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(71) Applicant: **Nuevas tecnologías Energéticas y
Amientales, S.L.**
08037 Barcelona (ES)

(72) Inventor: **De Tomas Massot, Alejandro**
08037 Barcelona (ES)

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(54) **Standard protector for tinned drinks**

(57) **OBJECT OF THE INVENTION:** The descriptive report herein refers to an Invention Patent application, related to a standard PVC or PET tinned drinks protector with its corresponding opening seal, the obvious aim of which is to form a protective element for the top of drinks tins, the area where users place their lips to drink from the container.

As the invention (protective cap) hermetically seals the top of the drinks tin and is fitted during the packaging

process, it guarantees that the area from which the user drinks is perfectly clean and hygienic.

FIELD OF THE INVENTION: This invention has its application in the food industry and drinks packaging at source, owing to its efficiency and simplicity of application.

ANTECEDENTS OF THE INVENTION: On the part of the applicant there is no 'knowledge of the existence at present of an invention designed to be a standard protector with seal for tinned drinks.

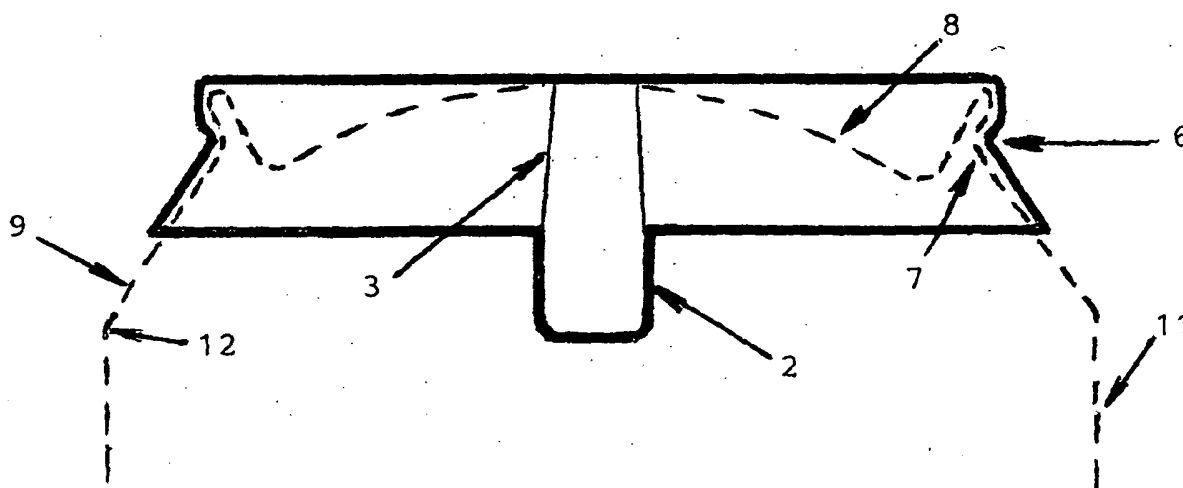


Fig. II

Description

[0001] The invention applied for refers to a standard tinned drinks protector, applied during packaging and, as its name indicates, protecting the top of the drinks tin, this being the area that comes into contact with the user's lips, atmospheric dust, animal traces or accidental spillage during transportation, storage or at point of sale.

[0002] The protective cap is made of PVC or PET thermoplastic material, heat and vacuum preformed, and possessing a closing seal system that is broken (enabling the cap to be opened) by means of the opening tab.

[0003] The system of fitting the protective cap onto the drinks tin is highly ingenious, and consists of a negative, circular groove in the protective cap, that slots into the negative closing groove of the drinks tin.

DESCRIPTION OF THE INVENTION

[0004] The standard tinned drinks protector that the invention herein proposes is based on the protection offered to drinks tins that are used for direct drinking consumption, normally 33 centilitre containers, although it can also be adapted for larger tins.

[0005] The protective cap made of PVC or PET thermoplastic material, is fitted on the packaging line of the drinks at source, and therefore offers the user the guarantee that the top of the tin is clean and hygienic, this being the area which enters into contact with the final user's or consumer's lips.

[0006] At the same time, the standard tinned drinks protector offers hygienic protection of the tin during transport, storage or placement at the point of sale, preventing atmospheric dust, any type of animal traces or accidental spillage of material from dirtying or contaminating the cap or the top of the tin.

