendage (17), the strip (15) can rotate about its own plane and the laminar portion (10) is able to be stuck by its adhesive face to the body of the can (11), on its side wall.
2. A laminar cover, in accordance with claim 1, **characterised** because the said strip (15) is short and orthogonally connected to the central part of the said band (16), which completely encircles the body of the can (11) at a section close to the said upper end (12) fitted with the ring-pull opener (13).
3. A laminar cover, in accordance with claim 1, **characterised** because the said laminar portion (10) completely covers the upper end (12) of the can (11) and peripheral lip (14) and moulds itself to the concave shape of the said end (12) and also covers the cited lip (14) of the same.
4. A laminar cover, in accordance with claim 3, **characterised** because an area of the face of the laminar portion (10) that is backed onto the cited ring-pull (13) is coated with adhesive.
5. A laminar cover, in accordance with claim 1, **characterised** because it is made of plastic that is resistant to pulling and tearing and obtained from a single, die-cut, printed sheet.
6. A laminar cover, in accordance with claim 1, **characterised** because a weakened line (18) is included where strip (15) joins the laminar portion (10) that will permit this section to be separated from the rest.

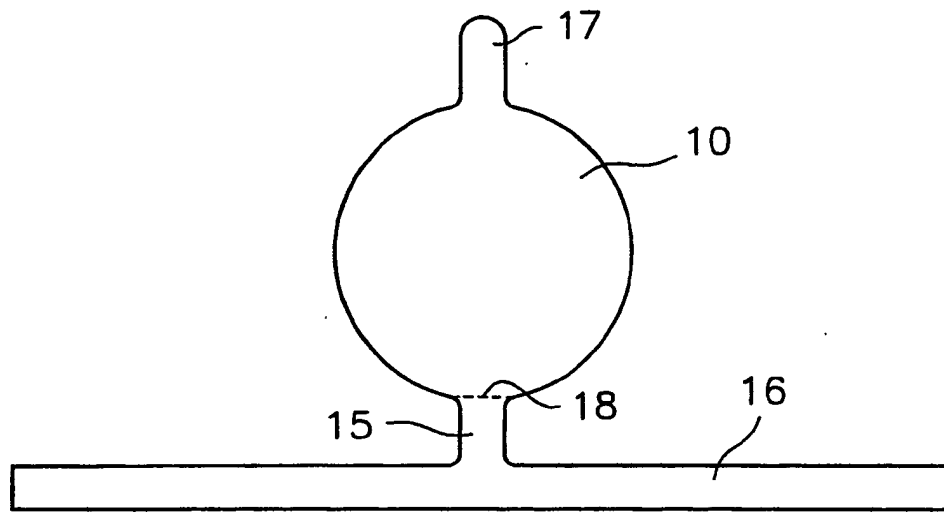


Fig. 1

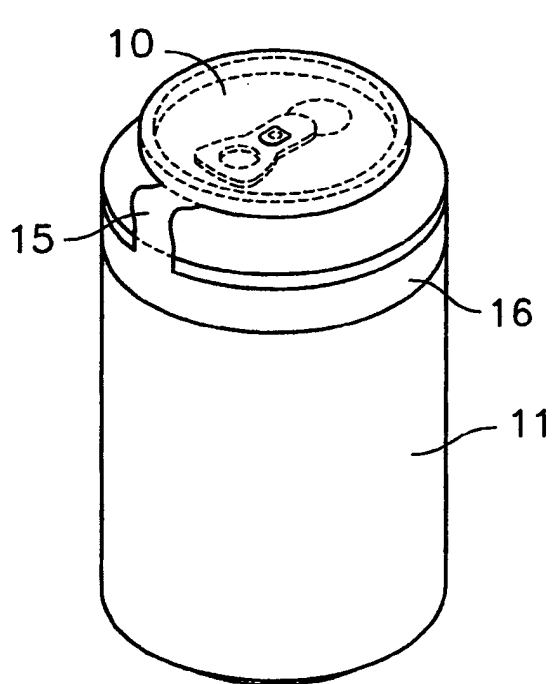


Fig. 2

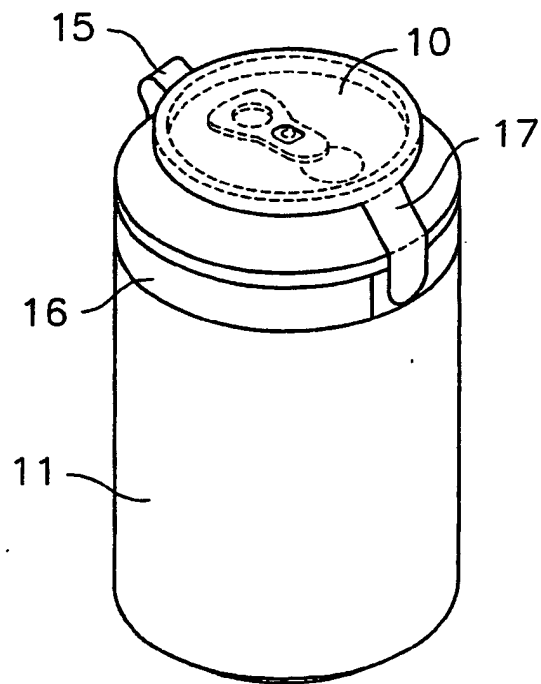


Fig. 3

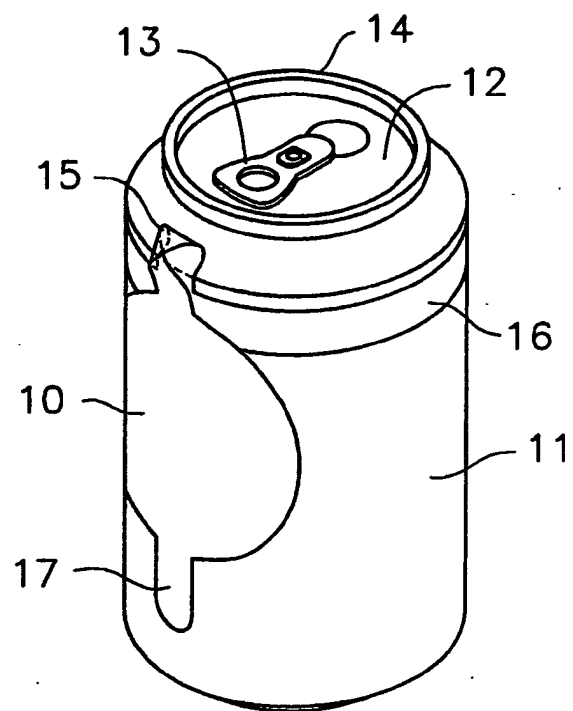


Fig.4

INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES03/00406

A. CLASSIFICATION OF SUBJECT MATTER		