[0007] At the side and projecting from the closure area of the cap formed by the standard tinned drinks protector, there is a tab or opening seal that extends to the upper central part of the protective cap by means of a double incision.

[0008] To remove the seal of the standard tinned drinks protector, you must lift the opening tab or seal and pull it, thus breaking the protective cap, this being facilitated by the micro incision that is preformed along the line of extension of the opening tab or seal up to the centre of the PVC or PET protective cap.

[0009] The cap formed by the standard tinned drinks protector will be labelled where the opening micro incision has been made, with a printed label stating the conditions for opening and use of the seal.

DESCRIPTION OF THE DRAWINGS

[0010] To complete the description that is being drafted and with a view to understanding better the invention

that is being presented, attached to the report herein, as an integral part of the same, there is a sheet of plans in which, for illustrative and not limitative purposes, there are 2 figures drawn without sizes, as these would depend on the practical execution to be developed.

ELEMENTS OF THE INVENTION AND THEIR DESCRIPTION

[0011] In Figure I, there is an aerial view of the cap (1) formed by the standard tinned drinks protector, that is made of PVC or PET thermoplastic material, preformed and punched in order for the protective cap (1) to have the ideal shape so that on applying vertical pressure to the cap or force to the top (8) of the tin, the cap (1) slots into the rim (7) of the drinks tin (11), a slotting in that is carried out by the pressure exerted by the groove (6) or negative circular incision of the protective cap (1).

[0012] The profile or final shape of the protective cap (5) covers 50% of the sloping side profile (9) where the tin closing device (7) is found. On the side of the cap profile (5), the tab or opening seal (2) projects, being designed for easy use (removal). Following the profile of the tab (2), the micro incision (3) can be seen, that extends up to the centre of the protective cap (1), a micro incision that facilitates breaking the seal (10) and the protective cap (1) thereby opening the standard tinned drinks protector.

[0013] Figure II presents a cross-section, which shows (in broken lines) the sloping profile of the drinks tin (9 and 11) with its connection point (12) between the cone (9) containing the tin closing device (7) at the top (8) with the cylindrical wall of the same (11).

[0014] On the upper side of the cone (9) of the drinks tin (11) there is the closing device (7) of the container (11). The closing device (7) forms a negative circular slot as a result of the encapsulation and joining of the top (8) to the cone (9). This circular slot (7) is used as a pressure closing anchorage of the protective cap (1) by means of the negative circular incision (6) that is preformed on the side of the cap (1). The slotting in of the above mentioned grooves (7) and (6) gives rise to a safe, hermetic fit of the standard tinned drinks protector (1) to the body of the container (11).

Claims

1. Standard tinned drinks protector (Figure I). **Characterised by** comprising a cap of PVC or PET thermoplastic material preformed by heat and vacuum before being punched to give it its characteristic circular shape (5) including the tab (2) of the closing seal (10).
2. Standard tinned drinks protector (Figure 1). **Characterised by** having a seal-breaking system (10)

performed at the top of the protective cap, made possible by punching the protective cap (1) with blades that carry out a micro incision (3) of approximately 70% of the thickness of the protective cap (1), such a system making it easier to break the thermoplastic material of the protective cap (1) 5

3. Standard tinned drinks protector (Figure II). **Characterised by** having an easy to use (remove) tab (2), that acts on the closing seal by breaking it (10) in order to open the protective cap (1), exposing the top (8) of the drinks can (11). 10
4. th Standard tinned drinks protector (Figure II). **Characterised by** having an ingenious system for joining or fitting the protective cap (1) to the drinks tin (11), consisting of the closing device (7) of the said tin and that by applying pressure or pushing down on the protective cap (1), the latter slots the negative circular incision (6) of the said protective cap (1), into the negative groove formed by join (7) of the top (8) to the sloping side (9) of the drinks tin (11), thus producing a firm, hermetic closure, and adaptation of the standard tinned drinks protector (1) to the drinks tin (11). 15 20 25

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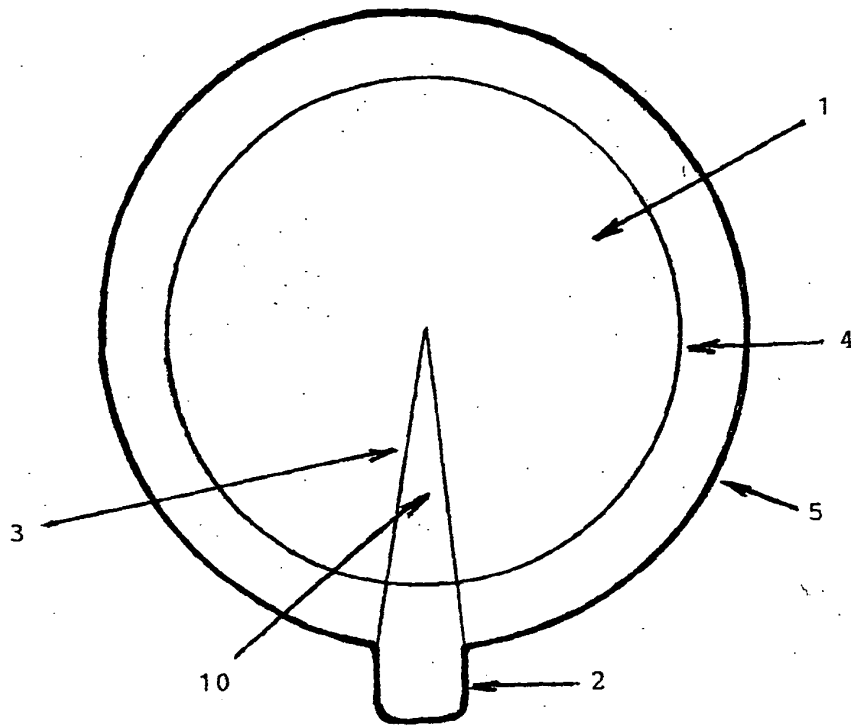


Fig. I

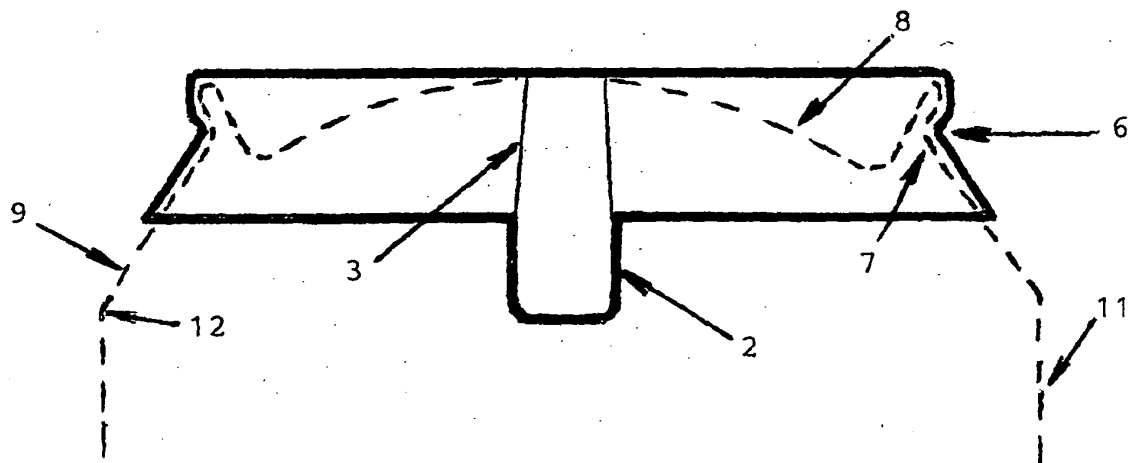


Fig. II



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EUROPEAN SEARCH REPORT

Application Number
EP 03 02 6858

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int.Cl.7)
X	US 3 204 805 A (MAY RUSSELL P) 7 September 1965 (1965-09-07) * figure 4 *	1-4	B65D51/20
X	US 6 290 084 B1 (LOUIE CHUN CHIU) 18 September 2001 (2001-09-18) * the whole document *	1-4	
X	US 4 749 100 A (EBERHART RAY) 7 June 1988 (1988-06-07) * column 2, lines 49-51 *	4	
			TECHNICAL FIELDS SEARCHED (Int.Cl.7)
			B65D
The present search report has been drawn up for all claims			
Place of search		Date of completion of the search	Examiner
Munich		21 September 2004	Ungureanu, 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 P : intermediate document 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 03 02 6858

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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21-09-2004

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US 3204805	A	07-09-1965	NONE	
US 6290084	B1	18-09-2001	NONE	
US 4749100	A	07-06-1988	NONE	