IPC 7 B65D 17/00, B65D 41/62, B65D 51/20 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 7 B65D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
ES		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
CIBEPAT, EPODOC, WPI, PAJ		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	GB 2304323 A (DAVIES) 19.03.1997, the whole document	1, 2
Y		3
Y	US 4927048 A (HOWARD) 22.05.1990, column 2, line 39- column 4, line 3; figures	3
A	ES 1044067 U (COLINO) 01.03.2000, the whole document	1-3
A	DE 19927779 A1 (HERTEL) 21.12.2000, column 3, line 52- column 4, line 57; figures	1-3
A	ES 1032734 U (FERNÁNDEZ CASTIÑEIRAS) 16.06.1996, the whole document	1-3
A	ES 2162570 A1 (MARTÍN SÁNCHEZ) 16.12.2001, the whole document	1-3
<input checked="" type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> 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		Date of mailing of the international search report
08 OCTOBER 2003 (08.10.03)		15 OCTOBER 2003 (15.10.03)
Name and mailing address of the ISA/ S.P.T.O.		Authorized officer
Facsimile No.		Telephone No.

Form PCT/ISA/210 (second sheet) (July 1992)

INTERNATIONAL SEARCH REPORT

International application No.
PCT/ES03/00406

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	FR 2644431 A1 (GRISON) 21.09.1990	
A	GB 2341599 A (BACON) 22.03.2000	

INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No

PCT/ES03/00406

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
GB 2304323 A	19.03.1997	NONE	
US 4927048 A	22.05.1990	NONE	
ES 1044067 U	01.03.2000	NONE	
DE 19927779 A1	21.12.2000	NONE	
ES 1032734 U	16.06.1996	ES 1032734 Y	01.12.1996
ES 2162570 A1	16.12.2001	NONE	
FR 2644431 A1	21.09.1990	NONE	
GB 2341599 A	22.03.2000	NONE	